## Economic \&

## The World's Women 2015 Trends and Statistics



United Nations

## Department of Economic and Social Affairs

## The World's Women 2015

## Trends and Statistics

United Nations
New York, 2015

# United Nations Department of Economic and Social Affairs 

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## Note


#### Abstract

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Suggested citation: United Nations, 2015. The World's Women 2015: Trends and Statistics. New York: United Nations, Department of Economic and Social Affairs, Statistics Division. Sales No. E.15.XVII.8.

## ST/ESA/STAT/SER.K/20

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Email: publications@un.org; website: un.org/publications
United Nations publication issued by the Department of Economic and Social Affairs (DESA)
ISBN: 978-92-1-161594-4
e-ISBN: 978-92-1-057371-9
Sales No. E.15.XVII. 8
DOI: 10.18356/9789210573719

## Message from the Secretary-General

The World's Women 2015: Trends and Statistics comes as the international community marks the twentieth anniversary of the landmark Beijing Declaration and Platform for Action and looks forward to the adoption of sustainable development goals to guide our global fight against poverty through the year 2030.
Women's advancement, equality and empowerment, so central to progress on the Millennium Development Goals, remain indispensable to success.

This report confirms that the lives of women have improved in a number of areas over the last two decades-but the pace has been slow and uneven across regions as well as within and among countries.

I commend this publication to governments, researchers, scholars, non-governmental organizations and citizens around the world. I trust that all will use the valuable information in these pages as we strive together to ensure that every woman enjoys her human rights and has the chance to achieve her full potential.


Ban Ki-moon

## Preface

This sixth edition of The World's Women: Trends and Statistics provides the latest statistics and analysis on the status of women and men at global and regional levels and reviews the progress towards gender equality over the last 20 years. The eight chapters of the report cover several broad policy areas identified in the 1995 Beijing Platform for Action, the framework that set the international agenda for improving the status of women. These areas include population and families, health, education, work, power and decision-making, violence against women, environment and poverty. In each area, a life-cycle approach is used to reveal the experiences of women and men during different periods of life-from childhood and the formative years, through the working and reproductive stage, to older ages.
The statistics and analysis presented in The World's Women 2015 are based on a comprehensive and careful assessment of a large set of available data and take into account new and emerging methodological developments in gender statistics. The report reveals that the lives of women have improved in some respects. For instance, the gender gap in education has narrowed, particularly at the primary level, and in many countries women now outnumber men in tertiary education. In other areas, however, progress has stagnated. Today, half the world's women join the labour force compared to three quarters of men, a situation not unlike that of 20 years ago. Women are far from having an equal voice to men in public and private spheres. And, unacceptably, in every region of the world, women are still subjected to various forms of violence. Women also face new challenges, including those related to changes in living arrangements. As a result, older women today are more likely to be living alone and in poverty than men of the same age.
My sincere hope is that this publication will deepen our understanding of the current status of women and men and of the advances in women's empowerment. I also trust that it will serve as a model for national and international stakeholders in identifying and addressing data gaps on gender issues. Much work remains to fill the gaps in coverage of key topics, to improve the timeliness and comparability of data over time and across countries, and to strengthen national capacity in the production and use of gender statistics.


Wu Hongbo
Under-Secretary-General for Economic and Social Affairs

## Acknowledgments

The World's Women 2015: Trends and Statistics was prepared by the United Nations Statistics Division (UNSD), Department of Economic and Social Affairs (DESA). The publication is the outcome of collective efforts, involving a wide range of contributors around the world.

Special gratitude goes to the following staff, consultants and interns of the Demographic and Social Statistics Branch of UNSD: Jan Beise, Ionica Berevoescu, Haoyi Chen, Charlotte French, Francesca Grum, Harumi Shibata Salazar, Thomas Spoorenberg and Seiffe Tadesse, for their research, analysis and drafting of individual chapters; and Richard Bilsborrow, Maria Isabel Cobos, Jason Davis, Andrew Smith, Phoebe Spencer and Wenjian Zhou, for their technical support and research.
The report was produced under the direction of Francesca Grum, Chief of the Social and Housing Statistics Section. Keiko Osaki-Tomita, Chief of the Demographic and Social Statistics Branch, provided overall substantive guidance.
Sincere appreciation goes to the following experts who reviewed and/or provided technical advice: Robert Bain, World Health Organization/United Nations Children's Fund (WHO/ UNICEF) Joint Monitoring Programme for Water Supply and Sanitation (JMP); Elisa Benes, International Labour Organization (ILO); Ties Boerma, WHO; Sophie Pauline Bonjour, WHO; Chiara Brunelli, Food and Agriculture Organization of the United Nations (FAO); Carlo Cafiero, FAO; Claudia Cappa, UNICEF; Barney Cohen, UN Population Division; Sara Demofonti, Giuseppina Muratore, Linda Laura Sabbadini, Italian Statistical Institute (ISTAT); DESA Editorial Board; Sara Duerto Valero, UN Women; Joann Vanek, Women in Informal Employment: Globalizing and Organizing (WIEGO); Patrick Gerland, UN Population Division; Erlinda Go, statistical consultant; Riet Groenen, UN Women; Zeina Hilal, Inter-Parliamentary Union (IPU); Henriette Jansen, international researcher on violence against women; Kareen Jabre, IPU; Vladimira Kantorova, UN Population Division; Alison Kennedy, United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics (UIS); Angela Me, United Nations Office on Drugs and Crime (UNODC); Shantanu Mukherjee, United Nations Development Programme (UNDP); Francois Nault and Maire Sinha, Statistics Canada; Lauren Pandolfelli, UNSD-EDGE project; Annette Martine Prüss-Ustün, WHO; Cheryl Sawyer, UN Population Division; Papa Seck, UN Women; Valentina Stoevska, ILO.

Several regional and international organizations supplied data to complement those directly collected by the United Nations Statistics Division: DHS Programme-ICF International, European Union Fundamental Rights Agency (FRA), ILO, International Diabetes Federation, United Nations Economic Commission for Latin America and the Caribbean—Division for Gender Affairs, UNICEF, UIS, WHO/UNICEF JMP. The National Statistical Offices of the following countries also kindly contributed by providing their most recent official statistics for selected indicators: Albania, Armenia, Austria, Canada, Chile, Costa Rica, Denmark, Ecuador, Estonia, Finland, France, Germany Iceland, Italy, Japan, Lithuania, Malta, Mexico, Norway, Poland, Portugal, Republic of Korea, Republic of Moldova, Romania, Singapore, Slovakia, Sweden, Switzerland, Tunisia, Turkey, United Kingdom, United States of America, Viet Nam and State of Palestine.

A special acknowledgment goes to the production team, including the editors, Lois Jensen and Peter Jackson, and the design and layout experts from the Graphic Design Unit and Copy Preparation and Proofreading Section, for their support and tireless efforts to produce the publication against tight deadlines.

## Executive Summary

At the 1995 United Nations Fourth World Conference on Women, Governments adopted the Beijing Declaration and Platform for Action, which "seeks to promote and protect the full enjoyment of all human rights and the fundamental freedoms of all women throughout their life cycle." Guided by these principles, the World's Women 2015: Trends and Statistics presents the latest statistics and analyses of the status of women and men in areas of concern identified by the Platform for Action. It also reviews progress towards gender equality over the past 20 years. The publication is the sixth edition in a series.

The World's Women 2015 comprises eight chapters covering critical areas of policy concern: population and families, health, education, work, power and decision-making, violence against women, environment, and poverty. In each area, a life-cycle approach is introduced to reveal the experiences of women and men during different periods of life-from childhood and the formative years, through the working and reproductive stages, to older ages.
The statistics and analyses presented in the following pages are based on a comprehensive and careful assessment of a large set of available data from international and national statistical agencies. Each chapter provides an assessment of gaps in gender statistics, highlighting progress in the availability of statistics, new and emerging methodological developments, and areas demanding further attention from the international community. In addition to the data presented in the chapters, a wide selection of statistics and indicators at the global, regional and country levels can be found in the Statistical Annex of this report available in a dedicated website hosted by the United Nations Statistics Division (http://unstats.un.org/unsd/gender/worldswomen.html). The report's main findings are summarized below.

## Population and families

Worldwide, men outnumber women by some 62 million. More baby boys are born than baby girls, a by-product of enduring natural selection processes. The slight male advantage in numbers at birth disappears progressively during childhood and young adulthood, owing to generally higher male than female mortality. Consequently, women outnumber men in older age groups. Women represent 54 per cent of the population aged 60 and over and 62 per cent of those aged 80 and over. The number of years lived as a person aged 60 and over is higher for women than for men by about three years. Noticeable differences are also found in the living arrangements of older women and men. In the later stages of life, women are much more likely than men to be widowed and to live alone. This has to be taken into account by programmes and services targeted to older persons, particularly in the context of the increasing share of older persons in the population (population ageing) that is taking place everywhere.

Marriage patterns have also changed over the past two decades. Both women and men are marrying later, a reflection of increases in education levels, later entry into the labour force, greater economic independence of women and a rise in informal unions. Women continue to marry a few years earlier than men, at age 25 on average, compared to 29 for men. The rate of child marriage - a fundamental violation of human rights that limits girls' opportunities for education and development and exposes them to the risk of domestic violence and social isola-
tion—has declined slightly. Still, almost half of women aged 20 to 24 in Southern Asia and two fifths in sub-Saharan Africa were married before age 18.
Globally, the total fertility rate reached 2.5 children per woman in 2010-2015, a decline from three children in 1990-1995. While fertility fell slightly in countries with high and medium fertility levels, it rose slightly in some countries with low fertility. Increasingly, having children is becoming delinked from formal marriage, as reflected by the increase in the share of extramarital births. As a result of this trend and a rise in divorce rates, one-parent households, among which single mothers with children make up more than three quarters, are becoming common in both developing and developed regions.

## Health

Medical and technological improvements over several decades have extended the lives of both women and men, who are expected at present to live an average of 72 and 68 years, respectively. An analysis of mortality data across age groups and regions shows that women and men tend to die of different causes. In all regions, biological factors, along with gender inequality and gender norms, influence sex differences in health trajectories throughout the life cycle.

Adolescence and young adulthood should be a time of general good health with low mortality rates. Yet in developing regions, complications linked to pregnancy and childbirth, as well as sexually transmitted infections, particularly HIV, continue to take a heavy toll on the lives of adolescent girls and young women. This is due not only to underdeveloped health systems that are unable to address women's needs, but also to gender issues. Poor access to information and education, early marriage, and lack of decision-making power among girls who are married or in relationship increase their exposure to sexually transmitted infections, unwanted pregnancies and the risk of unsafe abortion. Traditional gender expectations also exert a harmful effect on men. Adolescent boys and young men often take up habits and risky behaviours that are associated with images of masculinity. During adolescence and young adulthood, road injuries, interpersonal violence and self-harm are the leading causes of death among young men in both developed and developing regions. Injuries are also a leading cause of death among young women in developed regions, although the corresponding mortality rates are much lower than those of young men.
For women of reproductive age, the biological functions of pregnancy and childbirth create additional health needs. Overall, reproductive and maternal health has improved considerably over the past two decades. A growing proportion of women are using contraceptives and the demand for family planning is increasingly being satisfied. Worldwide, the number of maternal deaths declined by 45 per cent between 1990 and 2013. Still, in sub-Saharan Africa, only half of pregnant women receive adequate care during childbirth. In 2014, 83 per cent of pregnant women in developing regions had at least one antenatal care visit, an improvement of 19 percentage points since 1990. However, only 52 per cent of pregnant women had the recommended minimum of four antenatal care visits.

At older ages, non-communicable diseases such as cardiovascular disease, cancer, chronic obstructive pulmonary disease and diabetes are the more common causes of death. Over the entire life course, risk factors contributing to these diseases have a clear gender component. For instance, men smoke tobacco and drink alcohol to a much greater extent than women: 36 per cent of men aged 15 and over smoke and 48 per cent drink, compared to 8 and 29 per cent of women, respectively. However, large numbers of women have adopted these unhealthy habits, particularly in developed regions. Moreover, while the prevalence of obesity has increased among both sexes, women appear to be slightly more affected (14 per cent of women aged 20 and over are
obese compared to 10 per cent of men). Mental disorders, in particular dementia, are among the major causes of disability in later life. In 2013, an estimated 44 million people globally were living with dementia, a number that is expected to double every 20 years. Women are more affected than men due to women's greater longevity and the typically late onset of dementia. Women also represent the majority of informal caregivers of people with dementia-mostly in their role as partners, daughters and daughters-in-law.

## Education

The past two decades have witnessed remarkable progress in participation in education. Enrolment of children in primary education is at present nearly universal. The gender gap has narrowed, and in some regions girls tend to perform better in school than boys and progress in a more timely manner. However, in some developing countries that have not reached gender parity, the disparities against girls are stark. Today, 58 million children of primary school age are out of school worldwide. More than half of these are girls and nearly three quarters live in sub-Saharan Africa and Southern Asia.

Secondary school enrolment has increased but remains lower than primary school enrolment. Although gender disparities in access to secondary education have been reduced, they remain wider and more prevalent than at the primary level—to the advantage of boys in some countries and of girls in others. Gender disparities are even broader at the tertiary level. Female participation in tertiary education overall has increased globally and currently surpasses male participation in almost all developed countries and in half of developing countries. However, women are clearly underrepresented in fields related to science, engineering, manufacturing and construction. Women are also underrepresented in the more advanced degree programmes, especially in science-related fields, resulting in fewer women than men in research. Women account for 30 per cent of all researchers-an increase compared to previous decades but still far from parity.
Progress in educational access has yielded improvements in adult literacy and educational attainment. Illiteracy among youths has been eradicated in many regions of the world, and the vast majority of young women and men presently have basic reading and writing skills. However, an estimated 781 million people aged 15 and over remain illiterate. Nearly two thirds of them are women, a proportion that has remained unchanged for two decades. Illiteracy rates are highest among older people and are higher among women than men. At age 65 and over, 30 per cent of women and 19 per cent of men are illiterate. The vast majority of older persons are illiterate in Northern Africa, sub-Saharan Africa and Southern Asia, where gender gaps are also noted. As societies experience population ageing, it becomes increasingly important that literacy and other lifelong learning programmes enable women and men to become more self-reliant, work as long as desired and remain socially engaged at older ages.

## Work

As a group, women work as much as men, if not more. When both paid and unpaid work such as household chores and caring for children are taken into account, women work longer hours than men-an average of 30 minutes a day longer in developed countries and 50 minutes in developing countries. Gender differentials in hours spent on domestic work have narrowed over time, mainly as a result of less time spent on household chores by women and, to a smaller extent, by an increase in time spent on childcare by men.

Only 50 per cent of women of working age are in the labour force, compared to 77 per cent of men. The gender gap in labour force participation remains especially large in Northern Africa,

Western Asia and Southern Asia. Overall participation in the labour market is only slightly lower in 2015, compared to 1995 . However, women and men aged 15 to 24 years have experienced a decline in participation, which is likely linked to expanding educational opportunities at the secondary and tertiary levels. Older women aged 25 to 54 increased their labour force participation in most regions, while that of men in the same age group stagnated or declined slightly across regions. The proportion of women aged 55 to 64 in the labour force has risen in most regions, reflecting changes in the statutory retirement age and pension reforms.

Women are more likely than men to be unemployed or to be contributing family workers, which usually implies that they have no access to monetary income. In Oceania, sub-Saharan Africa and Southern Asia, between 30 and 55 per cent of employed women are contributing family workers, about 20 percentage points higher than men in the same regions. Women are also more likely than men to be employed part-time. However, while this can help them to better balance work, household and childrearing responsibilities, part-time jobs are often associated with lower hourly wages, less job security and less training and promotion opportunities than full-time employment. Women are also significantly underrepresented in decision-making positions such as legislators, senior officials and managers, but are overrepresented as domestic workers, positions that are characterized by low pay, long hours and lack of social protection. Across all sectors and occupations, women on average earn less than men; in most countries, women in full-time jobs earn between 70 and 90 per cent of what men earn. Many developed countries show a long-term decline in the gender pay gap, but the trend is mixed in recent years.
Over the past 20 years, an increasing number of countries have adopted legislation providing maternity and paternity benefits, enabling workers to meet their responsibilities outside work. Over half of all countries currently offer at least 14 weeks of maternity leave and 48 per cent of countries have provisions for paternity leave. These measures, however, often exclude workers in specific sectors or categories of employment, such as paid domestic workers, own-account and contributing family workers, casual and temporary workers, and agricultural workers.

## Power and decision-making

Inequality between women and men tends to be severe and highly visible in power and decisionmaking arenas. In most societies around the world, women hold only a minority of decisionmaking positions in public and private institutions. Advances over the past two decades are evident in all regions and in most countries, but progress has been slow.

Currently, only one in five members of lower or single houses of parliament worldwide is a woman. A few factors contribute to this blatant underrepresentation. Women are seldom leaders of major political parties, which are instrumental in forming future political leaders and in supporting them throughout the election process. Gender norms and expectations also drastically reduce the pool of female candidates for selection as electoral representatives, and contribute to the multiple obstacles that women face during the electoral process. The use by some countries of gender quotas has improved women's chances of being elected. Yet, once in office, few women reach the higher echelons of parliamentary hierarchies.
Women are largely excluded from the executive branches of government. Female Heads of State or Government are still the exception, although the number has increased slightly (from 12 to 19) over the past 20 years. Similarly, only 18 per cent of appointed ministers are women, and are usually assigned to portfolios related to social issues. Women are also underrepresented among senior-level civil servants, and seldom represent their governments at the international level.

Women's representation among corporate managers, legislators and senior officials remains low, with only about half of countries having shares of women in managerial positions of 30 per cent
or more, and none reaching or surpassing parity. The gender compositions of executive boards of private companies are nowhere near parity-meaning that the "glass ceiling" remains a reality for the vast majority of the world's women.

## Violence against women

Women across the world are subjected to physical, sexual, psychological and economic violence, regardless of their income, age or education. Such violence can lead to long-term physical, mental and emotional health problems. Around one third of women worldwide have experienced physical and/or sexual violence by an intimate partner or sexual violence by a non-partner at some point in their lives. Intimate partner violence is the most common form of violence, peaking during women's reproductive years in both developed and developing countries. Prevalence declines with age but still persists among older women. In the most extreme cases, violence against women can lead to death; around two thirds of victims of intimate partner or familyrelated homicides are women.

In the majority of countries, less than 40 per cent of the women who experienced violence sought help of any sort. Among those who did, most looked to family and friends as opposed to the police and health services. In almost all countries with available data, the percentage of women who sought police help, out of all women who sought assistance, was less than 10 per cent. Women's reluctance to seek help may be linked to the widespread acceptability of violence against women. In many countries, both women and men believe that wife-beating is justified in certain circumstances. However, attitudes towards violence are beginning to change. In almost all countries with available information for more than one year, the level of both women's and men's acceptance of violence has diminished over time.

More than 125 million girls and women alive today have been subjected to female genital mutilation across countries in Africa and the Middle East where this specific form of violence against women is concentrated. Prevalence tends to be lower among younger women, indicating a decline in this harmful practice. However, it remains commonplace in a number of these countries, with overall prevalence rates of over 80 per cent.

## Environment

Access to clean water and modern energy services has improved everywhere, but remains low in some developing regions, including Oceania, sub-Saharan Africa and Southern Asia. Poor access to both of these services has a huge impact on health and survival, while also increasing the workloads of both women and men. About half of the population living in developing regions lack access to improved drinking water sources in their homes or on the premises, with the task of water collection falling mostly on the shoulders of women. In settings where women and men do not have equal access to health services, as in some parts of Asia, inadequate water, sanitation and hygiene may result in more female than male deaths. Women in developing countries are also more exposed than men to indoor pollutants resulting from the use of firewood and other solid fuels, due to their role in cooking and caring for children and other family members.

The impact of extreme climate events and disasters also has a gender dimension. Although limited, available data suggest that age and sex are significant factors in mortality resulting from natural disasters. Their contribution varies by country and by type of hazard. For instance, a higher risk of death among women than men was noted mainly in the context of recent tsunamis and heatwaves. Gender roles and norms can also play a role in the aftermath of disasters. In some
post-disaster settings, women's access to work and their involvement in decision-making related to recovery efforts and risk-reduction strategies remain more limited than men's.
Environmental protection, and consequently sustainable development, require that both women and men become actively involved through day-to-day activities and are equally represented in decision-making at all levels. More and more people are engaging in environmental protection activities, including recycling and cutting back on driving to reduce pollution; women tend to be more involved than men, which is somewhat linked to the gender division of domestic labour. However women's involvement in local and national policy formulation and decision-making in natural resources and environment management remains limited.

## Poverty

Gender disparities in poverty are rooted in inequalities in access to economic resources. In many countries, women continue to be economically dependent on their spouses. Lower proportions of women than men have their own cash income from labour as a result of the unequal division of paid and unpaid work. In developing countries, statutory and customary laws continue to restrict women's access to land and other assets, and women's control over household economic resources is limited. In nearly a third of developing countries, laws do not guarantee the same inheritance rights for women and men, and in an additional half of countries discriminatory customary practices against women are found. Moreover, about one in three married women from developing regions has no control over household spending on major purchases, and about one in 10 married women is not consulted on how their own cash earnings are spent.

Gender disparities in poverty are more visible with the diversification of family arrangements, including an increase in one-person households and one-parent families. Working-age women in developed and developing countries are more likely to be poorer than men when they have dependant children and no partners to contribute to the household income or when their own income is non-existent or too low to support the entire family. At older ages, women in developed countries are more likely than men to be poor, particularly when living in one-person households. The difference in poverty rates between women and men, including among lone parents with dependant children and among older persons, is narrowing in some countries while it remains persistent in others. This points to the need for social protection systems that take into account the emerging diversification of family arrangements.

## Moving forward on gender statistics

## Availability of data for gender analysis has increased

Relevant, reliable and timely gender statistics-cutting across traditional fields of statistics, including education, health and employment as well as emerging ones, such as climate changeare essential to understanding the differences between women and men in a given society. Such information is critical to policy- and decision-makers and to advancing progress towards gender equality.

The World's Women 2015 has benefited from the growing availability of gender statistics. Because more countries are conducting household surveys, in addition to regular population censuses, the majority of them can produce at present data disaggregated by sex for basic indicators on population, families, health, education and work. Many more surveys are presently available on critical areas such as violence against women: 89 countries collected data on this topic through household surveys during the period 2005-2014 compared to only 44 in the previous decade. Furthermore, gender statistics based on administrative records are becoming more widely available. For instance, statistics on women's representation in lower or single houses of parliament are available for 190 countries in 2015, an increase from 167 countries in 1997.

## ... yet major gaps still exist in terms of availability and comparability

Despite improvements over time, gender statistics are still far from satisfactory and many gaps exist in terms of data availability, quality, comparability and timeliness, even for basic indicators. For example, according to the latest data reporting at the international level, only 46 countries were able to provide reliable statistics on deaths disaggregated by sex, based on civil registration systems, at least once for the period 2011-2014. Less than half of all developing countries have information disaggregated by sex on labour force participation, unemployment, status in employment, and employment by occupation for at least two points over the period 2005-2014.

Measuring gender equality in areas such as environment and poverty is even more challenging. Links between gender and environment have been assessed based on qualitative or small-scale quantitative studies and cannot be extrapolated to a whole society or across countries. House-hold-level data on poverty, measured traditionally on the basis of either income or household consumption, do not account for the distribution of resources within households. Thus they do not allow for an assessment of poverty at the individual level, which is needed for the production of relevant gender statistics.
The comparability of gender statistics at national and international levels is also problematic, mostly due to differences in sources, definitions, concepts and methods used to obtain the data. For example, the comparability of data on earnings is affected greatly by the data source used. Establishment surveys sometimes exclude workers in small enterprises and in the informal sector. Labour force surveys, although they cover all types of workers, have to rely on selfreported wages, which may introduce reporting errors. Comparability of data is also affected by the concepts and methods used to produce them, including how questions are phrased. For instance, the way in which women are interviewed about violence may affect their willingness
and capacity to disclose their experience, undermining the quality of the data produced and also their international comparability.

## Even when information is collected, it is often not tabulated and disseminated to allow for meaningful gender analysis

Yet another shortcoming is the fact that the information collected is often not exploited sufficiently for gender analysis. Data are frequently tabulated and disseminated in categories that are not relevant or are too broad to adequately reflect gender issues. For example, assessing gender segregation in the labour market is often hampered by the lack of employment data in detailed occupational categories. Another example of the underutilization of existing data relates to information collected through time-use surveys. Although data are most often collected by detailed categories of activities, published data on time use are often limited to broad categories only. Separate categories for time spent on collecting water and firewood, for example, are not often available, making it difficult to assess the impact of these specific activities on the work burden of women and men.

## New statistical standards and methods have been developed

New methodological guidelines have been produced by international organizations, with the aim to improve the availability, quality and international comparability of gender statistics. The most recent guidelines include the Handbook on Integrating a Gender Perspective into Statistics (2015); Guidelines for Producing Statistics on Violence against Women (2014); Methodological Guidelines for the Gender Analysis of National Population and Housing Census Data (2014); and the Handbook on Developing Gender Statistics: A Practical Tool (2010). Another ongoing effort, undertaken by the Evidence and Data for Gender Equality (EDGE) project, is developing methodologies to measure asset ownership and entrepreneurship from a gender perspective. The project is being implemented by the UN Statistics Division in collaboration with UN-Women. Furthermore, the International Labour Organization is developing statistical guidelines to collect data on work. The guidelines reflect the definition adopted by the 2013 International Conference of Labour Statisticians, encompassing all forms of work, including own-use production of goods and services, which is particularly relevant for gender analysis.

Another achievement towards the standardization of methods and harmonization of indicators is the 2013 agreement by the United Nations Statistical Commission to use the Minimum Set of Gender Indicators, consisting of 52 quantitative and 11 qualitative indicators, as a guide for national production and international compilation of gender statistics.

## ... but additional guidance is needed

Statistical methods and gender statistics are still lagging behind in many subject areas including: decision-making positions in local government and in the private sector; poverty based on individual-level data; the quality of education and lifelong learning; the gender pay gap; social protection measures, including pensions and unemployment benefits; universal health coverage; and the impact of natural disasters. Producing relevant, accurate and timely gender statistics remains a challenge for many countries. Initiatives to develop statistical standards and national capacity, particularly on integrating a gender dimension into official statistics, should therefore be undertaken on a priority basis.

## Technical note

This sixth edition of The World's Women: Trends and Statistics provides an update of the statistics and indicators on the situation of women and men around the world. It is a comprehensive and authoritative compilation of existing data and a source of gender-specific information on eight topics: population and families, health, education, work, power and decision-making, violence against women, environment and poverty. Underlying data for all tables and charts presented in the chapters, as well as statistics at the country level are published online in the Statistical Annex available at http://unstats.un.org/unsd/gender/worldswomen.html.

## Statistical sources

The statistics and indicators on women and men presented in the report are based mainly on data provided by the United Nations and other international organizations that compile data from national sources and/or estimate data in a comparable manner across countries. Additional regional and official national sources and, in a few cases, research-based data, were used to supplement the available data. The use of those additional sources was essential in areas of statistics where gender-sensitive concepts and methods of measurement and data collection are still being developed, such as, for example, power and decision-making in the corporate world and in the media.

Data presented in the report might differ from those available within countries. Although mostly drawn from official statistics provided by governments, data compiled by international organizations are sometimes further adjusted for international comparability. Indicators with missing values may also be filled by estimates from international organizations. In addition, countries may have more recent data than those available at the time of the analysis.
Every effort has been made to fully cite and document the sources drawn on for the data presented in the publication. The statistics presented in previous editions of The World's Women may not be comparable, due to revisions to data, changes in methodology and differences in the countries or areas covered and the regional groupings employed. As a result, trend analysis based on data in different editions of The World's Women should be avoided. The reader is strongly encouraged to consult the original sources since they usually contain comparable and regularly updated data.

## Countries, areas and geographical groupings

The World's Women 2015 covers 197 countries or areas with a population of at least 100,000 as at 1 July 2015, with the exception of the chapters on power and decision-making, violence against women and education, where countries or areas with a population of less than 100,000 have been included for selected indicators. The term "countries" refers to political entities that are independent States. The term "areas" refers to geographical entities that have no independent political status; an area is thus generally a portion of one or more independent States. In chapters 1 to 8 , tables and figures cover only countries or areas for which data are available. Similarly, in the online Statistical Annex, tables cover only countries or areas for which data are available.

For analytical purposes, countries or areas are grouped into developed and developing regions ${ }^{1}$. Developing regions are further classified into geographical regions or subregions, following the official Millennium Development Goals regional groupings ${ }^{2}$. In some cases, where indicated, regions may vary, depending on the grouping used by the international organizations providing the data and the statistical clustering of countries according to selected characteristics. For a full listing of countries or areas covered and the groupings used, see table at the end of the report.
Global and regional aggregates and averages prepared by international and regional organizations are weighted averages of country data. Regional estimates computed by the United Nations Statistics Division from data at the country or area level are also weighted unless indicated otherwise as unweighted in annotations to tables and figures. Unweighted averages are usually used when the availability of data for a particular indicator is limited. In these cases, the number of countries or areas used to calculate regional averages is provided.

## Symbols and conventions

- Two dots (..) indicate that data are not available or are not reported separately.
- A short dash (-) between two years (e.g. 2010-2015) indicates an average over the period unless otherwise stated. When the two-year period is followed by the words "latest available" in parenthesis (e.g. 2010-2013 (latest available)), this denotes that data refer to the latest available year in the given interval.
- A long dash ( - ) indicates magnitude nil or less than half of the unit employed.
- A point (.) indicates decimals. Thousands are separated by a comma (.) in numbers presented in the text and by a blank space ( ) in numbers presented in tables.
- A slash (/) between two consecutive years (e.g. 2005/06) indicates that data collection within a survey took place over a continuous period that covered a number of months within the two-year period.
- Numbers and percentages in tables may not always add to totals because of rounding.

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## Chapter 1

## Population and families

## Key findings

- There are about 62 million more men than women worldwide. In younger age groups, men outnumber women; in older age groups, women outnumber men.
- About half of all international migrants are women, but men migrants are dominant in developing countries, mostly those in Northern Africa, Oceania, and Southern and Western Asia.
- The age at marriage has increased for both women and men.
- Child marriage has declined; still, almost half of women aged 20 to 24 in Southern Asia and two fifths in sub-Saharan Africa marry before age 18.
- The average number of children per woman declined in countries with high and medium fertility levels but increased slightly in some countries with low fertility.
- Adolescent birth rates declined almost everywhere but are still high in many African and Latin American and Caribbean countries.
- Lone mothers with children constitute about three quarters of one-parent households.
- The proportion of women aged 45 to 49 who are divorced or separated is at least 25 per cent higher than that of men in the same age group.
- Widowhood is about three times higher among women aged 60 to 64 than among men in the same age group.
- The majority of older persons living in one-person households are women.


## Introduction

Population dynamics affect the lives of women and men everywhere. Declining fertility rates and increasing longevity have resulted in decreasing proportions of children and increasing proportions of older persons in the world's population. Women tend to outlive men, with the result that women outnumber men in older age groups. Subtle differences in the distribution of the population by sex have also emerged, starting at birth and extending throughout the life cycle. The global sex ratio (that is, the number of boys and men relative to the number of girls and women) increased across almost all age groups, resulting in an increasing share of boys and men in the global population.
Changes in marriage patterns and fertility suggest that, overall, women are becoming more independent, empowered and in control of their own fertility and lives. The age at marriage has increased, while fertility has declined in countries with high and medium fertility levels. Yet in many countries, child marriage and adolescent
fertility persist and a large share of the demand for family planning goes unmet.
At the same time, families are becoming more diverse. One-person households and one-parent households are more common as patterns of marriage, unions and divorce shift. One-person households are more common because of population ageing and changing norms related to intergenerational relationships and family support. Some of the changes in living arrangements are not spurred by personal choices but by larger phenomena. For example, in countries greatly affected by the HIV epidemic and by conflict, women are at higher risk of becoming young widows and children of becoming orphans. Since women and men do not often have the same opportunities in education, employment and access to their own income (see other chapters of this report), changes in living arrangements can have a bearing on the overall differences in well-being between women and men.

Demographic changes are also the background against which many dimensions of life-including health, education, labour and wealth-are being shaped. In fact, the mere distribution of the population across regions and countries largely determines the distribution of human capital, poverty and the burden of disease around the world. Therefore, any assessment of progress in
the status of women vis-à-vis men needs to draw first on major demographic changes. This chapter presents trends and current levels in population composition by age and sex and migration in the first part; and marriage and unions, their dissolutions, fertility and living arrangements in the second part. Mortality is covered in the following chapter (see Chapter 2 on Health).

## Box 1.1

Gaps in gender statistics related to population and families

Population statistics are routinely collected through population and housing censuses, civil registration systems and/or nationally representative sample surveys. Population and housing censuses are the primary source of information on the size and composition of the population by age and sex, as well as on other demographic topics, including migration, fertility and mortality. Most countries conduct at least one population census every 10 years. ${ }^{a}$ For the 2010 census round (covering the decade 2005-2014), 21 countries or areas, covering 7 per cent of the world's population, did not conduct a population census, a slight improvement over the previous census decade (1995-2004), when that number was 26.
The availability of data based on household surveys has increased dramatically in the past two decades. For instance, the number of countries able to conduct Demographic and Health Surveys (DHS) or Multiple Indicators Cluster Surveys (MICS) increased from 99 (conducting 189 surveys) in 1995-2004 to 113 (conducting 241 surveys) in 2005-2014. These surveys play a crucial role in providing statistics on fertility and mortality in countries where the civil registration system is underdeveloped. ${ }^{\text {b }}$
The quality of data on age and sex can be affected by the way the data are reported. Errors in the declaration of age are common. In some cultural settings, skewed sex ratios at different ages can also occur as a result of underreporting or misreporting of the female population. ${ }^{\text {c }}$
Inconsistencies among various data sources can occur as a result of differences in data collection operations, including sampling frames and questionnaires. For example, in a number of countries, the large variations in the marital status of women over time can be explained only by differences in the data sources used. Recent research has shown that, compared to population
and housing censuses, some household sample surveys suffer from systematic "family bias". Married women with children are more likely to be included in survey samples, while single women are almost systematically underrepresented. ${ }^{\text {d }}$ Basic demographic indicators, such as the average age at marriage or the number of children per woman, vary when different data sources are used.

Data on some demographic topics, such as on informal unions or births occurring outside of marriage, are less often collected. Only a limited number of countries collect and make data available on extramarital births. According to the World Fertility Report 2012, e only 91 countries reported data on extramarital fertility for the period 2000-2011, and only 64 have such data for the three periods, 1965-1989, 1990-1999 and 2000-2011.
Migration is one of the topics where the lack of detail impedes analysis. Data on the reasons why people migrate are often not collected and, when they are, they may be limited to only one primary reason. Women may appear considerably underrepresented in labour migration statistics since, although many of them work before and after migrating, they often cite the category of "marriage or family" as the reason for their migration.
The availability of demographic data on refugees, internally displaced persons and asylum seekers varies by categories of displaced populations. Data are more often available for refugees, particularly in countries where the United Na tions High Commissioner for Refugees (UNHCR) is directly involved in data collection, using its dedicated refugee registration system. In 2013, data disaggregated by sex were available for 71 per cent of the global refugee population. ${ }^{f}$

## A. Population

## 1. Population composition by age and sex

The world's population in 2015 is estimated at 7.3 billion people- 1.6 billion more than two decades ago. Currently, 83 per cent of the global population (6 billion people) live in developing regions and that share is increasing. This has implications for the global distribution of human capital and poverty, as well as the burden of disease. The developed regions are home to the remaining 17 per cent ( 1.3 billion). The share of the world's population living in developing regions is as follows: an estimated 45 per cent are concentrated in Eastern and Southern Asia; 14 per cent in Sub-Saharan Africa; and almost 9 per cent each in South-Eastern Asia and Latin America and the Caribbean. Taken together, the remaining developing regions (the Caucasus and Central Asia, Northern Africa, Oceania and Western Asia) represent less than 7 per cent of the global population. ${ }^{1}$

## The proportion of children is declining in most countries around the world

One of the most notable demographic changes in the past few decades has been the transition of the population to an older structure. Population ageing-an increase in the share of people in older age groups and a reduction in the proportion of children-is the result of a decrease in fertility and increased longevity. The global share of children aged 0 to 14 declined from 32 per cent in 1995 to 26 per cent in 2015. The decline is more pronounced in developed regions, but occurs in most countries around the world. Currently, the proportion of children in developed regions is low, at 17 per cent, compared to 28 per cent in developing regions. One region with a low proportion of children is Eastern Asia ( 18 per cent), dominated by population dynamics in China and its long-standing one-child policy. At the other extreme, sub-Saharan Africa has the highest proportion of children in the population, at 43 per cent. ${ }^{2}$

## Populations in many countries are ageing rapidly

The share of older people (aged 60 and over) in the global population has increased over time. In 2015 , the proportion is 12 per cent, compared to 10 per cent in 1995, and is projected to increase to 21 per cent by 2050. The older population itself is also ageing, with the proportion of those aged 80 or older projected to grow from 14 per cent in 2015, to 19 per cent by $2050 .^{3}$
Population ageing is taking place in all regions and countries, although each of them is at a different stage in the transition. In developed regions, where the transition occurred earlier, the proportion of older persons is currently at 24 per cent. By comparison, in developing regions, the proportion is 10 per cent. Nevertheless, population ageing is also occurring in developing regions and at a faster pace than in developed ones. The same demographic shift experienced by developed regions is expected to take a shorter period of time in developing regions. ${ }^{4}$ This means that countries in developing regions have much less time to put in place the infrastructure to address the needs of a rapidly expanding older population. A life-course approach to healthy and active ageing is becoming crucial. Continuous participation in and contribution to society, including at older ages, can be supported by promoting healthy behaviours at all ages, preventing and detecting chronic diseases early, encouraging lifelong learning, and gradual retirement at older ages (see Chapters on Health, Education and Work).

Programmes and services targeted to older persons need to take into account the fact that women tend to live longer than men (figure 1.1). Once they reach age 60, women are expected to live for another 24 years in the developed regions and for another 20 years in developing regions. By comparison, men reaching age 60 are expected to live for another 21 years in developed regions and 18 years in developing regions.

[^1]Figure 1.1
Life expectancy at age 60 by sex, 1990-1995 to 2010-2015

Source: United Nations, World Population Prospects: The 2012 Revision (United Nations, 2013a). Note: Data presented by MDG regions.


Women

10


Changes in age structure have created a demographic window of opportunity for economic growth in many developing countries

The reduction in the share of children, at a time when the proportion of older persons is still relatively low, opens a demographic window of opportunity for economic growth and social development in developing countries. ${ }^{5}$ This is a favorable period during which the share of the dependent population (children and older persons) is going down, while the share of the working population (adults) is increasing. The dependency ratio (the ratio of children and older population to the ratio of adults at working age) reached its minimum level in

2015, but is projected to stay there for only 15 years. ${ }^{6}$ Most developed countries already have large older populations, but many developing countries can benefit from this "demographic dividend", with the appropriate economic and social policies and increased investments in human capital (education and health), particularly among children, adolescents and youth. In this short window of opportunity, women's economic participation could make a big difference. Gender equality and women's access to the full range of economic opportunities can contribute to increased productivity and improved development outcomes for their children.

[^2][^3]
## Sex ratio

There are fewer women than men in the world and in some developing regions

In 2015, population projections estimate that there are 3.6 billion women and 3.7 billion men worldwide. In other words, women constitute slightly less than half of the global population (49.6 per cent). The ratio of males to females (sex ratio) indicates that there are 102 men for every 100 women. ${ }^{7}$ Men outnumbered women by approximately 44 million in 1995 and by 62 million in 2015. This increase is the result of population growth and greater improvements in the survival rates of men compared to women. Within the same time period, the sex ratio increased by a very small margin (less than 0.5 per 100). ${ }^{8}$

Large variations in the ratio of men to women are found across the world, with some regions experiencing a shortage of men and others a shortage of women (figure 1.2). Women outnumber men in developed regions and in three out of nine developing regions: the Caucasus and Central Asia, Latin America and the Caribbean, and SouthEastern Asia. The surplus of women in absolute numbers is highest in developed regions and in Latin America and the Caribbean, at 36 million and 10 million, respectively. Over the past two decades, the relative shortage of men became smaller in developed regions and in the Caucasus and Central Asia, and increased in Latin America and the Caribbean (figure 1.2). Currently, the countries and areas with the relative largest shortages of men are Curaçao ( 82 men per 100 women), Latvia ( 84 per 100), Lithuania, Martinique and Ukraine (all 85 per 100) and the Russian Federation (86 per 100). ${ }^{9}$

Men outnumber women in Eastern Asia, Southern Asia, Oceania, and Western Asia (figure 1.2). The largest relative surplus of men is recorded in Western Asia, where estimates count 111 men for every 100 women. Eastern and Southern Asia also experience a surplus of men, with a sex ratio of 107 and 106 , respectively. Three regions have the highest surplus of men in absolute numbers: 50.5 million in Eastern Asia (mainly due

[^4]to China), 49.5 million in Southern Asia (mainly due to India), and 12.1 million in Western Asia (mainly due to Saudi Arabia and the United Arab Emirates). Over the past two decades, the relative surplus of men declined in Southern Asia and Oceania and increased in Eastern and Western Asia. The increase was particularly noteworthy in Western Asia, where the relative surplus of men doubled (figure 1.2). Countries with the highest observed ratio of men to women in the world are located in this region, including Qatar ( 324 men per 100 women), the United Arab Emirates (228 per 100), Oman (188 per 100), Kuwait (148 per 100 ) and Saudi Arabia (139 per 100). In absolute terms, countries with the largest surplus of men are China ( 52 million), in Eastern Asia, and India (43 million), in Southern Asia. The ratio of men to women and the surplus of men in these two most populous countries largely determine the surplus of men observed at the global level. In sub-Saharan and Northern Africa, the number of women and men is almost equal. ${ }^{10}$

Figure 1.2
Surplus or shortage of men per 100 women by region, 1995 and 2015


## a. Sex ratio at birth

The sex ratio of a population is determined by the sex ratio at birth-the number of baby boys born for every 100 baby girls-and, after birth, by differences in female and male mortality and migration across age groups.

Currently, more baby boys are born than girls, a by-product of enduring natural selection processes and one of the very rare constants in demography. The biological level of the sex ratio at birth tends to be close to 105 boys per 100 girls, with a standard sex ratio at birth taken as between 103 and 107 boys per 100 girls, allowing for natural regional variations. In some populations, the sex ratio at birth exceeds the standard values. Sex-selective abortion, which is reflective of long-standing cultural preferences for sons, is a major explanatory factor. ${ }^{11}$

Globally, the sex ratio at birth for 2010-2015 is 107 boys per 100 girls. Regional differences, however, are evident. ${ }^{12}$ In developed regions, a sex ratio at birth of 106 is observed, compared to 108 for developing regions. The largest imbalances are recorded in Eastern Asia, with 115 male births per 100 female births, followed by Southern Asia, with a sex ratio at birth of 109, Oceania ${ }^{13}$ at 108, the Caucasus and Central

Asia at 107, due to recent imbalances recorded in selected countries (Armenia, Azerbaijan and Georgia), South-Eastern Asia at 106, and both Latin America and the Caribbean and Western Asia at 105. With 104 boys born per 100 girls, sub-Saharan Africa is the region of the world with the lowest sex ratio at birth.

Increasing imbalances in sex ratios at birth are found in a number of countries

Over the past few decades, a number of countries and areas have displayed growing imbalances in sex ratios at birth (figure 1.3), indicating that more parents are selecting the sex of their offspring in order to have at least one son. Currently, the highest sex ratio at birth is observed in China, where 116 boys are born for every 100 girls. While higher than expected sex ratios at birth were initially found mostly in Asia, they have also been observed in Southern Europe in recent years, as well as among the South Asian diaspora living in developed countries. ${ }^{14}$ The sex ratio at birth varies by the birth order of the child and the sex of the preceding child(ren). In general, the sex ratio at birth tends to increase with birth order and is more imbalanced in families without at least one son. ${ }^{15}$

Figure 1.3
Imbalanced sex ratios at birth in selected countries

[^5]

[^6]In some countries, son preference is declining. The experience of the Republic of Korea, for example, suggests that the sex ratio at birth can potentially return to a biologically normal value. After reaching its peak around 1990-1995, the sex ratio at birth in that country progressively declined to expected levels by 2010. Changes in social norms and societal development driven by increases in education, together with legislation against sex-selective abortions, are among the main forces driving the reversal of the trend in the sex ratio at birth. ${ }^{16}$ In contrast, in India, while sex-selective abortions have been technically illegal since 1996, the law has had little effect so far on the sex ratio at birth. ${ }^{17}$
b. Sex ratio across age groups

Among younger age groups, there are more boys and men than girls and women; the opposite is true among groups of older persons

After birth, biology favours women. The slight male advantage in numbers at birth progressively disappears during childhood and young adulthood, owing to a generally higher male (compared to female) mortality at all ages (see chapter 2 on Health). An equal balance in the numbers of women and men is reached during adulthood. At the global level, there are more men than women up to age 50 (figure 1.4). After that age, when higher mortality rates for men compared to women continue to be observed, the share of women increases rapidly. Globally, the sex ratio is 95 men per 100 women in the 60 to 64 age group, but declines to 70 per 100 in the 80 to 84 age group, and to 45 per 100 in the 90 to 94 age group.

Some populations depart from this global pattern due to specific sex differences in mortality and migration. In developed regions, the balance in the numbers of women and men is reached around age 40 , whereas in the developing regions it is around age 55 (figure 1.4). The difference between the two regions is mainly explained by the higher than expected sex ratio at birth and the lower than expected mortality for boys compared to girls in developing regions, particularly among children under age 5. Eastern and Southern Asia are extreme examples of this pattern. Unlike other regions, Eastern and Southern Asia have higher

[^7]sex ratios not only among children and youth, but also among older adults. In these two regions, the number of women equal that of men only around age 65.

The lower proportion of women across all age groups in Eastern and Southern Asia relative to other regions may be a measure of the inequalities faced by women at all stages of the life cycle. The term "missing women," coined by Amartya Sen ${ }^{18}$ and used extensively in the literature since then, refers to the high sex ratios observed in some Asian countries, such as China and India, compared to those found in developed countries (and in many countries in developing regions). In other words, the number of "missing women" is the number of additional women that would be found if these countries had the same sex ratios as areas of the world in which women and men received the same treatment and care. The higher mortality of women compared to other countries with similar overall levels of mortality and similar epidemiological conditions is an indicator of the neglect of girls and gender inequality. The sex ratio at birth (as shown above) and the relatively higher female mortality in childhood (see Chapter 2 on Health) play a key role in explaining the lower than expected numbers of women in some countries. More recent research points out that the "missing women" phenomenon can also be explained by premature deaths among women in later age groups. ${ }^{19}$
Among the other developing regions, Western Asia has the most distinct demographic profile, characterized by a much higher number of men than women at adult working ages, peaking in the 35 to 39 age group (figure 1.4). Western Asia also has the largest percentage of international migrants among its population and the only region where international migration has a significant impact on the sex ratio at adult ages. Large scale male-dominant labour migration to many Western Asian countries has brought the sex ratio of the adult population to unusually high levels. International migrants constitute nearly a third of the male population between the ages of 25 and 44 in that region. For women, the share of international migrants in the total female population in Western Asia is one in seven (figure 1.7).

[^8]Figure 1.4
Age-specific sex ratio in population, world and selected regions, 1995 and 2015


Compared to 20 years ago, the ratios of men to women across all age groups have changed slightly at the global and regional levels (figure 1.4). The slightly higher number of boys relative to girls recorded in 2015, compared to 1995, is indicative of the influence of Eastern and Southern Asia on world population dynamics. The increase is mainly explained by an increased sex ratio at birth over the past 20 years in a few countries (figure 1.3) in these two regions, as well as slightly faster improvements in boys' survival rates compared to girls' in these and other regions.
The ratio of men to women among older persons also increased (figure 1.4), due to a greater increase in the chance of survival to older ages among men than among women. Over the past 20 years, the number of men living beyond age 60 increased faster than the number of women, with a proportionate decline of women in older age groups. The increase in the ratio of men to women at older ages occurred mainly in developed regions, but also in some developing regions, including the Caucasus and Central Asia, Eastern Asia and Northern Africa (see Statistical

Annex). ${ }^{20}$ The opposite trend has been observed in Southern Asia. The unusually high ratio of men to women at older ages observed in 1995, declined considerably over the past 20 years. Nevertheless, the ratio remains the highest among all regions in 2015.

Despite gains in survival among men, including at older ages, women continue to constitute the majority of older persons in all regions, representing 54 per cent of those aged 60 and over, and 62 per cent of those aged 80 and over in 2015 (figure 1.5). They outnumber men at older ages in both developing and developed regions, but the developing regions count proportionally less women at older ages. The lowest proportion of women among older persons and in the oldest age group is found in Southern Asia ( 52 per cent and 55 per cent, respectively) and Eastern Asia ( 51 per cent and 58 per cent, respectively). This is the result of sex imbalances that begin at birth and continue throughout life.

[^9]Figure 1.5
Share of women among older persons (aged 60 and above) and among those aged 80 and over by region, 2015


Source: United Nations, World Population Prospects: The 2012 Revision (United Nations, 2013a).
Note: The vertical line (-) indicates the same number of women and men. Data presented by MDG regions.

## 2. Migration, refugees and internally displaced persons

Migration can offer an empowering opportunity for women and men seeking better education, job opportunities and improved living conditions. Gender roles and attitudes acquired in the country of origin are often challenged and changed among migrants as they integrate into new communities. Such roles and attitudes may also shift in the families and communities left behind. ${ }^{21}$ Women migrants in particular may become more empowered as they learn a new language and skills, take paid employment that secures their access to financial resources, and become familiar with new norms regarding women's rights and opportunities. Women left at home as their husbands migrate may also experience changes in their roles and assume greater decision-making power and autonomy. ${ }^{22}$

[^10]Migration has complex social and economic impacts in communities of origin and destination. In communities of origin, the emigration of highly educated and skilled individuals, often referred to as the "brain-drain", can negatively impact social development and economic growth. ${ }^{23}$ In some contexts, this type of emigration is more pronounced among women than men. For instance, emigration rates among highly educated women from developing regions to OECD countries (member States of the Organisation for Economic Co-operation and Development) are higher than those of highly educated men in about half the countries with available data. ${ }^{24}$

Migration often results in remittances, which are an important source of income for many families in developing countries. In 2013, officially recorded remittance flows to developing countries reached $\$ 404$ billion, far exceeding official development assistance. ${ }^{25,26}$ Remittances have an important role in keeping households out of poverty, including female-headed households. In some sub-Saharan African countries, for instance, the lower poverty rate among female-headed households, compared to maleheaded households, is partially attributed to remittances received (see Chapter 8 on Poverty). Remittances have other gender dimensions as well. Some studies have shown that women migrants tend to remit more of their income to their families than male migrants. ${ }^{27}$
The effect of international migration on women and men in their new destination often depends on whether the rights of migrants are protected and if migrants and their families are integrated into society. A number of global, regional and national instruments dealing specifically with migrant rights have been adopted. However, instruments protecting the rights of migrant workers and their families ${ }^{28}$ have been ratified by less

23 Ibid.
24 Widmaier and Dumont, 2011.
25 World Bank, 2014.
26 Official development assistance stood at $\$ 135$ billion in 2013. United Nations, 2014c.

27 United Nations, 2006.
28 The 149 ILO Convention concerning Migration for Employment (No. 97) was ratified by 49 States as at 1 December 2013; the 1975 ILO Convention concerning Migrations in Abusive Conditions and the Promotion of Equality of Opportunity and Treatment of Migrant Workers (Supplementary Provisions) (No. 143) was ratified by 23 States; the 1990 International Convention on the Protection of the Rights of All Migrant Workers and Members of their Families was ratified by 47 States; and the 2011 ILO Convention concerning Decent Work for
than one quarter of all UN Member States. For instance, the 2011 International Labour Organization Convention concerning Decent Work for Domestic Workers, a category of workers dominated by women, was ratified by only 10 member States as at the end of 2013. By comparison, instruments to combat human trafficking have been ratified by more than three quarters of States. ${ }^{29}$

## International migration

## Adult men are more likely than adult women to migrate internationally

Globally, the number of international migrants reached an estimated 232 million in 2013, up from 175 million in 2000, and 154 million in 1990. ${ }^{30}$ The proportion of international migrants in the global population has changed little, from 2.9 per cent in 1990 to 3.2 per cent in 2013. ${ }^{31}$ The sex composition of the migrant stock has remained relatively stable over time. With 111 million women migrants compared to 120 million men migrants, women constituted 48 per cent of total international migrants in 2013, compared to 48.8 per cent in $1990 .{ }^{32}$

Figure 1.6
Share of women and men in international migrant stock by region, 2013


Domestic Workers (No. 189) was ratified by 10 States. Source: United Nations, 2013k.
9 United Nations, 2013k,
0 United Nations, 2013b.
1 United Nations, 2013k.
2 United Nations, 2013b.

In developed regions, women migrants represent slightly more than half ( 52 per cent) of the international migrant stock (figure 1.6), a proportion that has been relatively stable over the past 20 years ( 51 per cent in 1990). ${ }^{33}$ In developing regions, women's share in the international migrant stock is lower, declining from 46 per cent in 1990 to 43 per cent in 2013. Nevertheless, in some developing regions, women are more than half of international migrants, including in Latin America and the Caribbean, the Caucasus and Central Asia and Eastern Asia. In regions with an established history of immigration, such as the developed regions and Latin America and the Caribbean, the larger share of women in the migrant stock is partially the result of the longer life expectancy of women than men migrants who arrived decades earlier. ${ }^{34}$ In the remaining developing regions, including, Northern Africa, Oceania, sub-Saharan Africa, Southern Asia and Western Asia, men's share among international migrants is higher than women's (figure 1.6). In Western Asia, women constitute the smallest share ( 34 per cent) of the international migrant stock.

Migration plays a role in the age and sex composition of the population in some regions and countries. In developed regions, the international migrant stock represents an estimated 11 per cent of the population. As shown in figure 1.7 , the proportion of migrants in the population is higher in the working age groups, particularly ages 30 to 44 . While the effect on the age structure of the host population is considerable, there is no effect on the sex ratio in the population, since the proportion of women and men migrants in the total population of the developed regions is similar (figure 1.7).
In developing regions, where less than 1.6 per cent of the population is composed of international migrants, the potential effect of international migration on the age structure of the population is less prominent than in developed regions (figure 1.7). However, the effect on the sex ratio at adult ages is more pronounced than in the developed regions, since men dominate the international migrant stock in developing regions. The difference is particularly significant between ages 25 and 44, as the share of migrant men in the population is 1.5 times higher than the share of migrant women.

[^11]Figure 1.7
International migrant stock by age and sex as a percentage of the male and female total population in 2013


Source: Computed based on United Nations, Trends in International Migrant Stock: The 2013 Revision (United Nations, 2013b).
Note: Data presented by MDG regions.
Among developing regions, Western Asia has the largest proportion of international migrants due to strong demand for migrant workers in its oilproducing countries. ${ }^{35}$ It is also the region with the highest impact of international migrants on the age and sex composition of the population. There, international migrants are almost a third of the male population between the ages of 25 and 44 . However, although, the share of international migrants in the total female population does not reach such levels, almost one in seven women between the ages of 25 and 44 is an international migrant.

[^12]In Europe, men are more likely to migrate for work, while women migrate mostly for family reasons

The two major reasons for migration, namely, family formation and/or reunification and labour migration, play different roles in the migration of women and men. For instance, as shown in figure 1.8, for first residence permits granted in European countries, migration for work in developed countries is still dominated by men. For women and children, migration for family reasons is predominant. However, it should be noted that women also migrate in high numbers for work, and men for family reasons. Migration for educational reasons is prevalent more often among young women than young men. Nevertheless, these statistics on officially recorded reasons for migration refer only to the first residence permit. Migration is a dynamic and complex process, and many women and men entering the host country for family or educational reasons may later shift from one category to another. Even if many women are categorized administratively as family migrants, like men, they nevertheless seek better living conditions and improved prospects for their children, including through individual access to paid employment.

Gender-specific labour demands in receiving countries stimulate the extent of labour migration of women and men. This is the case, for example, in the demand for domestic workers and nurses in developed regions, or demand for workers in the oil and construction industries in Western Asia. Gender norms and stereotypes in both countries of origin and destination, reinforced by formal education and training programmes, define jobs such as domestic workers and nurses as more suitable for women, and jobs in the oil industry or construction as more suitable for men. ${ }^{36}$

Labour market integration can be particularly challenging for women migrants. Many women are often ineligible for social benefits and mainstream support as they enter the host country under the family reasons category, and if their partners also work. Integration is usually particularly difficult for women migrants in countries where the employment of women is generally low. ${ }^{37}$ Nevertheless, migrant women still have more work opportunities than in their countries of origin, and tend to be more inte-

[^13]grated into the labour market of developed countries of destination than women from the same country who did not migrate. ${ }^{38}$

Figure 1.8
Numbers of people granted first residence permits by age, sex and reason, European countries, 2013


Source: Eurostat, First Permits by reason, age, sex and citizenship (accessed July 2014).
Note: Computed based on data on residence permit issued to a person for the first time. A residence permit is also considered a first permit if the time gap between the expiration of the old permit and the validation of the new permit issued for the same reason is at least 6 months, irrespective of the year the permit is issued. Four types of residence permits are covered in the data: family reasons, education, remunerated activities and other.

## Internal migration

Migration within countries is more common than international migration. In 2005, an estimated 763 million people living within their country of birth were residing outside the region of their birth, and 229 million people were living in a different region than they were five years earlier. ${ }^{39}$ Overall, the proportion of persons migrating internally is higher in developed than in developing regions. ${ }^{40}$

## Among young age groups, internal migration in some developing regions is dominated by women

Similar age and sex patterns of recent internal migration ${ }^{41}$ are observed in both developed and developing regions (figure 1.9). Internal migration is mainly concentrated among young adults,

[^14]and slightly more so for women than for men. In developing regions, internal migration peaks at younger ages than in developed regions, due to earlier age at first marriage, less years of schooling and earlier entry into the labour market. However, the reasons associated with internal migration among younger people may differ between the sexes. In developing regions, for example, adolescent boys tend to have higher rates of migration for work and education than girls. ${ }^{42}$ While marriage is the reason for migration for a high proportion of adolescent girls, the situation varies in some contexts. ${ }^{43}$ After peaking at the young adult years, internal migration in both developed and developing regions declines across all ages.

## Refugees and internally displaced persons

By the end of 2013, 51.2 million individualsincluding 16.7 million refugees, 33.3 million internally displaced persons (IDPs) and 1.2 million asylum-seekers (having pending refugee status)-were forcibly displaced worldwide as a result of persecution, conflict, generalized violence or human rights violations. In 2013, the three countries contributing most to the total number of refugees under UNHCR's mandate were Afghanistan ( 2.56 million), the Syrian Arab Republic ( 2.47 million) and Somalia (1.12 million). ${ }^{44}$ Developing countries hosted 86 per cent of the world's refugees. The largest numbers of refugees were hosted by Pakistan, the Islamic Republic of Iran and Lebanon.

Women and girls account for 49 per cent of the global refugee population. Women represent more than half of the refugees in all subregions of sub-Saharan Africa, except Southern Africa. Wide variations are found in the share of women among refugees. Among countries with over 1,000 refugees and complete coverage of data disaggregated by sex, the proportion of women range from 15 per cent in Israel, to 56 per cent in Rwanda. Women are underrepresented among asylum seekers ( 38 per cent in 2012). ${ }^{45}$ On the other hand, stateless persons and returnees to their countries of origin ${ }^{46}$ are more often women.

[^15]Figure 1.9
Percentage distribution of internal migrants by age and sex (according to the place of residence five years ago), 2000-2010 (latest available)




Source: Computed based on IPUMS data. IPUMS-International, 2014. Note: Unweighted averages. Regional average based on: four countries in sub-Saharan Africa; 12 countries in Latin America and the Caribbean; five countries in Asia; and six countries in developed regions. Internal migration is measured based on census information on residence in a different administrative unit five years ago.

Refugee and internally displaced women and girls are at special risk of violence and exploitation, partly because they often lack decision-making power. Violence against women-including rape, forced impregnation, forced abortion, trafficking, sexual slavery and the intentional spread of sexually transmitted infections, including HIV-is one of the defining characteristics of contemporary armed conflict (see Chapter 6 on Violence against women). Women's vulnerability to rape and sexual assault continues during the flight from their homes, crossing of the border and at the place of destination, as well as in refugee camps or collective centres. At their final destination, women and girls may face other difficulties. For example, they may lack individual identity documents, be sidelined in decisions concerning the administration of the camps and in the formulation and administration of assistance programmes. Returning refugees and internally displaced women, particularly widows, may face more difficulties than men in reclaiming property in post-conflict situations, and may be excluded from reconstruction and rehabilitation activities. ${ }^{47}$

## B. Families

## 1. Marriage and other unions

For many people, marriage is the first step in beginning a new life. However, in many coun-tries-representing a variety of social, cultural, legal and political systems-less formal unions form the basis of family life. Included in the category of "other unions" used in this chapter are informal consensual unions and civil unions based on cohabitation and polygyny (when a man takes more than one wife).

## Age at marriage

Women and men are marrying at later ages
Women and men around the world are marrying at later ages, reflecting increases in education levels, later entry into the labour force, changing norms about formal marriage and informal unions based on cohabitation, and increased economic independence and empowerment for women. Women continue to marry a few years earlier than men (figure 1.10). Currently at the global level, women marry at age 25 on average,

[^16]while men marry at age 29 , about 1 year later for both compared to two decades ago. ${ }^{48}$

Figure 1.10
Average age at first marriage by sex and region, 2005-2012 (latest available)

| Northern Africa | $\circ$ |
| ---: | :---: |
| Sub-Saharan Africa |  |
| Latin America and the Caribbean | $\triangle$ |
| Eastern Asia | $\square$ |
| Southern Asia | $\circ$ |
| South-Eastern Asia | $\neq$ |
| Western Asia | $\Delta$ |
| Oceania | $\times$ |
| Caucasus and Central Asia | $\square$ |
| Developed regions | $\diamond$ |

Source: United Nations, World Marriage Data 2012 (United Nations, 2013d), updated using United Nations, Demographic Yearbook Database (United Nations, 2014b) accessed September 2014.
Note: This figure presents the singulate mean age at marriage (SMAM), which is interpreted as the number of years lived single among those who ever married by age 50 . The diagonals correspond to the indicated age difference between spouses. Data presented by MDG regions.


Age at first marriage has increased in most regions, except in Latin America and the Carib-
bean and the Caucasus and Central Asia. It has been the highest and has increased the most in developed regions, where women marry at age 29 on average and men at age 31. The age gap between spouses also declined the most, reaching 2.4 years, the lowest among all regions. These trends in developed regions show increased similarity between women and men in patterns of age at first marriage in a context of wider educational and employment opportunities for both of them. Increasingly, both women and men also tend to spend a period of time in an informal union before formalizing a relationship into marriage. ${ }^{49}$

Women continue to marry at the youngest ages in Southern Asia and sub-Saharan Africa. Currently, for women in these regions, age at marriage averages 21 and 22 years, respectively, some 7 to 8 years earlier than in developed regions, while men on average marry at age 26 and 27, re-spectively-4 to 5 years earlier than in developed regions. In contrast, women and men in Northern Africa marry the latest among developing regions, at age 27 and 31, respectively. There, men marry at similar ages with men in developed re-

[^17]gions, while women marry two years earlier than women in those regions.

The age gap between spouses narrowed slightly in some regions and increased in others

For women, marrying at a young age tends to be associated with a wider age gap between spouses, often resulting in greater inequality. Women who marry older men at a young age may be disadvantaged in family decision-making, including on issues related to sexual and reproductive health. They are also at greater risk of domestic violence and early widowhood. ${ }^{50}$ The age gap between spouses remains the widest in subSaharan Africa (on average, men are 4.8 years older than their wives) and Southern Asia (men are an average of 4.3 years older). In the past two decades, the age gap between spouses narrowed slightly, by a few months, in four regions of the world: Northern Africa, Southern Asia, Western Asia and the developed regions. Meanwhile, in Latin America and the Caribbean and Eastern and South-Eastern Asia, the difference between the male and female average age at marriage increased, also by a few months. ${ }^{51}$

## Child marriage

The prevalence of child marriage is high in many countries, particularly in Southern Asia and sub-Saharan Africa

Child marriage, defined as a formal marriage or informal union before age 18, is a fundamental violation of human rights. Yet, marriage before age 18 is not allowed by law, with or without parental consent, in only 10 out of 45 developed countries with available information, and 35 out of 129 developing countries with available information. ${ }^{52}$ Girls are more likely to marry at a young age than boys. Moreover, girls are often married to older men, sometimes making it difficult for them to exercise their decision-making power within the household and partnership, including on issues related to reproductive health. Child marriage among girls can result in early pregnancy-placing the health and very survival of mothers and their babies at risk. Child brides are also more likely to experience domestic violence and social isolation, and typically have

[^18]limited opportunities for education, a career and vocational development. ${ }^{53}$

Globally in 2010, an estimated 26 per cent of women aged 20 to 24 were married before age 18 ; this is only 5 percentage points lower than in 1995. ${ }^{54}$ Women who married before age 15 accounted for most of the decline. Between 1995 and 2010, the proportion of women aged 20 to 24 who married before age 15 declined from 12 per cent to 8 per cent. ${ }^{55}$ The prevalence of child marriage remains highest in Southern Asia and sub-Saharan Africa (figure 1.11). In Southern Asia, 44 per cent of women aged 20 to 24 were married before age 18 and 16 per cent before age 15 . The corresponding figures for sub-Saharan Africa were 40 per cent and 12 per cent, respectively.
Among the 113 countries with available data, 42 have a prevalence rate of child marriage of more than 30 per cent, including 8 countries with prevalence rates exceeding 50 per cent (Bangladesh, Burkina Faso, Central African Republic, Chad, Guinea, Mali, Niger, and South Sudan). ${ }^{56}$

## Informal and civil unions

Informal unions everywhere are on the rise
While marriage remains the traditional path to establishing a family, other forms of union also exist, including consensual unions or unions based on cohabitation. While these relationships are usually recognized by society, they are not necessarily formalized through civil unions and/ or a legal contract, and are often not registered as unions in statistical sources. Many women and men in informal unions categorize themselves as "single" in censuses or surveys and are not listed as "married" or "in union" in datasets that look at marital status. Furthermore, in many countries, informal unions are not included as an option in census or survey forms. It is important to note that women in informal consensual unions may be disadvantaged relative to women in legal marriages, especially with respect to financial commitments in cases of separation.

In Latin America and the Caribbean, the proportion of women living in consensual unions has increased continuously, reaching high levels in

[^19]Figure 1.11
Proportion of women aged 20 to 24 who married before ages 15 and 18, 2005-2012 (latest available)


Source: UNICEF, State of the World's Children 2014 in Numbers: Every Child Counts. Personal communication (UNICEF, 2014b).
Note: Data presented by MDG regions.
most countries of the region (figure 1.12). For example, in Uruguay, the 2011 census revealed that 42 per cent of women aged 25 to 29 years were living in consensual unions, versus 16 per cent recorded in the 1996 census. Consensual unions are dominant among young persons in many other countries of the region. The proportion of women aged 25 to 29 living in consensual unions is more than 40 per cent in 8 out of 18 countries with available trend data.

In sub-Saharan Africa, consensual unions are generally less common, but are increasing in the majority of countries in the region. Some countries such as Burundi, Cabo Verde and Uganda have witnessed a sharp increase in the prevalence of consensual unions (figure 1.12). Currently, more than 30 per cent of women aged 25 to 29 are living in consensual unions in 4 out of 16 countries with available trend data (Botswana, Cabo Verde, Gabon and Uganda). In contrast to Latin America and the Caribbean and sub-Saharan Africa, informal unions are far less common across Asia, reaching, at most, 10 per cent of women aged 25 to 29.

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In Europe, cohabitation is common, whether as a prelude
    to marriage or as a stable alternative to it
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In some European countries, cohabiting partners can enter a civil union in order to legalize their relationship without marrying. Cohabiting unions are more often found among younger
people, particularly couples without children. For instance, in 2007, the proportion of women with no children in a cohabiting union was, on average, 63 per cent at around age 20, 38 per cent at around age 30 , and 23 per cent at around age 40 . Among women with children, the cor-

Figure 1.12
Proportion of women aged 25 to 29 years in consensual union, Latin America and the Caribbean and sub-Saharan Africa


Source: United Nations, World Marriage Data 2012 (United Nations 2013d), updated using United Nations, Demographic Yearbook Database (United Nations, 2014b) accessed September 2014.
responding proportions were 28 per cent, 14 per cent and 7 per cent. ${ }^{57}$

Large regional variations in cohabitation are found across Europe. Generally, the proportion of women aged 20 to 34 in a cohabiting union is higher in Northern and Western European countries than in Eastern and Southern European countries (figure 1.13). Denmark and Finland account for the largest proportion of women aged 20 to 34 in a cohabiting relationship. In contrast, the lowest proportions of women aged 20 to 34 in such relationships are found in Malta, Poland and Slovakia.

Figure 1.13
Proportion of women aged 20 to 34 cohabiting, European countries


Source: OECD Family Database, Table SF3.3. Cohabitation rate and prevalence of other forms of partnership (OECD, 2013b).
Note: Data refer to those who have formalized their relationship through a civil union and/or legal contract and those who have not registered their relationship (but report their cohabiting status in censuses and other relevant surveys). In most countries, cohabitation refers to relationships between men and women, but same sex partnerships can be included in a few countries.

[^20]
## Polygyny

Being in a polygynous union-meaning that a man has more than one wife-affects many aspects of a woman's life. Polygynous unions tend to be associated with wider age gaps between wives and husbands, ${ }^{58}$ lower contraceptive use and high fertility. ${ }^{59}$ There is also evidence that child survival is lower for children of polygynous unions. ${ }^{60}$ In general, polygyny is more prevalent in rural areas, among poorer households and less educated women. For example, an analysis of data for 34 countries in sub-Saharan Africa shows that the prevalence of polygyny among women with no education is twice as high as among women with secondary or higher education. ${ }^{61}$

## Polygyny is still prevalent in some sub-Saharan African countries

Polygyny is common in some countries in subSaharan Africa, particularly West Africa (figure 1.14). Around 2010, more than a third of women aged 15 to 49 in that region were married to men who had more than one wife. In Guinea, for instance, almost half of the women aged 15 to 49 were in polygynous unions. Nevertheless, the proportions of women in polygynous relationships have been declining faster in West Africa than in any other sub-region of sub-Saharan Africa. Outside of sub-Saharan Africa, polygyny is found in a few countries in Latin America and the Caribbean, Northern Africa, and in Southern, South-Eastern and Western Asia. Yet, in these regions, the prevalence of polygyny reaches about 5 to 7 per cent, with the exception of Haiti, where 16 per cent of women were in polygynous unions in 2012, versus 20 per cent in $2000 .{ }^{62}$

[^21]Figure 1.14
Proportion of women aged 15 to 49 years in polygynous unions, selected African countries with available data


Source: Data from the Demographic and Health Surveys (DHS) Program STATcompiler (DHS, 2014).

## 2. The dissolution of unions

## Divorce

Women are more likely than men to be divorced or separated
Divorce or separation can have multiple disruptive and lasting consequences not only for both partners, but also for children and other dependent family members. ${ }^{63}$ Women are less likely than men to re-marry after a divorce, and oftentimes find themselves in more vulnerable social and economic situations.

In most countries with available data, the proportion of women aged 45 to 49 who are divorced or separated is at least 25 per cent higher than the proportion of men who are divorced or separated (figure 1.15). Overall, the disparities between women and men in this regard are higher in developing than in developed regions. However, large variations are found across countries within each region, both in terms of the prevalence of divorce or separation and the gender disparities associated with them.

Figure 1.15
Proportion of divorced or separated women and men aged 45 to 49 years, 2000-2011 (latest available)
Sub-Saharan Africa
Latin America and the Caribbean $\triangle$
Developed regions $\diamond$

Source: United Nations, World Marriage Data 2012 (United Nations, 2013d), updated using United Nations, Demographic Yearbook Database (United Nations, 2014b) and Demographic and Health Survey (DHS) Program, data from STATcompiler (DHS, 2014).
Note: The diagonals correspond to the indicated difference between female and male proportions. Countries in Asia and Northern Africa are not displayed due to the low proportions of women and men divorced or separated in those regions.


## An increasing number of women are divorced or separated

Divorce is on the rise globally. The percentage of divorced or separated women in Latin America and the Caribbean and in the developed regions has increased. In the developed regions, over 17 per cent of women aged 45 to 49 on average are divorced or separated, while in Latin America and the Caribbean, the prevalence is about 16 per cent. However, these regional figures hide

[^22]large variations among countries. For example, among developed countries, the prevalence of divorced or separated women aged 45 to 49 in the Czech Republic (24 per cent) and Lithuania ( 22 per cent) is more than twice that of women in Japan ( 8 per cent) and Slovenia ( 10 per cent).
In sub-Saharan Africa, the prevalence of divorce or separation is generally lower, but is increasing, with large variations among countries. In some countries of the region, the proportions of divorced or separated women have reached levels comparable to those observed in developed regions, as well as in Latin America and the Caribbean. For example, in Gabon and Uganda, more than 20 per cent and 17 per cent of women aged 45 to 49 , respectively, are currently divorced or separated.
The prevalence of divorce remains low in Asia and Northern Africa compared to other regions of the world. In the latter region, the proportions of divorced or separated women aged 45 to 49 have been increasing very slowly during the past 20 years and currently stand at about 5 per cent. Large variations are found across Asia, with three broad regional patterns emerging: an East Asian pattern characterized by increasing divorce rates (for example, the proportion of women aged 45 to 49 in the Republic of Korea who are divorced or separated has almost tripled between 1995 and 2015); a Southeast Asian pattern characterized by declining divorce rates until recently; and a South Asian pattern with relatively stable and low divorce rates. ${ }^{64}$

## Widowhood

## Widowhood is about three times higher among women aged 60 to 64 than among men of the same age

Among persons aged 60 to 64 , widowhood is about three times more common among women than men (figure 1.16). This is a direct result of the higher survival rates among women than men and the lower probability of women than men remarrying after the death of their spouse. Widowhood among women of this age group is most prevalent in developing countries, particularly in some parts of Asia and sub-Saharan Africa, where mortality levels are higher, women often marry older men, and remarriage after the death of a male spouse is less common than in other regions.

[^23]The highest levels of widowhood (above 40 per cent among women aged 60 to 64) are found in some sub-Saharan African countries, especially in those countries that experienced political events such as conflicts (for example, in Burundi, Rwanda and Sierra Leone), as well as those with high HIV prevalence (such as Lesotho, Malawi and Zimbabwe). In addition, given the level of polygyny in the region (as shown earlier), when a man passes away it is usual that two or more women would become widows.

## Early widowhood has increased for women in countries afflicted by conflict and HIV

One of the results of the conflicts and HIV epidemics that have plagued many sub-Saharan African countries is early female widowhood. For example, in Lesotho and Zimbabwe-two countries with a high prevalence of HIV, women became widows at significantly younger ages in the early 2000s than in the 1990s (figure 1.17). In countries with high HIV prevalence, an increase in widowhood in the early 2000 s is consistent with the 10 -year time lag in mortality that followed the peak of the HIV epidemics in the mid1990s. In Zimbabwe, the proportion of widows in the 30 to 34 age group tripled between 1992 and 2002. As for the impact of conflict on widowhood, data for Rwanda show that as a result of the civil war and genocide in the early 1990s, the proportion of widowed women aged 30 to 34 increased nearly sixfold between 1991 and 2002.
The prevalence of widowhood in Asia has also been relatively high compared to other regions. The most recent available data for countries in the region show widowhood prevalence levels of over 40 per cent among women aged 60 to 64 in Indonesia, Mongolia and Pakistan. In the latter two countries, widowhood levels among men aged 60 to 64 were also considerably higher than in other countries in the region.
The prevalence of widowhood at age 60 to 64 is lowest in countries of the developed regions, where in general it has been steadily declining, mainly due to improvements in survival rates almost everywhere. ${ }^{65}$ However, a few exceptions are found, especially in some countries of Eastern Europe such as Belarus, the Republic of Moldova, the Russian Federation and Ukraine,

[^24]Figure 1.16
Proportion of widowed among persons aged 60 to 64, by sex, 2000-2013 (latest available)


Figure 1.17
Early female widowhood in countries with high HIV prevalence or conflicts

-1986 Census

- 2006 Census
- 1992 Census
- 2002 Census
- 1991 Census


Source: United Nations, World Marriage Data 2012 (United Nations 2013d) and IPUMS-International (IPUMS-International, 2014). Note: Grey-shaded areas and arrows indicate the increase in widowhood between censuses.
where, among women, it did not decline and even increased slightly due to negative trends in male mortality, ${ }^{66}$ and in the Caucasus and Central Asia, where it has not changed among women over the past two decades, mainly due to persistently high male mortality rates. ${ }^{67}$ In Latin America and the Caribbean, the prevalence of widowhood among women aged 60 to 64 is relatively low, similar to developed regions, and a general declining trend is observed.

## 3. Fertility

Almost all aspects of women's and men's lives are touched by decisions about how many children to have and when to have them. A number of factors influence how parenthood unfolds, including age at marriage, educational and employment opportunities available to women and men, their access to family planning, gender roles and expectations, and the overall social and economic context in which they live. All of these factors have undergone changes over the past two decades, as shown in the following Chapters of this report (see in particular the chapters on Education and Work). Parenthood models also shift as women's and men's roles in the family and society change. Although such changes are often slow, women are increasingly involved in decision-making in the public sphere (see Chapter 5 on Power and decision-making), while men are participating more in the raising of children. At the same time, men's rights to parental benefits are being addressed in a growing number of countries (see Chapter 4 on Work).
Globally, in 2010-2015, the total fertility rate reached 2.5 children per woman, compared to 3 children in 1990-1995 (figure 1.18). In developed regions, the total fertility rate reached its lowest point in 1995-2000, but in 2010-2015, it returned to the level observed 20 years earlier of 1.7 children per woman. In Europe, women have the fewest children, less than 1.6 children per woman on average in 2010-2015. The average number of children per woman has been increasing slightly in that region, however, after reaching its lowest level in the late 1990s and early 2000s.

[^25]Eastern and Southern Europe are the sub-regions of the world with the lowest fertility level (less than 1.5 children per woman in 2010-2015). In the late 1990s and early 2000s, women in Eastern Europe had less than 1.3 children on average. In the developed regions, many women and men desire a small number of children and choose to have them at later ages. The rising enrolment of women in higher education has resulted in an upward shift in the mean age at childbearing, ${ }^{68}$ from 27 years in 1980-1985 to above 29 years in 2010-2015. ${ }^{69}$ In that regard, the recent upturn in fertility observed across countries in developed regions can be explained by a decline in the pace of fertility postponement in recent years. ${ }^{70}$

In the developing regions, the average number of children per woman declined by 0.7 children, to reach 2.7 in 2010-2015. Despite a decline of more than one child on average over the past 20 years, sub-Saharan Africa is still by far the region where women have the largest number of children-4.6 in 2010-2015. Within that region, the total fertility rate varies from less than 2.5 in Southern Africa to more than 5.6 in Central and West Africa. ${ }^{71}$

Not all childbearing is intended, and millions of women around the world who would like to delay or stop it do not use any method of contraception. In many countries, a gap-called the unmet need for family planning-exists between contraceptive use and the desire of women to have children. Worldwide, 145 million women of reproductive age who are married or in union had an unmet need for family planning in 2014, increasing to 219 million if women using traditional contraceptive methods are included. ${ }^{72}$ This unmet need is especially high (more than one in four women who are married or in union) in sub-Saharan Africa and in countries where fertility is high ${ }^{73}$ (see Chapter 2 on Health).
The satisfaction of women's unmet family planning needs is important, especially since it enables women and men to decide freely on the number, timing and spacing of their children. Unmet need for family planning also has a considerable impact on population numbers. It is estimated that if the current unmet need for fam-

[^26]Figure 1.18
Average number of children per woman, by region, 1990-1995 to 2010-2015


Source: United Nations, World Population Prospects: The 2012 Revision (United Nations, 2013a).
Note: Data presented by MDG regions.
ily planning was satisfied over the next 25 years at an accelerated pace (compared to historical trends) in 97 developing countries (excluding China), the total population would be about 562 million less people in 2050 than what current trends suggest. ${ }^{74}$

## Adolescent birth rate

Despite a general decline, the adolescent birth rate is still high in a number of countries

Reducing the adolescent birth rate (births among women aged 15 to 19) is essential for improving the sexual and reproductive health of women and, ultimately, the social and economic wellbeing of adolescents. Over the past 20 years, the decline in the adolescent birth rate was almost universal (figure 1.19), but progress has slowed in recent years and adolescents in many countries still experience high birth rates. This is especially the case in a number of countries in sub-Saharan Africa and in Latin America and the Caribbean. Angola, Mali and Niger had adolescent birth rates of above 170 births per 1,000 girls aged 1519 years in 2010-2015. Adolescent fertility also remained high (at around 100 births per 1,000 girls in 2010-2015) in some countries in Latin America and the Caribbean (Dominican Republic, Guatemala and Nicaragua). High adolescent

[^27]birth rates are generally related to early marriage, unintended pregnancy, unsatisfied demand for family planning and school dropout. ${ }^{75}$

Figure 1.19
Adolescent birth rate by country and region, 1990-1995 and 2010-2015


## Births outside marriage

Marriage and fertility are becoming increasingly delinked. More people currently get married after having children or have children without getting married. In countries where informal unions are socially acceptable, extra-marital fertility is common, while in other countries such

[^28]unions are slowly becoming more socially acceptable than in the past. Trend data, based on 64 countries, show that the share of extra-marital births has been increasing since the 1970s, and there is currently a larger variation in the prevalence of extra-marital fertility across countries. ${ }^{76}$

The countries and areas with the highest prevalence of extra-marital fertility in 2000-2011 are in Latin America and the Caribbean: French Guiana ( 87 per cent), Jamaica ( 85 per cent), Panama ( 83 per cent), Venezuela ( 83 per cent) and Colombia ( 80 per cent). ${ }^{77}$ In comparison, the few countries with available data in Asia show very low levels of births outside of marriage. Extramarital fertility is also becoming more common in OECD countries. The share of children born outside marriage tripled, from 11 per cent in 1980 to almost 33 per cent in 2007. The rate is particularly high among Nordic countries, with Iceland, Norway and Sweden having more births outside of marriage than within. By contrast, ex-tra-marital fertility is rare in countries where the cohabitation rate is also low, as in Greece, Japan and the Republic of Korea. ${ }^{78}$

## Childlessness

Childlessness is increasing in almost all regions
Whether by choice or not, many women remain childless throughout their reproductive lives. Over the past few decades, the prevalence of childlessness (measured as the proportion of women aged 45 to 49 who have never had a child) has been generally on the increase worldwide. Childlessness reaches about 3 per cent in settings with low prevalence of contraceptive use, where large families are generally considered desirable, and where marriage or union tends to be early and universal. ${ }^{79}$ In the past, higher levels of childlessness have been associated with some sexually transmitted infections. For example, in the 1970s and earlier, the prevalence of childlessness in sub-Saharan Africa declined due to success in reducing sexually transmitted infections. However, more recently, it is increasingly linked to later age at marriage, the proportion of women who never marry, postponement of childbearing

[^29]to older and less-fecund ages, and the deliberate choice not to have children.

In recent years, the highest levels of childlessness were found in developed regions (figure 1.20). In some countries in these regions (Finland, Ireland and Spain), nearly one in five women are childless at the end of their reproductive lives. In contrast, childless women aged 45 to 49 are generally less common in developing regions. Among developing regions, countries in Latin America and the Caribbean have some of the highest proportions of childless women; however, childlessness does not exceed 15 per cent in any country. In countries of sub-Saharan Africa, the proportions of childless women are lower, at less than 10 per cent, and are increasing only slightly. Low proportions of childlessness are also generally recorded throughout Asia, where less than 10 per cent of women aged 45 to 49 are childless. Still, childlessness is quickly gaining ground in some Asian countries (such as Singapore, Thailand and the Republic of Korea), where the proportions of childless women have more than doubled between 1990 and 2010. The Caucasus and Central Asia is the only region of the world where childlessness has stagnated or has even declined in recent years. Indeed, this trend was observed mainly in Central Asia and should be interpreted in the context of recent fertility increases in the region.

## 4. Living arrangements

Living arrangements are also changing. Declining fertility rates, increasing age at first marriage and the increasing prevalence of divorce and never marrying are leading to smaller families, one-parent families and one-person households made up of young people. Living arrangements for young women and men are influenced by differences in education and employment opportunities, as well as gender differences in the norms and expectations related to starting a family. As a result, women tend to make the transition from childhood to adulthood at an earlier age than men. For instance, in European countries on average, half of women move away from home by age 24 , live with a partner by age 26 , and have a child by age 30 . In comparison, half of men move away from home by age 26 , live with a partner by age 29 and have a child by age $34 .{ }^{80}$

[^30]
## As young adults, men are more likely than women to live alone

In 40 countries with available data, ${ }^{81}$ women represent less than half of young people (aged 15 to 29) living in one-person households. However, large variations are found among regions as well as countries within the same region. Among developing regions, the share of women aged 15 to 29 in one-person households is lowest in sub-Saharan Africa. It is slightly higher in Latin America and the Caribbean as well as in Asia, where some countries, including Cambodia, Kyrgyzstan and Viet Nam, are getting very close to parity. In developed regions, the share of women among young people living alone is high in all countries with available data, ranging from 40 per cent in Ireland to 49 per cent in France, Hungary and Portugal.
The proportion of women and men living in one-person households is expected to increase in older age groups as well, since the proportion of the population who never marry is rising slightly. At the global level, 6 per cent of women aged 45 to 49 had never married or entered into union in the 1990s; this proportion increased to 9 per cent between 2000 and 2011. ${ }^{82}$ The increase was larger in developed regions (from 7 per cent to 12 per cent), compared to developing regions (from 6 per cent to 8 per cent). Among developing regions, the share of women who never married or lived in union varies widely-from 6 per cent or less in Asia, Northern Africa and sub-Saharan Africa to 16 per cent in Latin America and the Caribbean.

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Lone mothers make up more than three quarters
    of one-parent households
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With the increase in divorce and separation and in the share of children born outside marriage, one-parent households (households in which children are raised by only one parent) are more common in many countries in both developing and developed regions. ${ }^{83}$ Around 2010, the proportion of one-parent households in countries with available data ranged from 4 per cent in Albania to 20 per cent in Latvia.

[^31]Figure 1.20
Percentage of childless women aged 45 to 49 years, around 2000 and after 2005


In about three quarters of cases, the lone parent is the mother. This is usually related to the fact that mothers are awarded custody of children. The share of lone mothers is relatively stable, with a possible slight decline between 2000 and 2010, indicating that an increasing proportion of children live with their fathers or in joint custody. The mother and child(ren) of lone-mother households are likely to face challenging social and economic circumstances. Lone mothers, for example, are more likely to be poorer than mothers living with a partner and poorer than lone fathers (see Chapter 8 on Poverty).
Children's living arrangements are also changing as a result of changes in marriage and fertility patterns. The majority of children-both girls and boys-continue to live in households with both parents, however, an increasing proportion of children live in less traditional forms of households. For instance, the proportion of children in one-parent households has increased in most countries with available data, particularly in developed regions and Latin America and the Caribbean. ${ }^{84}$ Currently, in OECD countries, 73 per cent of children under age 18 live with two married parents, and an additional 11 per cent live with two cohabiting parents, 15 per cent live with one parent, and 1 per cent with neither parent. ${ }^{85}$ In developing regions, living arrangements for children are slightly different. In sub-Saharan Africa, for example, a region with a high propor-

[^32]tion of orphans (often due to HIV and conflict) and fostered ${ }^{86}$ children, only 59 per cent of children live with both parents, while 25 per cent live with one parent. The remaining 16 per cent, most of whom are fostered children, do not live with either of their parents. ${ }^{87}$

At older ages, women and men live more independently than before, often alone or as a couple without younger generations present in the household. This trend is largely the result of demographic ageing, increasing financial security and shifting family norms. ${ }^{88}$ Living arrangements at older ages are different for women and men, particularly in developed regions, and marital status is a major determinant of such arrangements. As shown earlier, in most countries there are more widows than widowers. Older women are more likely than older men to survive their spouses since women have lower mortality rates and tend to marry men that are a few years older. Older women are also less likely than men to remarry after their spouse dies. Men, on the other hand, are more likely than women to be in a marital union. The proportion of people in a marital union in 2005-2008 was 80 per cent among men aged 60 years and over and 48 per cent among women of the same age. ${ }^{89}$ Other factors contribute to the living arrangements of older persons. In some societies, social norms on intergenerational relationships and family support prescribe that younger generations provide for their parents in old age. Such norms have changed in many countries, particularly when large proportions of older persons have access to their own pensions and income, and there are fewer children and grandchildren to provide support.

[^33]Figure 1.21
Proportion of persons aged 60 and over living alone, by sex, selected countries with available data


Source: Computed by UNSD based on IPUMS-International (IPUMSInternational, 2014). Note: The percentages indicate the percentage of women or men living alone among the female and male population aged 60 and over.

At older ages, women are more likely than men to live in one-person households

Globally, older women are more likely than older men to live in one-person households (19 per cent versus 11 per cent, respectively) and less likely than men to live with a spouse and no children (22 per cent versus 29 per cent, respectively).

Living arrangements differ greatly between developed and developing regions. Overall in developed regions, older persons are more likely to live independently of younger family members. The differences in living arrangements between women and men are also wider in developed regions. The proportion of older persons living alone is 33 per cent for women and 16 per cent for men, and the proportion of older persons living with a spouse and no children is 37 per cent for women and 58 per cent for men. In developing regions, living arrangements for older persons are similar between women and men. ${ }^{90}$

Figure 1.21 presents the proportions of women and men aged 60 years and over living alone in selected countries with data available. In many countries, the proportions of women in that group living alone are higher compared to men of the same age. Wide variations are found across regions and countries in the proportion of women of this age living alone. In Switzerland, for example, it is close to 40 per cent, while among their counterparts in Burkina Faso, in sub-Saharan Africa, it is less than 2.5 per cent.

[^34]
## Chapter 2

Health

## Key findings

- Life expectancy over the past 20 years has risen for both sexes-reaching 72 years for women and 68 years for men in 2010-2015. The gender gap tends to widen as life expectancy increases.
- Health conditions related to pregnancy and childbirth, combined with HIV/AIDS, are the leading cause of death among young women aged 15 to 29 in developing regions, mainly due to the heavy toll of these deaths in sub-Saharan Africa.
- Maternal health has improved considerably over the years, yet in Southern Asia and sub-Saharan Africa only half of pregnant women have adequate care during childbirth.
- Injuries top the list of causes of death among young men aged 15 to 29 in developing and developed regions, and among young women aged 15 to 29 , in developed ones.
- The prevalence of tobacco smoking is higher among men than women in all regions.
- The prevalence of diabetes and obesity has increased for both sexes, and current levels of obesity are higher for women than for men.
- Breast and cervical cancers are the most common cancers affecting women.
- Men are at a higher risk than women of the same age of dying from cardiovascular disease, but more women than men die from the disease since they tend to live longer.


## Introduction

Good health is a fundamental human right and a necessary precondition for individual and societal development. It is defined as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. ${ }^{1}$
The differences in the health of women and men everywhere are determined by three interrelated factors: development, biology and gender. Each of these factors contributes to distinct health trajectories for individuals throughout the life cycle.

Development, understood as the development of health systems, but also of improved access to water, sanitation and transportation infrastructure, provides the overall context for the burden of disease. While the shift in the composition of the global health burden towards non-communicable diseases has been achieved in developed regions, communicable diseases, along with maternal, nutritional and neonatal conditions, continue to take a heavy toll in some developing regions, particularly sub-Saharan Africa, Oceania

[^35]and Southern Asia. Universal health coverage, which refers to systems in which all people have access to adequate health care without financial hardship and in an equitable manner, has been instituted in only some developed countries. ${ }^{2}$ Its prioritization in developing regions is likely to be based on each country's epidemiological conditions, demographics, economic resources and current state of the health system. ${ }^{3}$

Biology determines the health needs and vulnerabilities specific to women and men. It is one of the main factors behind men's increased risk for a number of health problems, their higher mortality (starting from day one and extending throughout their lives), and their shorter life expectancy. However, medical and technological improvements over several decades are extending the lives of both men and women. In the case of women, maternal and reproductive health needs are increasingly being addressed through improved health systems and the delivery of services. ${ }^{4}$ For example, complete cover-

[^36]
## Box 2.1

Gaps in gender statistics on health

Many of the indicators used in health and disease monitoring programmes have internationally agreed definitions. However, not all countries collect or provide quality data disaggregated by sex and/or age.

Over the years, the availability and quality of many health indicators have improved, but large gaps remain-mostly related to data quality. Mortality indicators, for example, require good quality data (that is, data that are complete and accurate) on births and deaths by age, sex and cause. Such data are produced on a regular basis by most countries with well-functioning civil registration systems. Many countries, however, lack a civil registration system with national coverage. For example, 95 out of a total of 195 countries lack complete death registration, where "complete death registration" means that 90 per cent or more of all deaths are recorded. Almost half of those countries are in sub-Saharan Africa; the rest are in Asia, Latin America and other parts of Africa. ${ }^{\text {a }}$ Furthermore, complete civil registration systems do not always translate into reliable and timely vital statistics. According to the latest information available at the international level, only 46 countries are able to provide reliable death statistics by sex at least once for the period 2011-2014. ${ }^{\text {b }}$

When reliable data from civil registration systems are not available, other sources such as population censuses or household surveys are used to estimate mortality statistics. However, these sources come with their own limitations. Mortality data obtained from censuses and surveys are infrequent and may suffer from sampling and enumeration errors. They are often subject to misreporting (for example, on age or cause of death) or underreporting (of births or deaths), which can lead to inconsistencies across data sources for the same country and period.c
The International Classification of Diseases (ICD) is the standard classification used to monitor the incidence and prevalence of diseases and other
health problems, maintained by the World Health Organization (WHO). The current version, ICD-10, endorsed by the Forty-third World Health Assembly in May 1990, came into use by WHO member States starting in 1994. ${ }^{\text {d }}$ Although this internationally agreed system is used in more than 100 countries to report mortality by cause of death, issues of data coverage and quality are common, with wide variations among and within regions. A 2007 studye showed that only 118 of 193 member countries, corresponding to 75 per cent of the world's population, reported cause-of-death data to WHO at least once over the period 1996-2005. Regional coverage was 100 per cent for Europe but only 6 per cent for Africa. Furthermore, out of 118 countries, only 31 of them, representing 13 per cent of the global population, produced high-quality data on causes of death. ${ }^{f}$
Reliable data on maternal mortality are also difficult to obtain and usually have to be estimated because of the poor quality of national data. ${ }^{9}$ Even in developed countries with well-functioning civil registration systems, maternal deaths may be underreported for a number of reasons. These include: misclassification of the ICD coding and undetected or unreported pregnancy (more common in deaths in the early stages of pregnancy, the later postpartum period, or among either very young or old pregnant women). Such underreporting occurs even more frequently in countries with deficient civil registration systems and where data on maternal mortality come from surveys and population censuses. ${ }^{\text {h }}$
While data availability has improved over the past 20 years, major gaps in health data remain. ${ }^{\text {i }}$ At the core of efforts to address these gaps must be the strengthening of birth and death registration systems, including the production of reliable cause-of-death data. Also essential are the implementation of household surveys covering priority health areas, the disaggregation by sex in all health-related questions in surveys and censuses, and the integration of a gender perspective at all stages of the production of health statistics. ${ }^{j}$
age of antenatal care services has been achieved in some regions, including developing regions. Other aspects of maternal health have also improved. Nevertheless, stark gaps remain among and within countries 20 years after the 1995 Beijing Platform for Action was adopted, including in access to skilled care and emergency services during childbirth. As a consequence, maternal
mortality is still unacceptably high in some developing regions. ${ }^{5}$
Gender inequality and gender norms and expectations continue to exert a strong influence on the health conditions affecting women and men. Practices such as early and forced marriage, to-

[^37]gether with poor access to information and education, lack of decision-making power within the couple, and violence against women increase the exposure of adolescent girls and adult women to sexually transmitted infections, including HIV. They also play a role in early pregnancies and the risk of unsafe abortions, increasing the likelihood of maternal death and morbidity. Traditional gender expectations can also have a harmful effect on men. Men smoke tobacco and drink alcohol to a much greater extent than women. Together with unhealthy diets and inactivity, smoking and heavy drinking are among the most important behavioural health risk factors for non-communicable diseases.

This chapter aims to shed light on the different health trajectories of women and men in developed and developing regions. The first part of the chapter draws on key aspects of women's and men's health, including life expectancy, the global burden of disease and risk factors to health. The second part looks at the interplay of development, biology and gender as they relate to specific health conditions associated with major life stages: early childhood, adolescence and youth, reproductive years and older years.

## A. Women's and men's health

1. Life expectancy at birth

Life expectancy has increased for both women and men over the past 20 years

Between 1990-1995 and 2010-2015, life expectancy at birth ${ }^{6}$ increased for both sexes. At the global level, women's life expectancy rose from 67.1 to 72.3 years, and from 62.5 to 67.8 years for men. Women tend to live longer than men and, in 2010-2015, women's life expectancy was higher than men's by 4.5 years, on average. However, large regional disparities are found. Women live 6 to 8 years longer than men in Latin America and the Caribbean, the developed regions, and the Caucasus and Central Asia, but only 2 to 3 years longer in sub-Saharan Africa and Eastern and Southern Asia. ${ }^{7}$

[^38]The increase in life expectancy for women and men is observed in all regions and most countries, but the improvement has not followed the same pattern everywhere (figure 2.1). Advances in life expectancy stagnated in sub-Saharan Africa during the 1990s as a consequence of the HIV epidemic. Since HIV/AIDS hit women harder than men in that region, ${ }^{8}$ the gender gap in life expectancy decreased from 2.9 years in 1990-1995 to 1.7 years in 2000-2005. During that period, the effect was most striking in Southern Africa, where life expectancy at birth dropped from 66 to 54 years for women and from 59 to 51 years for men. More recently, the trend in life expectancy has reversed, mainly due to a slowdown in the spread of new HIV infections and greater access to and more efficient HIV treatment, together with other health improvements. ${ }^{9}$ Although women's life expectancy recovered more than men's, the gender gap of 2.4 years in 2010-2015 in sub-Saharan Africa has not yet reached the pre-AIDS-crisis level (figure 2.1).
The gender gap generally widens as life expectancy increases (figure 2.1). Sub-Saharan Africa has the narrowest gender gap ( 2.4 years in 20102015), a consequence of high mortality levels overall, the ongoing HIV epidemic and generally high maternal mortality. ${ }^{10}$ The region is also home to all 30 countries in the world with a life expectancy under 60 years. Sierra Leone has the lowest life expectancy at birth in the world, at 46 years for women and 45 years for men, followed by Botswana ( 47 years for women, 48 for men) and Swaziland ( 49 years for women, 50 for men). Botswana and Swaziland are also the countries where women in 2010-2015 were expected to die before men (women's life expectancy is 1.5 years less than men's in Botswana and 1.2 years less in Swaziland).

At the opposite end of the spectrum, the two regions with the highest female life expectancy also have some of the widest gender gaps. In developed regions, women have an average life expectancy of 81.1 years- 6.8 years longer than men. In Latin America and the Caribbean, women have an average life expectancy of 77.9 years-6.4 years longer than men. In both regions, the gender gap has decreased slightly over

[^39]Figure 2.1
Life expectancy at birth by region and sex, 1990-1995 to 2010-2015



Source: United Nations, World Population Prospects: The 2012 Revision (2013a).
Note: Includes estimates for 1990-1995 up to 2005-2010 and projections (medium fertility) for 2010-2015.
the last 20 years as a result of faster progress in extending the lives of men.

Countries in developed regions have some of the highest rates of life expectancy in the world (figure 2.2). Women in Japan, for example, can expect to live 86.9 years on average, longer than women in any other country. In 2010-2015, women in 41 countries had a life expectancy exceeding 80 years-up from 12 countries two decades ago. ${ }^{11}$ For the first time, men in some countries (Australia, Iceland, Japan and Switzerland) can also expect to live 80 years or longer. Furthermore, in 38 countries, men's life expectancy exceeded 75 years in 2010-2015 (up from only five countries in 1990-1995). Almost all of the countries with the highest life expectancy can be found in developed regions (with the exception of Singapore).
The largest difference in life expectancy by sex is found in the Russian Federation, where women live on average 13 years longer than men ( 74 ver-

[^40]sus 61 years). The seven countries with a gender gap of 10 or more years are all countries of the former Soviet Union (Belarus, Estonia, Kazakhstan, Latvia, Lithuania, Russian Federation, and Ukraine). Drinking and smoking among men in these countries are key factors explaining this gap. ${ }^{12}$ Similar factors are also associated with the high gender gap, of 8.1 years, in countries in the Caucasus and Central Asia.
Unusually small gender gaps in life expectancy for a given level of mortality are observed in Eastern and Southern Asia. This suggests unequal gender norms and discriminatory practices. Eastern Asia has the second narrowest gender gap among regions ( 2.8 years) in a context of high life expectancy at birth (the third highest for women and second highest for men among all regions). Over the past 20 years, the gender gap in life expectancy in Eastern Asia has diminished slightly as a result of a much steeper increase in life expectancy for men than women. A small gender gap (3.3 years) is also observed in Southern Asia, representing an improvement

[^41]from 20 years ago, when the difference in life expectancy between women and men was only one year (61 years for women and 60 years for men).

## 2. Mortality and causes of death

Globally, men have higher mortality rates than women across all age groups

The risk of dying shifts dramatically over the course of one's life (figure 2.3). It is very high in the first week and month after birth, then drops sharply, reaching a low point around age 5-10, before rising steadily into old age. Mortality rates also vary by region and by sex, and are higher for both women and men in developing regions. For both sexes combined, in developing regions, the mortality rate of children under 10 years of age is at least 10 times higher than in developed regions, and is about twice as high among adults. ${ }^{13}$
In general, men have a significantly higher risk of death than women at all ages in both developed and developing regions. Relatively high mortality levels in developing countries, due in large part to infectious diseases, tend to have an equalizing effect on gender differences. In contrast, differences in mortality rates between women and men are pronounced in developed regions, where infectious diseases play only a minor role as a cause of death.
Causes of death also vary by age and sex, and the patterns observed across regions and countries are closely linked to the development of health systems and the epidemiological transition from communicable to non-communicable diseases. The ICD developed by WHO includes three major categories of causes of death: the first includes communicable diseases, ${ }^{14}$ but also maternal, neonatal and nutritional conditions; ${ }^{15}$ the other

[^42]Figure 2.2
Life expectancy at birth by sex, 2010-2015


Source: United Nations, World Population Prospects: The 2012 Revision (2013a).

Figure 2.3
Mortality rate over the life cycle by sex and region, 2010-2015


Source: United Nations, World Population Prospects: The 2012 Revision (2013a).
Note: UN Population Division regions.

Figure 2.4
Distribution of deaths by major categories of causes of death and by sex, world, 2000 and 2012

two categories are non-communicable diseases and injuries. ${ }^{16}$

Non-communicable diseases continue to increase their share among all causes of death

Figure 2.4 shows the percentage distribution of the major causes of death for women and men

[^43]worldwide in 2000 and 2012. In 2012, noncommunicable diseases were the leading cause of death, responsible for over 70 per cent of all female deaths and 66 per cent of all male deaths worldwide. Since 2000, the share of non-communicable diseases as a leading cause of death increased by eight percentage points for both women and men, mostly at the expense of communicable diseases, whose share decreased from 23 to 17 per cent. Currently, non-communicable diseases are the dominant cause of death in all regions except sub-Saharan Africa.
The change in the balance between communicable and non-communicable diseases reflects the continuing global trend of epidemiological and health transition. It is a consequence of changes in demographic age structures, patterns of disease and risk factors, and the development of health systems. An increase in the proportion of older persons increases the share of non-communicable diseases among all causes of death. Also, the risk factors associated with communicable diseases such as undernutrition, unsafe water and poor sanitation are decreasing in importance as a consequence of economic development, and improvements in basic infrastructure and in health systems.

Demographic changes and development progress also explain the decrease in the share of other less prominent-but mostly preventablecauses of death. The share of deaths caused by neonatal conditions decreased between 2000 and 2012 by around 25 per cent for both girls and boys, reaching around 5 per cent for boys and 4 per cent for girls. The share of deaths caused by maternal conditions decreased by 34 per cent, down to 1 per cent in total female deaths. The share of deaths caused by nutritional deficiencies declined by 20 per cent for the female population and 14 per cent for the male population.
The share of deaths caused by injuries, on the other hand, has remained mostly unchanged. Injuries are much more common among males than females. In 2012, for example, injuries caused twice as many deaths among boys and men ( 3.4 million, or 12 per cent of all deaths) than among girls and women ( 1.7 million, or 7 per cent of all deaths).

Figure 2.5
Distribution of deaths by major categories of causes of death, sex and region, 2012


Source: Computed by the United Nations Statistics Division based on data from WHO, Global health estimates for deaths by cause, age, and sex for years $2000-2012$ (2014b).

## Communicable diseases remain the most prevalent cause of death in sub-Saharan Africa

The distribution of causes of death varies by region (figure 2.5). Although communicable diseases account for only about one fifth of deaths globally, they are the leading cause of mortality in sub-Saharan Africa, accounting for almost half of all deaths. At the other extreme are developed regions, where the proportion of communicable diseases in all deaths is only 5 per cent for women and 6 per cent for men; non-communicable diseases, on the other hand, account for 90 per cent of all deaths in women and 85 per cent of all deaths in men.

> Injuries are much more common among men than among women

Injuries are the cause of death with the widest disparities between women and men. The largest differences can be observed in Latin America, where the share of deaths due to injuries is three times higher for men than for women (18 per cent compared to 6 per cent), followed by Western Asia ( 21 per cent compared to 8 per cent) and the Caucasus and Central Asia (11 per cent compared to 4 per cent), where the share is almost three times higher for men than for women. The smallest differences are found in Eastern Asia, where the share is 8 per cent of male deaths and 7 per cent of female deaths. In Eastern Asia, the
share of injuries among all male deaths is among the lowest, similar to the proportion observed in developed regions. In contrast, the share of injuries among all female deaths is high, mainly due to a higher share of self-harm, falls and road accidents than in other regions. The region with the highest share of injuries among all female deaths is Southern Asia (10 per cent). There, female mortality rates caused by self-harm and falls and their share in all female deaths are higher than in any other region. ${ }^{17}$
High levels of male deaths due to injuries are often associated with risk-taking behaviour that can be related to certain gender roles and expectations. On the other hand, the high levels of female deaths due to injuries, especially in countries in Southern and Eastern Asia, are most likely linked to violence against women and their disadvantaged position in society. For instance, a study in rural Bangladesh, where women experience much higher rates of violent death than men, showed that these deaths-particularly sui-cide-were associated with physical and mental abuse by husbands and relatives in the context of childlessness, rejection by future husband, or out-of-wedlock pregnancies among unmarried women. Social and economic hardship and abandonment were also associated with divorced and widowed women who died violently. ${ }^{18}$

[^44]Figure 2.6
Distribution of deaths by major categories of causes of death, age and region, 2012


Source: Computed by the United Nations Statistics Division based on data from WHO, Global health estimates for deaths by cause, age, and sex for years 2000-2012 (2014b).


Differences in causes of death over the life cycle between developing and developed regions remain prominent

Changes in causes of death over the life cycle are similar for both women and men. Differences between developing and developed regions, however, are stark (figure 2.6). The first month of life is unique in the sense that most deaths at that age in both regions have roots in prenatal or genetic conditions. In developing regions, most child deaths after the first four weeks are due to communicable diseases ( 70 per cent). Over the life course, in developing regions, communicable diseases become less and less important as a cause of death; in people aged 70 and over, they account for 10 per cent of all deaths. As these diseases become less important, non-communicable diseases become more prominent. The latter are responsible for 11 per cent of deaths in children between 1 month and 5 years of age in developing regions, but 84 per cent of deaths among persons aged 70 and over. A different pattern emerges when injuries are the cause of death. Injuries are most common as a cause of death among adolescents and young adults.

A somewhat similar picture is found in developed regions, although communicable diseases are much less prominent. Only 19 per cent of deaths between 1 month and 5 years of age are due to infectious diseases. In all older age groups (after age 5), the share of infectious diseases among all causes of death hardly exceeds 10 per cent. Maternal conditions and nutritional deficiencies as causes of death are negligible. Success in reducing communicable diseases through effective prevention and treatment in developed regions has led to other causes of death to account for an increased share in all deaths. In particular, non-
communicable diseases are currently responsible for 63 per cent of deaths in the 30 to 39 age group and for increasingly higher shares in older age groups (up to 92 per cent at age 70 and over).

## 3. Health risk factors

A health risk factor is anything that increases the likelihood of an individual developing a disease or injury. Risk factors can be demographic, social, economic, environmental, biological or behavioural in nature. In most cases, they are a combination of all of them.

The set of risk factors contributing most to the burden of disease is changing. At the same time, large differences divide developed and less developed regions. Risk factors such as undernutrition, unimproved water and sanitation facilities, poor hygiene, and indoor smoke from solid fuels remain highly relevant in countries from developing regions. The harmful use of alcohol and tobacco, poor diet and the lack of exercise contribute substantially to the burden of noncommunicable diseases in developed regions, but their role is also increasing in developing regions. Across regions, unsafe sex remains the main risk factor for sexually transmitted infections, and HIV in particular, while gender norms, ideals of masculinity and power relations fuel a relatively high level of unintentional injuries and interpersonal violence.

This section addresses some of the most important risk factors for mortality and morbidity for women and men, namely: tobacco use, alcohol consumption, overweight and obesity, and diabetes. All of them are risk factors with huge importance at a time of continuing shift towards non-communicable diseases as the main causes
of death and are particularly relevant from a gender perspective. Additional risk factors such as physical inactivity and unsafe sex are discussed in a later section on the health of adolescents and youth. Environmental factors creating health risks, such as unimproved water and sanitation facilities and household air pollution, are discussed in the chapter on Environment.

## Tobacco use

Tobacco use is the second leading risk factor (after high blood pressure) for non-communicable diseases, accounting for 9 per cent of global deaths due to such diseases. ${ }^{19}$ It kills nearly 6 million people each year, 1.5 million of whom are women. ${ }^{20}$ Tobacco use is responsible for 22 per cent of all cancer deaths and 71 per cent of global lung cancer deaths, ${ }^{21}$ and is a major risk factor for chronic respiratory and cardiovascular diseases. In women, smoking is also associated with breast cancer. ${ }^{22}$

Prevalence of tobacco smoking is higher among men than women in all regions, but large shares of women smoke in developed regions and in Oceania

Women are less likely than men to use tobacco. In 2011, 8 per cent of women 15 years and older worldwide were smokers compared to 36 per cent of men the same age ${ }^{23}$ and this gender difference was visible in all regions of the world (figure 2.7). However, in a number of countries, smoking is a habit for a large share of the female population. The regions with the highest female prevalence of tobacco smoking are developed regions and Oceania. Countries with at least 30 per cent prevalence among women include Austria, Bulgaria, Chile, Croatia, Czech Republic, France, Greece and Kiribati. ${ }^{24}$ In developed regions in particular, women smoke almost as much as men. For instance, only a 1 - to 2 -percentage-point difference separate the smoking prevalence between men and women in Australia, Austria, Iceland, New Zealand, Norway, Sweden and the United Kingdom.

[^45]Figure 2.7
Smoking prevalence among persons aged 15 or over, by sex and region, 2011


Source: Computed by the United Nations Statistics Division from WHO, WHO Report on the Global Tobacco Epidemic, 2013, Appendix X (2013a).
Note: The figure shows unweighted averages of age-standardized prevalence estimates for smoking among people 15 years and older in 2011. Smoking is defined as the use of any form of tobacco (including cigarettes, cigars and pipes and excluding smokeless tobacco) at the time of the survey, including daily and non-daily smoking. The average for Eastern Asia is based on two countries, China and Mongolia.

Smoking prevalence among men also varies among regions and countries. In Oceania, South-Eastern Asia, and Eastern Asia, 40 per cent or more of the male population over age 15 smoke. With the exception of Oceania, these regions also have the largest gender gap: smoking is widespread among men but uncommon among women. At the country level, the gender gap in smoking is 45 percentage points or more in Armenia, Bangladesh, China, Egypt, Georgia and Indonesia. Lower levels of tobacco use among men as well as women are generally found in countries in the Caribbean and sub-Saharan Africa.

In terms of male smoking, the gap between developed and developing regions has narrowed, due to a decrease in male smokers in developed countries and an increase in developing countries. The gap in tobacco use between women and men is also getting smaller. Nevertheless, the current epidemic of tobacco use involves both women and men as multinational tobacco companies continue to expand their focus on men in developing regions and women everywhere. ${ }^{25}$

While most smokers are men, the majority of victims of second-hand smoke are children and women. For instance, in 2004, second-hand

[^46]smoke was estimated to have caused about 600,000 premature deaths. Children represented more than a quarter ( 28 per cent) of such deaths and women about 64 per cent of adult deaths. Comprehensive smoke-free legislation covering 1.1 billion people in 2012 ( 16 per cent of the global population), is the most widely adopted measure to address second-hand smoking. ${ }^{26}$

## Alcohol consumption

Alcohol consumption is a health risk factor contributing to many different diseases, injuries and other health conditions. The detrimental effects of alcohol are based on three main mechanisms: toxic effects on organs and tissues; intoxication impairing cognitive and emotional functioning; and dependence leading to adverse social and economic effects. The alcohol-related impact on health and social outcomes is determined mainly by the amount consumed and the pattern of drinking (for example, "low-level daily consumption" versus "heavy drinking episodes"). ${ }^{27}$
Harmful alcohol use causes approximately 3.3 million deaths each year. In 2012, 6 per cent of all deaths ( 8 per cent of deaths among males and 4 per cent among females) were attributed to alcohol consumption, including several forms of cancer, chronic liver disease, cardiovascular disease and alcohol-induced injuries. ${ }^{28}$ For women, cardiovascular disease is the most common cause of death attributed to alcohol use, while for men, injuries and cardiovascular disease are most common. The differences between women and men are even larger when considering the burden of disease expressed in disability-adjusted life years (DALYs). ${ }^{29}$ Estimates for 2012 show that the number of years of life lost due to premature death and disability related to alcohol use disorders (which combine the health effects of the

[^47]harmful use of alcohol and dependence) is three times higher for men than for women. ${ }^{30}$ Nevertheless, alcohol consumption among women has additional implications. For example, women who drink during pregnancy may increase the risk of preventable health conditions in their newborn.

The sex differential in mortality and morbidity due to alcohol use can be explained by differences in the quantity consumed and in drinking patterns. In addition, factors such as women's lower body weight, smaller capacity of the liver to metabolize alcohol, and a higher proportion of body fat contribute to higher blood alcohol concentrations in women than men for the same amount of alcohol intake.

Men are more likely than women to engage in drinking and heavy episodic drinking

Globally, an estimated 29 per cent of women and 48 per cent of men aged 15 and over are current drinkers ${ }^{31}$ (table 2.1). In all regions ${ }^{32}$ and across all age groups, the proportion of women who currently drink is lower than that of men. Women consistently drink less on average and engage less often in heavy episodic drinking than men. However, sex differences in the proportion of drinkers, the quantity consumed and the frequency of drinking vary significantly among regions. For instance, in 2010, those differences in consumption and drinking patterns were smaller in Europe, the Americas while relatively large in South-East Asia and Eastern Mediterranean regions (table 2.1). ${ }^{33}$ In both South-East Asia and Western Pacific, men engage in heavy episodic drinking almost 11 and 7 times as much as women, respectively. In general, alcohol use among women has been increasing in tandem with economic development and the accompanying change in gender roles.

[^48]Table 2.1
Proportion of current drinkers among adults (15+ years), total alcohol per capita consumption among drinkers, and prevalence of heavy episodic drinking among adult drinkers, by sex and by WHO region, 2010

| WHO region | Proportion of current drinkers among adults ( $15+$ years) (per cent) |  |  | Total alcohol per capita consumption among drinkers ( $15+$ years) (litres) |  |  | Prevalence of heavy episodic drinking among adult drinkers ( $15+$ years) (per cent) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | Males/ females | Males | Females | Males/ females | Males | Females | Males/ females |
| African region | 40.2 | 19.6 | 2.1 | 22.4 | 13.2 | 1.7 | 20.3 | 8.3 | 2.4 |
| Region of the Americas | 70.7 | 52.8 | 1.3 | 18.0 | 8.0 | 2.3 | 29.4 | 12.3 | 2.4 |
| Eastern <br> Mediterranean region | 7.4 | 3.3 | 2.2 | 14.0 | 4.8 | 2.9 | 2.0 | 0.5 | 3.7 |
| European region | 73.4 | 59.9 | 1.2 | 22.7 | 10.1 | 2.3 | 31.8 | 12.6 | 2.5 |
| South-East Asia region | 21.7 | 5.0 | 4.3 | 26.3 | 8.2 | 3.2 | 15.4 | 1.4 | 10.9 |
| Western Pacific region | 58.9 | 32.2 | 1.8 | 19.0 | 7.1 | 2.7 | 23.1 | 3.2 | 7.3 |
| World | 47.7 | 28.9 | 1.6 | 21.2 | 8.9 | 2.1 | 21.5 | 5.7 | 3.8 |

Source: WHO, Global Status Report on Alcohol and Health 2014 (2014d).
Note: Based on WHO regions (see: www.who.int/about/regions/en/). Current drinkers are defined as people who consumed an alcoholic drink in the past 12 months; heavy drinkers are defined as people who consumed 60 or more grams of pure alcohol ( $6+$ standard drinks in most countries) on at least one single occasion at least monthly.

## Overweight and obesity

Obesity prevalence is higher for women than men

Globally, almost 3 million deaths are related to excess bodyweight, a significant risk factor in mortality and morbidity due to cardiovascular diseases, diabetes and cancer (including breast cancer). Overweight and obesity lead, via metabolic pathways, to increased blood pressure, high cholesterol and triglycerides levels, and insulin resistance, which are themselves direct risk factors for several chronic diseases. ${ }^{34}$ According to WHO, a person with a body mass index (known as BMI-a weight-for-height index) of 25 or more is considered overweight, and a person with a BMI of 30 or more is considered obese. WHO estimates that, globally in 2008, approximately 1.5 billion adults aged 20 and over were overweight, around one third of whom ( 500 million) were obese, with more women ( 300 million) being obese than men ( 200 million). ${ }^{35}$ The agestandardized overweight prevalence was similar for adult women and men ( 35 per cent and 34 per cent, respectively), while the age-standardized obesity prevalence was higher among women than men ( 14 per cent and 10 per cent, respectively).

[^49]The 2008 age-standardized prevalence of obesity showed nearly a doubling of 1980 levels, when 5 per cent of men and 8 per cent of women were estimated to be obese. Not only did prevalence rates increase dramatically, but with increasing speed. Half of the increase in obesity prevalence between 1980 and 2008 happened in the first 20 years; the other half occurred in the subsequent eight years. ${ }^{36}$ The rise in overweight and obesity prevalence was almost universal, although the pattern varied substantially among regions and countries and between women and men. Only a few countries showed no statistically significant increase in prevalence rates, and not a single country showed a significant decrease in overweight or obesity among the adult population. ${ }^{37}$

At the regional level in 2008, the largest proportion of overweight adults (age 20 and over) was found in Western Asia and Northern Africa: 66 per cent of women in both regions; and 63 per cent and 53 per cent of men, respectively were overweight (figure 2.8). Among the overweight population in both regions, more than half of the women and around 30 to 40 per cent of the men were considered obese. Latin America and the Caribbean, Oceania, the Caucasus and Central Asia and the developed regions also had high prevalence rates for overweight and obesity,

[^50]with more than half of the adult female population being overweight and one in four obese. In those regions, the prevalence of overweight was higher among women than men, with the exception of the developed regions, where 50 per cent of women were overweight compared to 59 per cent of men. Both overweight and obesity prevalence were lowest in Southern Asia. There, 16 per cent of women and 13 per cent of men were considered overweight; prevalence rates for obesity were 4 per cent for women and 2 per cent for men.

## Obesity has become a serious health problem for women in the Pacific Islands

Country-specific data reveal a wide variation in obesity within regions. In Oceania, for example, regional estimates are dominated by Papua New Guinea, which represents about 75 per cent of the region's population. That country has relatively high overweight and obesity prevalence rates (50 per cent and 45 per cent overweight prevalence for women and men, respectively, and 20 per cent and 12 per cent obesity prevalence, respectively). The region also includes countries with the highest prevalence of obesity in the world: in descending order Tonga, Samoa, Kiribati and Micronesia, with obesity prevalence rates between 53 and 70 per cent for women and 31 and 49 per cent for men.

In Western Asia and Northern Africa, Egypt, Jordan, Kuwait, Libya, Saudi Arabia and the United Arab Emirates, also show very high rates of obesity among women-ranging from 41 to 52 per cent compared to 22 to 37 per cent for men. In Latin America and the Caribbean, the Bahamas, Barbados and Belize have estimates of female obesity above 40 per cent, while male obesity is lower, between 22 and 27 per cent.

## Diabetes

Diabetes is a chronic disease that occurs when the body does not produce enough of the blood sugar-regulating hormone insulin, or when the body cannot effectively use the insulin it produces. Around 90 per cent of all diabetes cases globally are type 2 diabetes, largely resulting from an unhealthy diet, being overweight and physical inactivity. Type 2 diabetes is therefore generally preventable. It used to affect mainly middle-aged and older people, but is increasingly found in younger people and even children.

Figure 2.8
Prevalence of overweight (a body mass index of 25 or above) and obesity (a body mass index of 30 or above) for women and men 20 years and over, by region, 2008


Source: Computed by the United Nations Statistics Division based on data from WHO, Global health observatory, 2013b (data retrieved 23 Sept 2014).
Note: Weighted averages based on age-standardized estimates.

Type 1 diabetes is the result of an autoimmune process that usually starts in children and young adults.

Diabetes can also negatively affect maternal health. Untreated gestational diabetes or other diabetes during pregnancy can lead to a significantly larger baby (known as "macrosomia"), increasing the risk for complications such as obstructed labour that can threaten the life and health of both mother and newborn. ${ }^{38}$ Furthermore, babies born to a mother with gestational diabetes have a higher lifetime risk of obesity and of developing diabetes themselves. ${ }^{39}$

[^51]Globally, it is estimated that almost half of all diabetes cases go undiagnosed, which has serious health consequences. Undiagnosed diabetes is particularly common in some low-income countries in sub-Saharan Africa, with as many as 90 per cent of cases going undetected. Even in high-income countries, about one third of people with diabetes have not been diagnosed. ${ }^{40}$ Over time, untreated diabetes leads to serious damage to the body's systems, especially the nerves and blood vessels.

Globally, between 2000 and 2012, mortality and morbidity due to diabetes have increased, mainly due to lifestyle changes that encourage unhealthy diets and physical inactivity, and the resulting excess body weight. Globally, 44 per cent of the burden of diabetes can be attributed to overweight and obesity, another 27 per cent to physical inactivity. ${ }^{41}$
Worldwide in 2013, 8 per cent of adults ( 20 to 79 years), or 382 million people, were living with diabetes. ${ }^{42}$ Almost half of them ( 48 per cent) are between 40 and 59 years old. More than 80 per cent of the 184 million people with diabetes in this age group live in low- and middle-income countries. ${ }^{43}$

In general, diabetes prevalence is highest in Western Asia (15 per cent for both women and men) and Northern Africa (figure 2.9). Among countries, the Federated States of Micronesia, Kiribati and Vanuatu stand out for having very high diabetes prevalence rates (women have prevalence rates of 36 per cent, 27 per cent and 25 per cent, and men 35 per cent, 31 per cent and 23 per cent, respectively).

Globally, little difference is found in diabetes prevalence among men and women. In 2013, slightly more men than women were living with diabetes ( 198 million men and 184 million women). ${ }^{44}$ At the regional level, however, some gender differences were observed (figure 2.9). Prevalence rates were higher for women than men in Northern Africa, in particular (13 per cent versus 11 per cent). They were lower in the Caucasus and Central Asia (4 per cent for women

[^52]Figure 2.9
Prevalence of diabetes in adults aged 20 to 79 years by sex and region, 2013


Source: Computed by the United Nations Statistics Division based on data from the International Diabetes Federation (IDF), 2013, and communication with IDF in 2014.
Note: Undiagnosed cases of diabetes are taken into account in estimating the prevalence of diabetes. Weighted averages based on "comparative data" as provided by IDF.
versus 7 per cent for men) and in Eastern Asia (8 per cent for women versus 10 per cent for men).

In terms of mortality, about 1.5 million people died from diabetes in 2012. Overall, diabetes ranked eighth on the list of leading causes of mortality worldwide, compared to the tenth place ranking a dozen years earlier. There is very little difference between men and women in the total number of deaths due to diabetes. ${ }^{45}$

## B. A life-cycle perspective on health

## 1. Child health and survival

Nutrition, immunization and a supportive environment in early life are key determinants in the health and survival of children and their physical, cognitive and emotional development. Optimal development of children also encourages healthy habits in adolescence and reduces the burden of disease in adult life. The health and nutrition of girls, in particular, influence maternal health during the reproductive years and affect the survival and well-being of future generations.

[^53]
## Mortality among children under age 5

Child survival improved in all regions
Tremendous progress has been achieved in reducing child mortality over the past two decades. The mortality rate for children under 5 years old dropped by more than half between 1990 and 2015-from 90 deaths per 1,000 live births to 43 in 2015. ${ }^{46}$ The annual rate of reduction increased from 1.2 per cent in 1990-1995 to 4.0 per cent in 2005-2013. Globally, the number of children dying before their fifth birthday decreased from 12.7 million in 1990 to around 6 million in 2015.

Child survival improved in all regions, but wide disparities persist. ${ }^{47}$ In 2013, under-5 mortality ranged from 6 deaths per 1,000 live births in developed regions to 92 per 1,000 in sub-Saharan Africa. Dramatic reductions in under-5 mortality have been achieved in Eastern Asia (a 76 per cent reduction), Latin America and the Caribbean and Northern Africa (a 67 per cent reduction in both regions). Sub-Saharan Africa, on the other hand, reduced its under- 5 mortality by only 49 per cent. That region registered an increasing share of the global number of children dying before age 5 , in part due to population growth. In 2013, half of all children who died before their fifth birthday lived in that region.
The youngest children account for the majority of children under age 5 who have died. Most deaths in children occur in the first year of life (infant mortality), with most of them occurring within the first four weeks (neonatal mortality). ${ }^{48}$ Globally, the main causes of neonatal deaths are preterm birth complications ( 35 per cent), complications during labour and delivery ( 24 per cent) and sepsis ( 15 per cent). Together, these three causes account for almost three quarters of all neonatal deaths. ${ }^{49}$

After the first month of life, the set of life-threatening diseases and conditions affecting children change. Worldwide, over two-thirds of all child deaths in 2012 were due to infectious and parasitic diseases (46 per cent) and respiratory infections ( 23 per cent). Unintentional injuries were the third broad cause of death ( 9 per cent). ${ }^{50}$ The vast majority ( 99 per cent) of deaths between 1

[^54]month and 5 years of age occur in developing countries. Children in the developed regions face a very different set of diseases and health conditions. Comparatively, fewer child deaths in the developed regions are due to respiratory infections and infectious and parasitic diseases (19 per cent compared to 70 per cent in developing regions). Instead, other causes become more prominent: congenital anomalies ( 28 per cent) and unintentional injuries ( 16 per cent) are the two leading causes of death, responsible for almost half of all deaths in this age group. ${ }^{51}$
The share of neonatal deaths in under-5 mortality increased from 37 per cent in 1990 to 43 per cent in 2013, since the reduction in neonatal mortality between 1990 and 2013 was slower than the overall reduction of under- 5 mortality. ${ }^{52}$ This can be explained by the fact that the reduction in under- 5 mortality was mostly due to improvements in the prevention or cure of infectious diseases-namely pneumonia, diarrhoea, malaria and measles. These diseases tend to strike children who have outgrown the neonatal stage, subsequently giving neonatal deaths more weight in overall under- 5 mortality. ${ }^{53}$

## Under-5 mortality is higher for boys than girls in all

 regions, except Southern AsiaGlobally in 2013, under-5 mortality was estimated at 47 deaths per 1,000 live births for boys and 44 for girls, resulting in a sex ratio of 107 male deaths to 100 female deaths. The lower mortality rate for girls reflects the female advantage in survival, which begins in utero and continues after birth. Innate biological differences make boys weaker and more susceptible to disease and premature death. In the absence of genderbased discrimination, girls have lower mortality than boys and this biological advantage persists through life, leading to an overall higher female life expectancy at birth.
In almost all regions, boys under age 5 have a higher mortality than girls (figure 2.10). In subSaharan Africa, for example, 86 girls and 98 boys per 1,000 live births died in 2013, which translates into a male-to-female mortality ratio of 114 . The only notable exception to the general pattern of higher male mortality in the under-5 age group is Southern Asia. There, the

[^55]Figure 2.10
Under-5 mortality rate (deaths per 1,000 live births) by sex, 1990 and 2013


Source: UNICEF, Levels and Trends in Child Mortality: Report 2014, (2014a).
difference reflects the disadvantage of girls, suggesting gender-related discriminatory practices. In 1990, Southern Asia had a sex ratio in under-5 mortality of 97 boys per 100 girls, and an overall under-5 mortality level of 126 deaths per 1,000 live births. In 2013, after the mortality level more than halved to 55 deaths per 1,000 live births, the sex ratio levelled out to 100 .

Figure 2.11 shows under-5 mortality rates for girls and boys in 2013 for 195 countries and areas. Two lines are used to illustrate gender parity and potential gender discrimination. The grey dashed line shows parity in mortality between girls and boys-that is, when the mortality rate for girls is equal to that of boys. However, as boys have a greater biological vulnerability to disease and certain health conditions than girls, based on genetic, hormonal and immunological differences, ${ }^{54}$ an expected sex ratio in the absence of any gender preferences or discrimination would have a value above 100, indicating higher male than female mortality among children under 5 years of age. An observed sex ratio of 100 or below is therefore assumed to be the result of discrimination against girls.

An expected sex ratio in the absence of gender discrimination is likely to vary with changes in the mortality level, since the degree of male vulnerability shifts with the magnitude and composition of the disease environment. ${ }^{55}$ The

[^56]gray solid line in figure 2.11 shows the expected female mortality for different levels of observed male mortality under age 5 based on recent research by Alkema and others. ${ }^{56,57}$ For those countries in which the sex ratio falls close to or below the parity line, it can be assumed that discrimination against girls exists. For countries in which the sex ratio falls below the gray line, some kind of discrimination against girls is likely.
The country with the lowest sex ratio in under-5 mortality is India, with a ratio of 93 ( 93 boys die before age 5 for 100 girls that die by that age). This is also the only country with an under- 5 mortality sex ratio under 100 (more girls die than boys). India alone accounted for 21 per cent of all under-5 deaths in 2013. Thus, this low sex ratio in under-5 mortality is pulling down the average for Southern Asia as a whole and, indeed, the entire world (figure 2.11). Higher mortality among girls can be closely related to a general preference for sons in India, which is expressed in special treatment for boys in terms of parental investment in nutrition, vaccinations, access to health treatment and parental care in general. ${ }^{58}$

[^57]The recent study on global sex ratios for under-5 mortality by Alkema and others ${ }^{59}$ identified 10 countries with outlying under- 5 mortality sex ratios for 2013, all of which had higher than expected female mortality (Afghanistan, Algeria,

Figure 2.11
Male and female under-5 mortality rates (deaths per 1,000 live births) for 195 countries, 2013


Source: Computed by the United Nations Statistics Division based on data from UNICEF, Levels and Trends in Child Mortality: Report 2014 (2014a) and from Alkema and others (2014).

Bangladesh, Egypt, India, the Islamic Republic of Iran, Jordan, Nepal, Pakistan, Saudi Arabia).

## Undernutrition

The nutritional status of children is the consequence of three interacting factors: food intake, health status, and parental and health care. ${ }^{60} \mathrm{Nu}$ tritional deficiencies are the sixth leading cause of death in developing countries, and the immediate cause for 5 per cent of deaths among children ( 1 to 59 months old). ${ }^{61}$ Nutritional deficiencies weaken the immune system and increase the vulnerability of children to disease, particularly infectious diseases such as pneumonia, diarrhoea, malaria and measles. Globally, nearly

[^58]half of all deaths among children under 5 are attributable to undernutrition. ${ }^{62}$ It is not only an immediate health threat, but also has long-term consequences. It hinders optimal health and growth and is known to lead to suboptimal brain development, which in turn influences cognitive ability and future performance. ${ }^{63}$

Worldwide, 15 per cent of children are underweight. ${ }^{64,65}$ The regions with the highest proportion of underweight children under 5 are South Asia (32 per cent) and sub-Saharan Africa (21 per cent). Boys are more likely to be underweight than girls. In almost half (58) of the 127 countries (across all regions) for which comparable data are available, the male-to-female sex ratio is higher than $115^{66}$ (figure 2.12). Many of those countries are in sub-Saharan Africa. This skewed sex ratio, to the disadvantage of boys, reflects their higher biological vulnerability to disease rather than neglect, or preferential treatment for girls. ${ }^{67}$ Exceptions to this pattern, such as the case of Bangladesh or India (figure 2.12), which shows higher underweight prevalence rates for girls, suggest discrimination towards girls.

While the concept of underweight combines aspects of both temporary and chronic undernutrition, stunting results from chronic undernutrition alone, particularly during the most critical periods of growth and development, starting before birth and lasting up to about 2 years of age. Stunted children ${ }^{68}$ may appear normally proportioned, but they are too short for their age.

Globally, every fourth child under 5 years of age was stunted in 2013-amounting to about 164 million stunted children worldwide. ${ }^{69}$ A high prevalence of chronic child undernutrition was observed in sub-Saharan Africa and South Asia, where 4 out of 10 children were stunted.

[^59]Together, these two regions account for almost three quarters of all stunted children worldwide. Similar to the situation of underweight, boys are more likely to be stunted than girls. This is evident in 111 out of 128 countries with available data, 21 of which have a male-to-female sex ratio higher than $115 .{ }^{70}$ Girls are more likely to be stunted in 14 countries, and in the remaining three the proportions are identical. ${ }^{71}$

## Immunization

Immunization is a cost-effective public health strategy for preventing a number of potentially life-threatening childhood diseases such as diphtheria, measles, pertussis, pneumonia, polio, rotavirus diarrhoea, rubella and tetanus. It is estimated that, globally, immunizations prevent around 2 to 3 million deaths each year. ${ }^{72}$ Although considerable variations can be found in immunization coverage among boys and girls in some countries, no significant systematic bias has been observed. In some countries, immunization coverage for girls is higher, while in others, it is higher for boys. ${ }^{73}$

## 2. Adolescents and young adults

Adolescence is a time of general good health, with low mortality rates. Nevertheless, many lifestyle choices made during this period have negative consequences later in life. It is estimated that at least 70 per cent of premature adult deaths result from behaviour that started or was reinforced during adolescence, such as unhealthy eating, alcohol and tobacco use, substance abuse, unsafe sex and lack of physical activity. ${ }^{74}$ Adolescence is also the age when young women and men increasingly model their behaviour on adult gender roles. In some societies, adolescent girls are pressured into early marriage and childbearing and their access to information on health and their power to make their own decisions remain low. Adolescent boys often take up harmful habits and risky behaviours that are associated with images of masculinity. All of these factors can

[^60]Figure 2.12
Proportion of underweight among boys and girls under 5 years of age, 2000-2012 (latest available)

lead to separate health and survival trajectories for girls and boys.

## Adolescent pregnancies and deaths due to maternal conditions

> Complications during pregnancy and childbirth are the leading cause of death for women aged 15 to 29 in developing regions

The percentage of adolescents (aged 15 to 19) who have given birth has declined in the past two decades but remains high in a number of countries in Africa and in Latin America and the Caribbean (see Chapter 1 on Population and families). Early childbearing, particularly among girls under age 15, comes with health risks to both young mothers and their newborn. This is due in part to the fact that adolescents are not fully developed physically, as well as to the high rates of anaemia and undernutrition common in this age group. Many adolescent pregnancies are also unwanted pregnancies, leading to abortion, most often unsafe abortion, which carries a high risk of morbidity and mortality. In 2008, 15 per cent of all unsafe abortions in developing countries (excluding Eastern Asia) occurred among girls aged 15 to $19 .{ }^{75}$

[^61]Complications linked to pregnancy and childbirth are the leading cause of death for adolescents and young women (aged 15 to 29) worldwide (table 2.2). However, almost all maternal deaths ( 99 per cent) occur in developing countries. ${ }^{76}$ In developed regions, mortality rates due to maternal conditions are 20 times lower than those of developing regions. In developed regions, other causes of death, such as selfharm and road injuries, top the list for mortality among 15 - to 29 -year-old women and men, although death rates for men are much higher.

## Sexually transmitted infections, including HIV

Unsafe sex is a leading risk factor in the health of adolescents and youth, leading to sexually transmitted infections, including HIV. Among the challenges to preventing such infections are inadequate access to high-quality, youth-friendly sexual and reproductive health services and comprehensive sexuality education. ${ }^{77}$

Women have a higher risk of contracting sexually transmitted infections, including HIV, than men, due to their greater physiological vulnerability. Other factors contributing to higher infection rates among women are: gender inequality, including violence against women and girls; unequal access to information, education and economic opportunities; the practice of early marriage, including to older partners; and a lack of negotiating power.

The number of new HIV infections is higher for young women than young men in sub-Saharan Africa

Although new HIV infections are decreasing globally, they remain concentrated among young people. In 2012, around 40 per cent of all new infections among adults aged 15 years and over occurred among young people aged 15 to $24 .{ }^{78}$
Globally, the number of new HIV infections among women aged 15 to 24 is 50 per cent higher than among their male peers. This susceptibility to HIV infection is most acute in sub-Saharan Africa, home to 72 per cent of all new HIV infections among the young adult population (figure 2.13). In all sub-regions of sub-Saharan Africa, the number of new infections among young women in 2012 was around twice that of young men. In

[^62]other regions of the world, more young men are infected than young women-a pattern specific to regions where HIV is predominantly transmitted through sex between men or intravenous drug use. In Latin America, Eastern Asia and developed regions, for example, the number of new infections among young men is twice that of young women.
HIV/AIDS is the second leading cause of mortality among women aged 15 to 29 globally; it ranks fourth among men the same age. This ranking is driven by developing regions and by sub-Saharan Africa in particular. In developing regions, death rates due to AIDS are 17 per 100,000 population for women and 13 per 100,000 for men. In developed regions the corresponding rates were much lower, at 2 and 4 per 100,000, respectively. ${ }^{79}$

Condom use among young people (aged 15 to 24) with multiple sexual partners has increased in developing regions. However, it remains relatively low overall in many countries and is lower among women than men. ${ }^{80,81}$ Comprehensive knowledge of HIV among young people also increased in most developing countries over the past 15 years, but the gains are only slight on average, and the level remains low, particularly among young women. ${ }^{82}$ In sub-Saharan Africa, only 30 per cent of young women and 37 per cent of young men have a comprehensive and correct knowledge of HIV and AIDS, representing an increase of less than 10 percentage points since 2000 for both groups. ${ }^{83}$

## Injuries

Taking risks and exploring boundaries are part of the biological and psychological development of adolescents. ${ }^{84}$ Such behaviour can lead to health risks both in the short term and over the course of their lives. Road injuries are the single largest cause of death among young men aged 15 to 29 globally, followed by interpersonal violence and self-harm (table 2.2). These three causes of death are predominant among young men in both developed and developing regions. They

[^63]Table 2.2
Specific causes of death among young women and men (aged 15 to 29 years) by region, 2012 (top 10 sex-specific causes of death worldwide)

| Women |  |  |  |  | Men |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| World rank | Cause of death | Cause-specific mortality rates (deaths per 100,000) |  |  | World rank | Cause of death | Cause-specific mortality rates (deaths per 100,000) |  |  |
|  |  | World | Developed regions | Developing regions |  |  | World | Developed regions | Developing regions |
| 1 | Maternal conditions | 17 | 1 | 20 | 1 | Road injury | 28 | 19 | 29 |
| 2 | HIV/AIDS | 15 | 2 | 17 | 2 | Interpersonal violence | 19 | 8 | 21 |
| 3 | Self-harm | 11 | 5 | 12 | 3 | Self-harm | 16 | 21 | 15 |
| 4 | Road injury | 8 | 6 | 8 | 4 | HIV/AIDS | 11 | 4 | 13 |
| 5 | Diarrhoeal diseases | 6 | 0 | 7 | 5 | Drowning | 6 | 4 | 7 |
| 6 | Lower respiratory infections | 5 | 1 | 6 | 6 | Lower respiratory infections | 6 | 2 | 7 |
| 7 | Interpersonal violence | 4 | 2 | 4 | 7 | Collective violence and legal intervention | 5 | 1 | 6 |
| 8 | Tuberculosis | 3 | 1 | 3 | 8 | Ischaemic heart disease | 5 | 3 | 5 |
| 9 | Fire, heat and hot substances | 3 | 0 | 3 | 9 | Diarrhoeal diseases | 4 | 0 | 4 |
| 10 | Ischaemic heart disease | 3 | 1 | 3 | 10 | Meningitis | 4 | 0 | 4 |

Source: Computed by the United Nations Statistics Division based on data from WHO, Global health estimates for deaths by cause, age, and sex for years $2000-2012$ (2014b).
are also predominant among young women in developed regions, with some differences in the ranking. Self-harm is the number one cause of death for young men in developed regions.

Injuries are the leading cause of death among young men in developed and developing regions

Young men are more likely than young women to die from both unintentional and intentional injuries ( 95 versus 36 deaths per 100,000 population aged 15 to 29, respectively, in 2012). Globally, this accounted for half of the deaths among young men between 15 and 29 years in $2012 .{ }^{85}$ Traffic accidents are particularly lethal for young men in Latin America and the Caribbean, subSaharan Africa and South-Eastern Asia, where the corresponding death rates are 41, 37 and 34 deaths per 100,000. Latin America and the Caribbean and sub-Saharan Africa also stand out in terms of intentional injuries. Male death rates due to violence between individuals are the highest in these two regions, at 92 and 41 per 100,000, respectively. In Western Asia, male death rates due to collective violence and legalintervention ${ }^{86}$ are the highest, at 92 per 100,000.

[^64]Figure 2.13
Number of new infections among young women and men (aged 15 to 24 years), 2012


Source: United Nations Statistics Division and UN Women, Millennium Development Goals Gender Chart (2014).

[^65]
## Mental health

An estimated one in four or five young people will suffer at least one mental disorder in a given year. ${ }^{87}$ Exact numbers are difficult to ascertain due to the lack of available information, particularly in developing countries, and to methodological differences in underlying studies. Many mental health disorders begin in adolescence, but they are often detected only later in life. This can delay the specialized care that could improve an individual's quality of life and even forestall death.

Mental disorders contribute substantially to the mortality of young women and men and the associated disease burden at that age and later in life. Among young persons aged 15 to 29, the number of years lost due to premature mortality and disability (DALYs ${ }^{88}$ ) associated with unipolar depressive disorders and anxiety disorders are higher for women than for men ( 15 years versus 9 years per 1,000 population for unipolar disorders, and 7 years versus 4 years per 1,000 for anxiety disorders). The number of DALYs are higher for young men than young women when it comes to alcohol use disorder and drug use (9 years versus 2 years per 1,000 population and 6 years versus 3 years per 1,000 , respectively). However, they are similar with regard to schizophrenia and bipolar disorders ( 1 to 2 years per 1,000 population). ${ }^{89}$

## Suicide rates are lower for young women than young men in all regions except Southern Asia and Eastern Asia

In terms of mortality, self-harm (suicide) is the third leading single cause of death for both young women and young men (table 2.2). In 2012, almost 100,000 young women and over 140,000 young men between the ages of 15 and 29 committed suicide worldwide. ${ }^{90}$ In developed regions, self-harm is the leading cause of death for young men and the second leading cause of death for young women. In most regions, suicide rates are much higher for men than for women, particularly in developed regions, the Caucasus and Central Asia, Latin America and the Caribbean and sub-Saharan Africa. Southern and Eastern Asia stand out as the only two regions in the world where suicide rates are slightly higher for young women than for young men. They are particularly high in Southern Asia, with

[^66]28 deaths per 100,000 female population (compared to 11 deaths per 100,000 female population worldwide and 12 in developing regions).

## Substance abuse and physical inactivity

Many girls and boys take up smoking and drinking during adolescence, increasing the risk of developing non-communicable diseases later in life. As with adults, more adolescent boys currently drink than their female peers in every region. Adolescent boys (aged 15 to 19) engage in heavy drinking about three times more often than girls the same age ( 17 per cent compared to 6 per cent). The highest rates of heavy drinking among young people of both sexes are found in Europe, the Americas and Western Pacific regions. ${ }^{91}$

Smoking prevalence is as high or even higher for teenage girls than boys in some countries

Surveys conducted between 2008 and 2012 showed that in 21 countries around the world teenage girls ${ }^{92}$ were as likely to smoke, and in some countries more so than boys. Twelve of those 21 countries are in Europe. Among them, tobacco use was higher for girls than for boys by 8 percentage points in Spain, 7 points in Sweden, and 6 in the Czech Republic. ${ }^{93}$

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Girls aged 13 to 15 are less likely than boys of the same age to exercise physically in developing countries
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Physical inactivity in childhood and adolescence is detrimental to health in both the short and long term, increasing the risk of developing non-communicable diseases earlier, and premature death. ${ }^{94}$ Physical activity fosters healthier adolescent populations not only through the maintenance of healthy body weight, but also through improvements to psychological wellbeing, social development, educational performance, and reduced use of tobacco, alcohol and drugs. ${ }^{95}$ Despite these benefits, many adolescents do not meet the physical activity levels recommended by WHO (figure 2.14). In the vast majority of the developing countries surveyed, girls exercised less than boys, implying a difference in opportunities and/or preferences of adolescents with regard to physical activity.

[^67]Figure 2.14
Physical exercise and prevalence of overweight among adolescents aged 13 to 15 years, developing countries, 2003-2014 (latest available)


Physical inactivity and poor diet contribute to the increasing prevalence of overweight among children and adolescents. ${ }^{96}$ Rates of overweight for female and male adolescents vary by region (figure 2.14). For both sexes, the highest rates of overweight are found in Oceania and the lowest in sub-Saharan Africa, Southern Asia and SouthEastern Asia. However, in terms of gender differences, Oceania and sub-Saharan Africa tend to have higher overweight rates among girls than boys, while overweight rates for boys tend to be higher than those of girls in Western and SouthEastern Asia.

## 3. Women's reproductive years

Women's reproductive years are bordered by puberty (and the onset of menstruation) and menopause, roughly covering ages 15 to 49 . Globally, women's health status during this period is dominated by issues related to sexual and reproductive health. The leading female causes of death at the global level and in developing regions are HIV/ AIDS and maternal conditions. In 2012, in developing regions, the female mortality rates for these two causes of death were 34 and 19 deaths per 100,000 female population aged 15 to 49 years, respectively (table 2.3). In developed regions, maternal conditions were not a leading cause of death (1 per 100,000 death rate), while HIV/AIDS was among the highest ranked causes of death (6 per 100,000 ), together with breast cancer, ischaemic heart disease and self-harm. Within the same

[^68]age group, men's causes of death are dominated by HIV/AIDS and road injuries in the developing regions and self-harm and ischaemic heart disease in the developed regions (table 2.3).
This section focuses on the key components of reproductive and maternal health, including access to contraceptive methods, prevention of unsafe abortions, access to prenatal care and skilled health care at delivery. Improvement in these key areas could save many of the almost 300,000 women who die each year from causes related to pregnancy and childbirth. The section concludes with issues related to HIV and AIDS.

## Contraceptive use

Family planning is one of the most important aspects of reproductive health, since the use of modern contraceptive methods allows women to avoid unintended pregnancies. An unintended or unwanted pregnancy may be a pregnancy too early in life, too soon after a previous pregnancy, or after having reached the desired family size. Like any pregnancy, unwanted pregnancies carry the risk of disability or even death, but they also have added health risks due to abortion, particularly unsafe abortions. Unlike abortions carried out by skilled personnel in a medically safe environment, unsafe abortions have a very high risk of complications. Approximately half of all induced abortions globally are considered unsafe, according to the WHO definition (see following section). ${ }^{97}$

97 Sedgh and others, 2012.

Source: Compiled by UNSD based on data from the Global Schoolbased Student Health Surveys, 2003-2014 (WHO, 2014j).
Note: Each point represents data for one country. $\mathrm{N}=62$ for physical activity; 73 for prevalence of obesity. WHO recommends that children aged 5-17 years should accumulate at least 60 minutes of moderate- to vigorous-intensity physical activity daily. Overweight children have a BMI above 1 standard deviation from the median BMI for children of the same age and sex.

Table 2.3
Cause-specific mortality rates for women and men (aged 15 to 49 years) by region, 2012 (top 10 causes of death worldwide)

| Women |  |  |  |  | Men |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| World rank | Cause of death | Cause-specific mortality rates (deaths per 100,000) |  |  | World rank | Cause of death | Cause-specific mortality rates (deaths per 100,000) |  |  |
|  |  | World | Developed regions | Developing regions |  |  | World | Developed regions | Developing regions |
| 1 | HIV/AIDS | 30 | 6 | 34 | 1 | HIV/AIDS | 31 | 13 | 34 |
| 2 | Maternal conditions | 16 | 1 | 19 | 2 | Road injury | 29 | 16 | 31 |
| 3 | Self-harm | 9 | 6 | 10 | 3 | Ischaemic heart disease | 19 | 23 | 18 |
| 4 | Stroke | 8 | 4 | 9 | 4 | Interpersonal violence | 17 | 8 | 19 |
| 5 | Road injury | 8 | 5 | 9 | 5 | Self-harm | 17 | 25 | 15 |
| 6 | Ischaemic heart disease | 8 | 6 | 8 | 6 | Stroke | 11 | 7 | 11 |
| 7 | Breast cancer | 7 | 7 | 7 | 7 | Cirrhosis of the liver | 10 | 11 | 10 |
| 8 | Lower respiratory infections | 6 | 2 | 7 | 8 | Tuberculosis | 9 | 5 | 10 |
| 9 | Tuberculosis | 6 | 1 | 7 | 9 | Lower respiratory infections | 8 | 3 | 9 |
| 10 | Diarrhoeal diseases | 6 | 0 | 7 | 10 | Drowning | 6 | 5 | 6 |

Source: Computed by the United Nations Statistics Division based on data from WHO, Global health estimates for deaths by cause, age, and sex for years 2000-2012 (2014b).

A recent study estimated that if all women wanting to avoid pregnancy used a modern contraceptive method, the number of unintended pregnancies would drop by 70 per cent and unsafe abortions by 74 per cent. Additionally, if contraceptive needs were met and all pregnant women received the basic standard of care recommended by WHO, the number of women dying from pregnancy-related causes would drop by two thirds, from 290,000 to $96,000 .{ }^{98}$

> Contraceptive use and the proportion of demand for family planning that is satisfied remain low in some regions, particularly in sub-Saharan Africa and Oceania

As of 2013, 84 per cent of the total demand for family planning (women wanting to delay or avoid pregnancy) among women in developing regions was being met. ${ }^{99}$ This statistic reflects only women aged 15 to 49 who were married or in union.
The demand for family planning and the use of contraception (contraceptive prevalence) have increased over the years in almost all regions of the world, but wide disparities persist (figure 2.15). For instance, in sub-Saharan Africa, the proportion of women using any method of contraception doubled from 13 per cent to 27 per cent between 1990 and 2012. However, this still

[^69]represents only half of the total demand for family planning ( 51 per cent), leaving the remainder of women desirous of delaying or avoiding pregnancy with an unmet need for family planning. The level of unmet need in sub-Saharan Africa is the highest among all regions. The region has also the highest share of unsafe abortions ${ }^{100}$ and highest level of maternal mortality. ${ }^{101}$
Developing countries in Oceania also have low levels of contraceptive prevalence (38 per cent) and a relatively high unmet need for family planning. Around 40 per cent of the women there who would like to delay or avoid pregnancies are not using any method of contraception.

At the other extreme, Eastern Asia has the highest contraceptive prevalence ( 84 per cent) and nearly all demand for family planning is satisfied. Contraceptive prevalence has also reached very high levels ( 73 per cent) in Latin America and the Caribbean, where unmet need is comparable to the levels observed in developed regions (around 10 per cent).

[^70]
## Induced abortions

While abortion rates have declined since 1995 , the share of unsafe abortions among all abortions have increased

Globally, 44 million pregnancies were terminated by induced abortions in 2008. That number declined from 46 million in 1995 to 42 million in 2003, increasing again to 44 million in 2008 due to the growing population of women of reproductive age. The induced abortion rate fell from 35 abortions per 1,000 women aged 15 to 44 years in 1995 to 29 in 2003, declining only slightly afterwards to 28 in 2008 (table 2.4). Induced abortions occur in every region of the world at rates varying from about 20 to 30 abortions per 1,000 women aged 15 to 44 years (table 2.4). The exception is Eastern Europe, which had the highest abortion rate worldwide, at 43 abortions per 1,000 women in 2008.
About half of all abortions globally are considered unsafe, ${ }^{102}$ almost all of them occurring in developing regions (table 2.4), especially in Asia, Africa and Latin America and the Caribbean. Unlike abortions performed according to medical guidelines, unsafe abortions carry high health risks for women. ${ }^{103}$ In 2008, for example, an estimated 22 million unsafe abortions led to more than 5 million complications, resulting in 47,000 deaths, mostly from heavy bleeding and infection. ${ }^{104}$ While the total number of induced abortions has decreased since 1995, the share of unsafe abortions in total abortions worldwide increased from 44 per cent in 1995 to 49 per cent in 2008.

## Abortion policies remain restrictive in many countries

In general, abortion policies are more restrictive in developing than in developed regions. In 2013, almost all countries ( 97 per cent) permitted abortion to save the life of a pregnant woman, with 31 per cent of all countries in developing regions allowing abortions only under this condition, compared to 6 per cent in developed regions. Six countries or areas did not permit abortion under any circumstance: Chile, the Dominican Republic, El Salvador, the Holy See, Malta and Nica-

[^71]Figure 2.15
Total demand for family planning, contraceptive prevalence, and unmet need for family planning, 1990, 2000 and 2013 (percentage of women aged 15 to 49 years, married or in union)


Source: United Nations, The Millennium Development Goals Report 2015 (2015c). Statistical Annex.
ragua. The most liberal allowances for abortion, on request or for economic or social reasons, are found in about 80 per cent of developed countries, but only in about 20 per cent of developing countries. ${ }^{105}$ Although 56 countries extended the legal grounds for permissible abortion between

[^72]Source: WHO, Information sheet: safe and unsafe induced abortions (2012a).
Note: Abortion rate is defined as the number of abortions per 1,000 women aged 15 to 44 years. UN Population Division regions. Developed regions include Europe, North America, Japan, Australia and New Zealand; all others are classified as developing. Asia and Oceania exclude Japan, Australia and New Zealand from the regions.

Table 2.4
Number of abortions and abortion rate by region, 1995, 2003 and 2008

| Region | Number of abortions (millions) |  |  |  | Abortion rate (per 1,000 women aged 15 to 44) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1995 | 2003 |  | 2008 | 1995 | 2003 |  | 2008 |
|  |  |  | Total | Unsafe abortions |  |  | Total | Unsafe abortions |
| World | 46 | 42 | 44 | 22 | 35 | 29 | 28 | 14 |
| Developed regions | 10 | 7 | 6 | <1 | 39 | 25 | 24 | 1 |
| Developing regions | 36 | 35 | 38 | 21 | 34 | 29 | 29 | 16 |
| Africa | 5 | 6 | 6 | 6 | 33 | 29 | 29 | 28 |
| Asia | 27 | 26 | 27 | 11 | 33 | 29 | 28 | 11 |
| Europe | 8 | 4 | 4 | <1 | 48 | 28 | 27 | 2 |
| of which, Eastern Europe | 6 | 3 | 3 | $<1$ | 90 | 44 | 43 | 5 |
| Latin America and the Caribbean | 4 | 4 | 4 | 4 | 37 | 31 | 32 | 31 |
| Northern America | 2 | 2 | 1 | - | 22 | 21 | 19 | - |
| Oceania | $<1$ | $<1$ | $<1$ | - | 21 | 18 | 17 | 2 |

1996 and 2013, many others continue to impose restrictive measures and eight ${ }^{106}$ have even tightened their abortion policies. ${ }^{107}$
It is important to note that abortions take place regardless of their legal status. Nearly all of the estimated 22 million unsafe abortions in 2008 occurred in developing countries. ${ }^{108}$ Countries with restrictive laws against abortion have more than four times as many unsafe abortions as countries with liberal abortion policies ( 27 versus 6 unsafe abortions per 1,000 women aged 15 to 44 years, respectively, in 2008). Countries with restrictive abortion laws also had maternal mortality rates that were three times higher than those with liberal abortion policies ( 223 versus 77 maternal deaths per 100,000 live births in 2013). ${ }^{109}$

## Antenatal and delivery care

Access to antenatal care has improved, with almost universal coverage in some regions

Antenatal care visits by trained health workers can result in health problems in pregnant women being detected and treated before they become perilous for both mother and unborn baby. They include the identification and management of obstetric complications such as

[^73]preeclampsia, tetanus toxoid immunization, intermittent preventive treatment for malaria during pregnancy (IPTp), and identification and management of infections, including HIV, syphilis and other sexually transmitted infections. Significant improvements in access to antenatal care have been achieved (table 2.5). In 2014, 83 per cent of pregnant women in the developing regions had at least one antenatal care visit, an improvement of 19 percentage points since 1990. Some developing regions have reached almost universal antenatal care coverage. Latin America and the Caribbean, Eastern Asia and SouthEastern Asia all have antenatal care coverage of over 90 per cent. African countries, especially, have advanced. Between 1990 and 2014, coverage increased from 50 to 89 per cent in Northern Africa and from 68 to 80 per cent in sub-Saharan Africa. However, only little more than half of pregnant women in developing regions had the recommended minimum of four antenatal care visits. ${ }^{110}$ Furthermore, information on the quality of care is scarce.

Skilled delivery care improved everywhere but remains Iow in Southern Asia and sub-Saharan Africa

Assistance during delivery by skilled health personnel-a doctor, nurse or midwife-can prevent or manage most obstetric complications and thus reduce the risk of death or disability for both mother and child. Skilled health workers

[^74]can either intervene directly or refer a patient to higher levels of maternal health services, including emergency obstetric care. It is estimated that around 15 per cent of all pregnant women will develop complications during childbirth, ${ }^{111}$ often spontaneously without any previous existing conditions. In developing regions, the percentage of births attended by skilled health personnel was 70 per cent in 2014, an increase of 13 percentage points since 1990 (table 2.5). Some developing regions show almost universal coverage for skilled attendance at birth, such as Eastern Asia and the Caucasus and Central Asia, at 100 per cent and 96 per cent, respectively. However, in Southern Asia and sub-Saharan Africa, only every other pregnant woman gives birth with adequate care.

## Maternal mortality

Maternal mortality has declined, yet high levels are still found in sub-Saharan Africa

Maternal mortality is a leading cause of death in women of reproductive age. In 2013, an estimated 289,000 women died during pregnancy, or the first 42 days after delivery (or termination of pregnancy) due to causes related to pregnancy or childbirth. ${ }^{112}$ Maternal mortality shows extreme variations among regions. ${ }^{113}$ In 2013, the maternal mortality ratio was 16 deaths per 100,000 live births in developed regions versus 230 deaths per 100,000 live births in developing regions and peaked in sub-Saharan Africa with 510 deaths per 100,000 live births. Accordingly, the vast majority of maternal deaths occur in developing regions-286,000, of which almost two thirds occurred in sub-Saharan Africa, compared to 2,300 in developed regions. The lifetime risk of maternal death (the probability that a 15 -yearold woman will die eventually from a maternal cause) is 1 in 3,700 in developed regions but 1 in 160 in developing regions. Women in countries such as Chad and Somalia face the highest lifetime risk of dying due to maternal conditions, at 1 in 15 and 1 in 18 , respectively.
However, much progress has been made since 1990. The number of maternal deaths worldwide declined by 45 per cent between 1990 and 2013.

[^75]During that period, the maternal mortality ratio was reduced from 380 to 210 per 100,000 live births at the global level (from 430 to 230 deaths per 100,000 live births in developing regions). Yet, high levels of maternal mortality are still found in sub-Saharan Africa, similar to the levels found in Southern Asia 20 years ago (figure 2.16).

The wide variations in the maternal mortality ratio and lifetime risk suggest that most maternal deaths are preventable. The main conditions causing maternal death, including post-partum haemorrhage, sepsis, obstructed labour, complications of unsafe abortions and hypertensive disorders, can be managed when well-trained staff and adequate equipment are available to provide the necessary care, including emergency obstetric care. ${ }^{114}$ However, in developing countries, coverage by skilled birth attendance and of emergency obstetric care remain inadequate, preventing a more drastic decline in maternal mortality rates. ${ }^{115}$

Table 2.5
Women receiving antenatal care and deliveries attended by skilled health personnel by region, 1990 and 2014

|  | Percentage of pregnant women receiving antenatal care (at least one visit) |  | Percentage of births attended by skilled health personnel |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1990 | 2014 | 1990 | 2014 |
| Developing regions | 64 | 83 | 57 | 70 |
| Africa |  |  |  |  |
| Northern Africa | 50 | 89 | 47 | 90 |
| Sub-Saharan Africa | 68 | 80 | 43 | 52 |
| Latin America and the Caribbean | 75 | 97 | 81 | 92 |
| Caribbean | 84 | 95 | . | .. |
| Latin America | 75 | 97 | .. | .. |
| Asia |  |  |  |  |
| Eastern Asia | 70 | 95 | 94 | 100 |
| Southern Asia | 53 | 72 | 38 | 52 |
| South-Eastern Asia | 79 | 96 | 49 | 82 |
| Western Asia | 53 | 85 | 62 | 86 |
| Caucasus and Central Asia | . | . | 97 | 96 |
| Oceania | . | . | . | .. |

Source: United Nations, The Millennium Development Goals Report 2015 (2015c).

[^76]Figure 2.16
Maternal mortality ratio by region, 1990 and 2013


Source: United Nations Millennium Development Goals Report 2015 (United Nations, 2015c), statistical annex.

## HIV/AIDS

HIV/AIDS is the single largest cause of death worldwide for both women and men aged 15 to 49 years. In 2012, an estimated 540,000 women and 580,000 men in this age group died from AIDS. ${ }^{116}$ The death rates due to HIV/AIDS were 34 per 100,000 population for both women and men in developing regions. In developed regions, rates were higher for men, at 13 deaths per 100,000 population compared to women, at 6 per 100,000 (table 2.3). Recent data from the Joint United Nations Programme on HIV/AIDS (UNAIDS) also suggest that, in high-prevalence countries, HIV contributes significantly to pregnancy-related mortality, pointing to the urgent need to ensure that eligible women living with HIV receive full treatment and that these services are integrated into sexual and reproductive health care. ${ }^{117}$

## In sub-Saharan Africa, women represent the majority of people living with HIV

In 2013, an estimated 35 million people globally were living with HIV. Of these individuals, 31.8 million were over the age of 15 and 3.2 million were under age $15 .{ }^{118}$ Globally, the numbers of women and men living with HIV are similar, but with large regional differences (figure 2.17). Nearly seventy per cent of those who are HIVpositive live in sub-Saharan Africa, and 59 per cent of that group are women. In the Caribbean, the sex distribution among HIV-positive indi-

[^77]viduals is balanced, while in all other regions more men than women are HIV-positive. In these regions, the female share of those who are HIV-positive ranges from 22 per cent in Western and Central Europe and North America to 39 per cent in the Middle East and North Africa.

In general, females have a greater physiological susceptibility than males to contracting HIV. Gender inequality and specific gender norms can add to their risk. Violence against women, for example, is fuelling the HIV epidemic. Women who have experienced intimate partner violence are 50 per cent more likely to be living with HIV than those who have not. ${ }^{119}$ Moreover, fear of violence undermines the capacity of girls and women to negotiate safer sex and to seek HIV testing, reproductive health services or other health care. ${ }^{120}$ Overall, services for women experiencing violence remain inadequate (see Chapter 6 on Violence against women).
Men are also harmed by unequal gender norms and expectations and prevailing concepts of masculinity. Men's sexual risk-taking can increase their chance of contracting HIV. They are also less likely to get tested for HIV in all regions as compared to women, who may be at an advantage since HIV testing is routinely offered in antenatal care settings. ${ }^{121}$ Men also tend to enter treatment at later stages of the infection and are more likely to abandon it. ${ }^{122}$

Access to antiretroviral treatment has increased dramatically, yet it is far from universal

The number of adults living with HIV is increasing (figure 2.17), despite a decline in the number of new infections since the late 1990s. ${ }^{123}$ The reason lies in the greater availability of therapy and improved medications that are keeping more HIV-positive people alive for longer periods of time. Since 2005, the number of people receiving antiretroviral treatment (ART) has increased sharply in most regions. As at June 2014, 13.6 million people living with HIV were receiving ART globally, among which 12.1 million living in the developing regions. Between 2012 and 2013 alone, the number of people receiving ART

[^78]rose by 1.9 million in the developing regions, the largest annual increase ever ( 20 per cent). ${ }^{124}$

Treatment coverage is higher for women than for men in most regions. For instance, in 2012, 73 per cent of eligible ${ }^{125}$ women compared to 57 per cent of eligible men received antiretroviral treatment in low- and middle-income countries. ${ }^{126}$
Antiretroviral coverage for the prevention of mother-to-child transmission of HIV has increased, and the number of new infections among children has declined. ${ }^{127}$ In 2012, of the estimated 1.5 million pregnant women living with HIV in low- and middle-income countries, 62 per cent received antiretroviral treatment; the proportion in sub-Saharan Africa was 60 per cent, more than double the share only three years earlier. ${ }^{128}$ In other regions, antiretroviral coverage for the prevention of mother-to-child transmission of HIV varied, from 90 per cent in Eastern and Central Europe and the Caribbean to less than 20 per cent in Asia and the Pacific, the Middle East and North Africa. ${ }^{129}$

## 4. Older ages

## Non-communicable diseases are the main cause of death and disability among those in their later years

Old age is usually characterized by an increasing and general impairment of physiological functioning, resulting in the growing risk of disease and death. This is the outcome of the life-long individual ageing process and the accumulated effects of exposure to external health risk factors during all life stages. For statistical purposes, and unless otherwise specified, the term "older persons" in this chapter refers to those aged 60 and over.

Many studies, especially in developed countries, show that older women report worse health than men, suffer from more diseases, have more limitations in daily living activities, have more mental health problems, and are physically weaker than men of the same age. ${ }^{130}$ Despite their higher morbidity, women in this age group have lower mortality than men. Possible explanations for

[^79]Figure 2.17
Estimated number of women and men (15+ years) living with HIV (thousands), 1990, 2000, 2013


Source: UNAIDS, The Gap Report, (2014a).
Note: Regions as listed in UNAIDS, 2014a.
this paradox are, among other reasons, genetic and immunological differences between men and women, and differences in health reporting and in access and use of health-care services. ${ }^{131}$
Over 85 per cent of all deaths among those aged 60 and over are caused by non-communicable diseases. Stroke and ischaemic heart disease (a disease of the blood vessels supplying the heart muscle) are, by a large margin, the most common causes of death in both older women and men, followed by all cancers combined and chronic obstructive pulmonary disease (table 2.6). ${ }^{132}$

## Cardiovascular disease

## Cardiovascular disease kills more women than men, but the risk is higher for men than women

Stroke, ischaemic heart disease and other cardiovascular diseases have long been regarded as a male burden. Although men continue to have higher death rates due to cardiovascular disease than women in all regions of the world, in absolute numbers more women than men aged 60 and over die from these diseases globally ( 7.8 million women compared to 6.8 million men in 2012). This is mainly due to the increasing proportion of women in older age groups ( 70 and over), in which cardiovascular diseases cause most deaths. ${ }^{133}$

[^80]In 2012, death rates due to ischaemic heart disease for persons aged 60 and over were 802 per 100,000 population for men and 700 per 100,000 for women. Death rates were higher in developed regions compared to developing regions and higher for men than women in both regions. A different pattern emerged in death rates due to strokes: they were higher in developing than in developed regions, and women had higher death rates than men in developed regions (table 2.6).

## Chronic obstructive pulmonary disease

## Men are more likely than women to develop and die from chronic obstructive pulmonary disease

Chronic obstructive pulmonary disease (COPD) is a lung disease in which the airflow from the lung is blocked, making it hard to breathe. The disease is common among older persons and is usually irreversible and progressive. In 2012, death rates due to COPD for persons aged 60 and over were 278 per 100,000 population for women and 414 per 100,000 for men (table 2.6). Smok-ing-including passive exposure-is responsible for around 80 per cent of cases. Men have higher tobacco use than women and are more likely to develop COPD, but the increase in the number of women smokers could lead to an increase in incidence and prevalence of COPD among them. ${ }^{134}$
Other important risk factors for the disease are household air pollution and occupational exposure to various dusts or chemicals. Household air pollution is mostly caused by the burning of solid fuels, which are typically used in subSaharan Africa and Southern and Eastern Asia for heating and cooking. ${ }^{135}$ Women in general have higher exposure to this form of air pollution because of closer proximity and longer exposure during cooking and household work (see Chapter 7 on Environment). ${ }^{136}$ Exposure to occupational pollution, as in some factories or mines, is more common among men than women. ${ }^{137}$

## Cancer

Although the majority of cancers start during middle adulthood, the disease usually takes its toll in terms of mortality in later years. Over 60

[^81]per cent of all cancer deaths occur after age 60. ${ }^{138}$ Four of the 10 leading causes of death among men in this age group are cancers of different types-trachea, bronchus and lung cancers; stomach cancer; prostate cancer; and liver cancer. For women, two cancer types are included in this list-trachea, bronchus and lung cancers, and breast cancer (table 2.6).
Cancers (also called malignant neoplasms) are a group of diseases characterized by uncontrolled growth and spread of abnormal cells (metastasis). Cancers are a complex group of diseases and can have a variety of external causes usually modified by an individual's genetic make-up. An estimated 30 per cent of all cancer deaths are ultimately caused by five behavioural and dietary risks: high body mass index, low fruit and vegetable intake, lack of physical activity, tobacco use and alcohol consumption. Tobacco use alone is responsible for around 22 per cent of all cancer deaths and for about 71 per cent of global lung cancer deaths. ${ }^{139}$

It is estimated that in 2012 there were over 14 million new cases of cancer, 8.2 million cancer deaths and 32.6 million people of all ages living with the disease. ${ }^{140}$ Cancer incidence rates (the number of new cases per 100,000 population) and mortality rates (the number of deaths per 100,000 population) differ among regions and between women and men. For almost all forms of cancer (with the exception of cervical cancer), the age-standardized incidence rates in the developed regions are much higher than in the developing regions, while the age-standardized mortality rates are similar. In the developing regions, cancer detection usually occurs much later due to the lack of individual awareness, adequate primary care and widely available effective treatments. ${ }^{141}$

The global incidence rate for all cancers for men is 24 per cent higher than that for women, and the mortality rate 52 per cent higher (table 2.7). Although most forms of cancer can develop in both women and men, differences do exist: for women, the most common cancers are cancers of the breast, cervix, colon and lung; for men, cancers of the lung, prostate, colon, stomach and liver are predominant.

[^82]Table 2.6
Cause-specific mortality rates for women and men (aged 60 or over) by region, 2012 (top 10 causes of death worldwide)

| Women |  |  |  |  | Men |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Cause-specific mortality rates (deaths per 100,000) |  |  |  |  | Cause-specific mortality rates (deaths per 100,000) |  |  |
| World rank | Cause of death | World | Developed regions | Developing regions | World rank | Cause of death | World | Developed regions | Developing regions |
| 1 | Stroke | 703 | 491 | 825 | 1 | Ischaemic heart disease | 802 | 858 | 776 |
| 2 | Ischaemic heart disease | 700 | 737 | 678 | 2 | Stroke | 703 | 416 | 842 |
| 3 | Chronic obstructive pulmonary disease | 278 | 104 | 378 | 3 | Chronic obstructive pulmonary disease | 414 | 180 | 528 |
| 4 | Lower respiratory infections | 177 | 103 | 220 | 4 | Trachea, bronchus, lung cancers | 231 | 292 | 201 |
| 5 | Diabetes mellitus | 149 | 70 | 194 | 5 | Lower respiratory infections | 201 | 136 | 232 |
| 6 | Hypertensive heart disease | 129 | 104 | 144 | 6 | Diabetes mellitus | 135 | 76 | 163 |
| 7 | Alzheimer's disease and other dementias | 103 | 226 | 33 | 7 | Hypertensive heart disease | 107 | 79 | 121 |
| 8 | Trachea, bronchus, lung cancers | 88 | 110 | 76 | 8 | Stomach cancer | 95 | 78 | 103 |
| 9 | Breast cancer | 65 | 98 | 46 | 9 | Prostate cancer | 83 | 125 | 63 |
| 10 | Kidney diseases | 63 | 54 | 69 | 10 | Liver cancer | 82 | 54 | 96 |

Source: Computed by the United Nations Statistics Division based on data from WHO, Global health estimates for deaths by cause, age, and sex for years 2000-2012 (2014b).
Note: Mortality rates are not age-adjusted.

## Breast cancer and cervical cancer are among the most common forms of cancer among women

Two of the most common cancers among women are related to their reproductive function: breast and cervical cancer.

In 2012, breast cancer accounted for 26 per cent of all new cancer cases (around 1.7 million worldwide) and 16 per cent of all cancer deaths (522,000 worldwide). Developing regions saw slightly more new cases of breast cancer $(883,000)$ than the developed regions $(794,000)$, but the incidence rate was 2.4 times higher in the latter. ${ }^{142}$ The higher incidence rate in the developed regions is partly due to higher detection rates. Lifestyle and risk factors also contribute. Low fertility, high alcohol consumption and obesity are important factors that increase the risk for breast cancer. ${ }^{143}$

Cervical cancer is almost always caused by a vi-rus-the human papillomavirus (HPV). HPV is the most common viral infection of the reproductive tract, and most sexually active women and men will be infected at least once during their lives-most likely at a young age. Cervical cancer can easily be treated or even avoided when discovered at an early stage. Furthermore, vac-

[^83]cinations are available against some virus types that are responsible for around 70 per cent of all cervical cancers. Contrary to most other cancers, cervical cancer has much higher incidence and mortality rates in developing than in developed regions (table 2.7). This is due to the lack of sufficient cancer screening and vaccinations in many developing countries. Cervical cancer is also the second most common cancer in terms of new cases in developing regions.

## For men, lung cancer is the most common type of cancer and is a leading cause of death in men over 60

For men, the most common cancers are cancers of the lung, prostate, colon, stomach and liver. Lung cancer is the most common cancer worldwide for men and for both sexes combined, with an estimated 1.8 million new cases in 2012. It has a relatively high fatality rate and is responsible for every fifth cancer death in the world. Ageadjusted incidence rates for men are 2.5 times higher than those for women. The highest incidence rates for men are in Central and Eastern Europe and Eastern Asia, and for women in North America and Northern Europe. ${ }^{144}$ These gender and geographic patterns largely reflect historical exposure to tobacco smoke.

[^84] year per 100,000 population (age-standardized).
b Number of deaths per year per 100,000 population (age-standardized).
c Top five cancers with highest mortality, sorted by incidence rate. d Excluding non-melanoma skin cancer.
Source: Ferlay and others, 2013. GLOBOCAN 2012 v1.0, Cancer incidence and mortality worldwide: IARC CancerBase No. 11. http:// globocan.iarc.fr (accessed November 2014).
Note: UN Population Division regions.

Table 2.7
Estimated age-adjusted incidence ${ }^{\text {a }}$ and mortality ${ }^{\text {b }}$ rates of top five ${ }^{\text {c cancers worldwide, women and men, by }}$ major regions, 2012

| Women <br> Cancer | World |  | Developing regions |  | Developed regions |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Incidence | Mortality | Incidence | Mortality | Incidence | Mortality |
| Breast | 43 | 13 | 31 | 12 | 74 | 15 |
| Cervix uteri | 14 | 7 | 16 | 8 | 10 | 3 |
| Colorectum | 14 | 7 | 10 | 6 | 24 | 9 |
| Lung | 14 | 11 | 11 | 10 | 20 | 14 |
| Stomach | 8 | 6 | 8 | 7 | 7 | 4 |
| All cancers ${ }^{\text {d }}$ | 165 | 83 | 136 | 80 | 241 | 86 |
| Men | World |  | Developing regions |  | Developed regions |  |
| Cancer | Incidence | Mortality | Incidence | Mortality | Incidence | Mortality |
| Lung | 34 | 30 | 30 | 27 | 45 | 37 |
| Prostate | 31 | 8 | 15 | 7 | 70 | 10 |
| Colorectum | 21 | 10 | 14 | 8 | 36 | 15 |
| Stomach | 17 | 13 | 18 | 14 | 16 | 9 |
| Liver | 15 | 14 | 18 | 17 | 9 | 7 |
| All cancers ${ }^{\text {d }}$ | 205 | 126 | 163 | 120 | 309 | 138 |

Cancer of the prostate is the second most common cancer among men globally, but with large geographical differences. In developed regions, it is the leading form of cancer in terms of new cases, with 50 per cent more cases in 2012 than lung cancer. The incidence rate in developed regions is almost five times higher than in developing regions-largely a consequence of higher-level diagnostic practices in developed countries. ${ }^{145}$ Prostate cancer is mostly a cancer of old age, with the only other known risk factors being African ancestry and having a family history of the disease.

## Dementia

Dementia is one of the major causes of disability in later life. It is a syndrome caused by degenerative changes in the brain leading to deterioration in memory, thinking, behaviour and the ability to perform everyday activities. The result is a loss of skills that enable one to live independently. Dementia is caused by a number of different underlying brain pathologies. Alzheimer's is the most common and is responsible for around 70 per cent of all dementia cases. Not much is known about risk factors except age itself, although evidence points to shared risk factors with cardiovascular disease. Smoking, obesity, diabetes, high

[^85]cholesterol and hypertension seem to increase the risk of dementia, while physical activity, a healthy diet, social activities and education seem to have a protective effect. Furthermore, genetic factors may increase the risk of dementia. ${ }^{146}$

## Women are more likely than men to be affected by dementia

The prevalence of dementia is less than 1 per 1,000 up to age $65,{ }^{147}$ but rises sharply afterwards, doubling with every subsequent five to seven years of age. At age 90 and over, an estimated 3 to 5 people out of 10 live with dementia. ${ }^{148}$ Although research shows that the age-related prevalence of dementia has hardly changed over the past 30 to 40 years (at least in high-income countries), ${ }^{149}$ the continuous ageing of the world population (see Chapter 1 on Population and families) will lead to a sharp increase in the number of people with dementia. In 2013, an estimated 44 million people globally were living with dementia, a number that is expected to double every 20 years, leading to 76 million cases by 2030, and 135 million by $2050 .{ }^{150}$ Due to the changing population

[^86]structure, the vast majority (71 per cent) of people with dementia will live in countries currently classified as low- or middle-income. ${ }^{151}$

Dementia has important gender dimensions for two reasons. First, women are at a higher risk of dementia than men and represent the majority of older persons suffering from this condition. The prevalence rate for dementia is estimated to be between 23 and 41 per cent higher for women than for men. Also, the number of years lost globally due to premature death and disability related to Alzheimer's disease and other forms of dementia are higher for women than for men by 14 per cent in the 60 to 69 age group and by 38 per cent in the 70 and over age group. Women are more affected than men by the disease because of their greater longevity and the typically late onset of dementia. Dementia prevalence in the age group 85 and over-of which women represent 65 per cent in $2015^{152}$-is estimated to range between 25 to 50 per cent. ${ }^{153}$
Not only do more women than men suffer from dementia, they are also the majority of informal caregivers-mostly in their role as partners, daughters and daughters-in-law. Informal care is the rule in most low- and middle-income countries, where professional or institutional care is often not widely available. A recent literature review by Alzheimer's Disease International of 25 studies covering all major regions (and representing countries with 78 per cent of the global population with dementia) revealed that between 55 and 91 per cent of all informal caregivers of people with dementia were women (unweighted average of 76 per cent). ${ }^{154}$ A survey in the United States conducted by the Alzheimer Association showed that the share of women among caregivers increased with the duration and amount of caregiving provided. The same study showed that women caregivers were seven times more likely than men to go from working full-time to working half-time and twice as likely to give up paid work entirely. ${ }^{155}$ Taking care of a demented person not only has an economic impact, it also has adverse effects on the physical and mental health of caregivers due to the physical and emotional strain of caring for those ill with the disease. ${ }^{156}$

[^87]
## The health of an ageing population

The proportion of older persons in the population is increasing worldwide as a consequence of declining fertility rates and increasing life expectancy (see Chapter 1 on Population and families). This phenomenon, known as "population ageing", takes place in nearly all countries around the world. ${ }^{157}$ Globally, the proportion of older people (aged 60 and over) has increased from 9 per cent in 1990 to 12 per cent in 2015, and is expected to increase further to 21 per cent by $2050 .{ }^{158}$ As populations age, the prevalence of non-communicable diseases and the proportion of persons with disabilities increase. Forty-six per cent of all persons aged 60 and over have a moderate or severe disability compared to just 15 per cent of persons aged 15 to $49 .{ }^{159}$ Several noncommunicable diseases contribute the most to the burden of disease in terms of number of years lost due to disability per 1,000 persons (YLD) for both women and men. In addition to Alzheimer and dementia, they include hearing loss, musculoskeletal diseases (in particular, back and neck pain and osteoarthritis), COPD, unipolar depressive disorders, injuries due to falls, diabetes, vision loss and ischaemic heart disease. ${ }^{160}$ Among these, the burden of disease due to unipolar depressive disorders, vision loss and osteoarthritis is higher for women than for men; the burden due to back and neck pain, hearing loss and injuries resulting from falls is higher for men than for women. Hyperplasia of the prostate also adds to the years of life lost due to disability in men. ${ }^{161}$
These conditions, which limit functional capacity and can cause chronic pain, are associated with increased dependency and restricted participation. They also create considerable demand for long-term care that often becomes the responsibility of the women in a household. For instance, a 2011 study on caregiving in 16 OECD countries ${ }^{162}$ showed that more than 1 in 10 adults aged 50 and over are involved in informal caregiving related to personal care or basic activities of daily living for persons with functional limitations. A larger number of car-egivers- 1 in 3 adults aged 50 and over-provide help with instrumental activities of daily living

[^88]such as shopping and paperwork. About two thirds of them are women, but the sex distribution changes with age. Among caregivers aged 75 and over, men have similar or higher rates of caregiving than women in two thirds of countries. The study also showed that providing personal care can be demanding and may be incompatible with a full-time job when the time spent on care is more than just a few hours. Caregivers, particularly those providing longer hours of care activities, are less likely to be employed than non-caregivers. When they are employed, they tend to work shorter hours or have a temporary work contract. Furthermore, intensive caregiving can have a negative impact on mental health. In some countries, the detrimental effect is stronger for women than for men. ${ }^{163}$

To improve the quality of life of older persons, more attention needs to be paid not only to managing disabilities but also to preventing them. The functional capacity of the body naturally declines with age, but the rate of decline is largely determined by external factors throughout the life course. The decline can accelerate due to unhealthy habits such as smoking or alcohol use, or slow down by healthy habits such as a wholesome diet and physical activity. Healthy behaviour in all life stages can increase life expectancy and delay the onset of chronic conditions and disability, compressing the time spent in ill health into a shorter period at the end of life. ${ }^{164}$

## Chapter 3

## Education

## Key findings

- Despite progress, only one in two children in developing regions receive pre-primary education compared to nine in 10 in developed regions.
- Primary school enrolment at the appropriate age is nearly universal in most regions, except sub-Saharan Africa and Oceania.
- Yet, an estimated 58 million children of primary school age- 31 million of whom are girls-are out of school.
- Only 72 per cent of the world's girls and 74 per cent of boys attend secondary school; gender disparities at the secondary level are wider than those at the primary level. In tertiary education globally, enrolments are increasing faster for women than for men.
- The proportion of women graduating in the fields of science and engineering remains low in poor and rich countries alike.
- Women account for 30 per cent of all researchers.
- Women account for about two thirds of teachers at the primary level, 52 per cent at the secondary level and 42 per cent at the tertiary level.
- Nearly two thirds of the world's 781 million illiterate adults are women, and almost all of them live in developing regions.
- The vast majority of the world's youth are literate: 87 per cent of young women and 92 per cent of young men having basic reading and writing skills.


## Introduction

Education is a core human right ${ }^{1}$ and an essential tool for achieving sustainable development. ${ }^{2}$ It is an investment in human capital that confers benefits to both individuals and societies, allowing them to reach their fullest potential. Education is indispensable for closing the gap between women and men in respect to social and economic opportunities and is a key to empowering women and allowing them to become agents of change in economic, social and political spheres. It also improves women's chances of leading a healthy life and passing on the benefits to future generations. ${ }^{3}$
This chapter presents evidence-based analysis of progress in the education of girls and boys, and women and men, over the period 1990-2012. Overall, the data show remarkable progress

[^89]in participation in education and literacy levels. Substantial progress has been made in the achievement of universal primary education, and girls and boys around the world participate equally in primary education in most regions of the world. While the overall progress in secondary education is encouraging, it lags behind primary education. In addition, gender disparities are wider and occur in more countries at the secondary than at the primary level. Among positive global trends, the evidence shows that, girls-once they have access to school-tend to do better than boys in terms of progression at the primary and secondary levels and beyond. In tertiary education, a clear trend is emerging that favours women-with enrolments increasing faster for women than for men. However, gender disparities persist in the fields in which men and women choose to study. Women continue to be underrepresented among graduates in the fields of science and engineering in most countries.

## Box 3.1

Gaps in gender statistics on education

The primary source for cross-nationally comparable statistics on education is the UNESCO Institute for Statistics (UIS). The statistics published by the UIS are based on national data reported to the Institute and estimates made by it. National sources of statistics on participation in education and their outcomes are: school administrative records; population and housing censuses; and, household or other sample surveys.

## Availability and data quality issues

Country reporting to the international statistical system is an indication of national capacity to produce and disseminate education data. As the information in the table below indicates, there was a high level of reporting of enrolment data to the UIS for the two periods considered. Out of 211 countries or areas from which the UIS
collects statistics, 192 reported gross enrolment ratios for primary education by sex at least once for the period 2005-2012, while 184 did so for secondary education. Relatively fewer countries or areas (168) reported these ratios for tertiary education, partly because some countries do not have a tertiary education system within their borders. Periodicity in the reporting of the data continues to be a problem for some countries. A smaller number of countries or areas were able to report enrolment frequently (here defined as reporting for at least four out of the eight years considered). One hundred and seventy-five countries or areas frequently reported gross enrolment ratios by sex for primary education in the period 2005-2012, 158 for secondary education, and 125 for tertiary education.

Number of countries or areas for which data on gross enrolment ratios by sex and level of education are available, 1997-2004 and 2005-2012

|  | Primary |  | Secondary |  | Tertiary |  | Tertiary Field of study |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | At least once | At least 4 years | At least once | At least 4 years | At least once | At least 4 years | At least once |
| 2005-2012 |  |  |  |  |  |  |  |
| World | 192 | 175 | 184 | 158 | 168 | 125 | 113 |
| Developed regions | 46 | 46 | 47 | 46 | 47 | 44 | 42 |
| Developing regions | 146 | 129 | 137 | 112 | 121 | 81 | 71 |
| 1997-2004 |  |  |  |  |  |  |  |
| World | 193 | 177 | 188 | 151 | 164 | 115 | . |
| Developed regions | 46 | 44 | 46 | 41 | 45 | 40 | .. |
| Developing regions | 147 | 133 | 142 | 110 | 119 | 75 | . |

The major source of information on official enrolment levels is school administrative records, which often face data quality issues. In some countries, there is less than universal reporting by schools. In many countries, administrative data cover education in formal public and private institutions. Some educational institutions managed by non-governmental organizations and local communities may not be covered by administrative statistics. ${ }^{a}$ The reliability of the data reported by government and public schools may be affected by shortcomings, particularly when resource allocation from the government is tied to the size of enrolment. ${ }^{\text {b }}$ Moreover, population
estimates are a key component in the calculation
of enrolment ratios. As a result, inconsistencies with population estimates used can affect the calculation of the enrolment ratios.
Literacy and educational attainment statistics are primarily produced from censuses and household surveys. The reporting of education data from these sources is slightly lower than that from administrative records. The total number of countries or areas that have reported adult and youth literacy data by sex from census or survey sources is 158 for the period 2005-2012 and 102 for educational attainment. Fewer countries or areas (108) reported literacy data on older persons. It is important to note that not all of the countries or areas that collected statistics on
literacy and educational attainment in the 2010 census round (spanning the period 2005-2014) have as yet reported them to the international statistical system. There are differences in the reporting of data on literacy and educational attainment among development groups. Most countries in the more developed regions do not regularly report data on literacy because it is considered virtually universal and thus the information is not collected in their censuses and surveys.
Many factors contribute to data quality issues in the measurement of literacy and educational at-
tainment from censuses and household surveys. The completeness of the census enumeration and the sample design for the household survey may affect the accuracy of estimates produced from these sources. Surveys can also systematically miss parts of the population that are difficult to reach. A lack of consistency in survey questions and methodology may affect results. Because censuses and surveys are carried out infrequently, data from these sources may not be comparable across years and sources, especially in countries where the education system has changed over time.

Number of countries or areas for which data on literacy rates and educational attainment by sex are available, 1995-2004 and 2005-2012

|  | Adult literacy rates | Youth literacy rates | Literacy rates for older <br> persons | Educational <br> attainment |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1995-2004 | 2005-2012 | 1995-2004 | 2005-2012 | 1995-2004 | 2005-2012 | 2005-2012 |
| World | 143 | 158 | 143 | 158 | 116 | 108 | 102 |
| Developed regions | 20 | 25 | 20 | 25 | 17 | 15 | 37 |
| Developing regions | 123 | 133 | 123 | 133 | 99 | 93 | 65 |

## International comparability

Education systems across the world vary widely. Most countries have their own definitions of education levels that do not easily correspond to the International Standard Classification of Education (ISCED) levels. Consequently, the UIS works with countries to map their education systems to the ISCED classification with a view to improving cross-country and -temporal comparisons. Despite UIS' guidance to countries to exclude data on programmes designed for people beyond regular school age, adult education data may still be included for a few countries, which may slightly affect the comparability of their enrolment data with those of other countries.

The definition and measurement of literacy differ across national censuses and household surveys. Some countries use self-reporting to measure literacy skills, while others rely on direct assessment. Yet, some other countries collect literacy data using proxy measurements based on educational attainment, though estimates produced by such methods are not accepted by the UIS. Some developed countries where basic literacy is considered virtually universal use a new concept that relates literacy to skills needed for successful participation in social and economic life. A lack of common definitions and measurements affect the international comparability of education data.

## A. Participation in education

## 1. Pre-primary education

Early childhood education plays an important role in building a strong foundation for lifelong human development. Evidence from around the world indicates that an early start in education can improve children's chances of participating in and completing higher levels of education. Thus, it can potentially reduce social inequality by offsetting social, economic and language-
based disadvantages. ${ }^{4}$ Early childhood care and education is a diverse area of learning. It ranges, on the one hand, from formal pre-primary education, which is integrated into the national education system via kindergartens where care, play and education are all included, to more informal and often home-based activities. Pre-primary programmes are typically designed for children aged 3 to 5 years, and include organized learning

[^90]activities that last, on average, an equivalent of at least two hours per day and 100 days per year.

Only one in two children in developing regions are enrolled in pre-primary programmes, compared to nine in 10 in developed regions

Coverage of pre-primary education has steadily expanded over the period 1990-2012 (figure 3.1). Gross enrolment ratios (GER) ${ }^{5}$ in pre-primary education have increased consistently in all regions of the world for both boys and girls over the same period. Worldwide, pre-primary enrolment rose from 28 to 54 per cent for boys while it increased from 27 to 54 per cent for girls. Overall, participation in pre-primary education was the highest in developed regions. It was also relatively high in Eastern Asia, Latin America and the Caribbean, and Oceania, where the regional averages were above 70 per cent for both boys and girls. Enrolment was low in Northern Africa, sub-Saharan Africa, Western Asia and the Caucasus and Central Asia. Only one in five children in subSaharan Africa and Western Asia was enrolled in pre-primary programmes, compared with one in two for developing regions as a whole and about nine in 10 in developed regions.

## Gender disparities in pre-primary education were less

 marked than at other levels of educationPre-primary education is less marked by gender disparities than any other level of education. This is partly because private institutions account for a large proportion of total pre-primary enrolment. Children participating in pre-primary education tend to come from more affluent groups, where gender biases in education are generally less pronounced than among the poor. With 54 per cent of girls and boys attending pre-primary

[^91]education globally in 2012, the Gender Parity Index (GPI) - the ratio between the female and male pre-primary GERs (see box 3.2)—was within the range of parity at 1.00 . Globally, gender parity was maintained between 2000 and 2012. The GPI showed parity in all regions in 2012, except Northern Africa, where 9 girls are enrolled for every 10 boys. A high proportion of countries- 112 out of 184 with available data, or 61 per cent-showed gender parity at the preprimary level. ${ }^{6}$ The largest disparities to the disadvantage of girls (GPI below 0.90) were found in: Montserrat, Morocco, Nauru, Niue, Pakistan, Tajikistan, Turks and Caicos Islands and Yemen. On the other hand, the largest disparities to the disadvantage of boys (GPI above 1.10) were observed in Angola, Armenia, Cayman Islands, Georgia, Saint Kitts and Nevis, Samoa, Senegal and Tuvalu.

Box 3.2
Understanding the gender parity index
The Gender Parity Index (GPI) is commonly used to measure progress towards gender parity in education. For a given indicator, the GPI is calculated as the ratio of the value for females to that for males. A GPI value equal to one indicates parity. This signifies that there is no difference in the indicator for females and males. UNESCO has defined a GPI value of between 0.97 and 1.03 (inclusive) as the achievement of gender parity. For indicators where higher values are desirable (e.g. school participation rates), a GPI of less than one means that girls are at a disadvantage and a GPI greater than one means that boys are at a disadvantage. For indicators where lower values are desirable (e.g. repetition rates), a GPI of less than one means that boys are at a disadvantage and a GPI greater than one means that girls are at a disadvantage. In general, the GPI should be interpreted together with the values of the underlying indicator.
One of the difficulties in presenting the GPI is that the scale of disadvantage for females and males is not represented symmetrically around one. For example, a GPI of 0.5 indicates that the female value of the indicator being reviewed is half the male value, whilst a GPI of 1.5 (also 0.5 units away from parity) indicates the male value of the indicator is two-thirds of the female value (not half).

[^92]
## 2. Primary education

Primary education is fundamental to human development and to the progress of all countries. Providing "universal access to basic education and ensuring the completion of primary education" by both girls and boys is one of the actions all governments must take to address one of the "Critical Areas of Concern-Education and Training of Women"-contained in the Beijing Platform for Action adopted in 1995. This section deals with some key topics in primary education, including participation, progression and completion, while offering an assessment on the extent to which education systems provide equitable access to both boys and girls.

## Participation in primary education

## Participation in primary education is nearly universal

Between 1990 and 2012, primary education was extended to an ever increasing proportion of the world's children. Over that period, substantial progress was made towards universal primary education, with the global adjusted net enrolment rate ${ }^{7}$ in primary education rising from 77 to 90 per cent for girls and from 87 to 92 per cent for boys (figure 3.2). The enrolment of girls in primary education has increased faster than that of boys, which helped to close the gender gap at the primary level. This is particularly true in those regions where girls' enrolment rates were historically much lower than that of boys. Outstanding gains in primary enrolment have been registered in developing regions, particularly in Northern and sub-Saharan Africa, Southern Asia and Oceania. This is largely due to increased investment in primary education and measures taken such as the abolishment of school fees. However, many countries in some of these regions are still far from attaining universal primary education. In sub-Saharan Africa, despite an impressive increase of 27 and 22 percentage points for girls and boys, respectively, over the period 1990-2012, only 75 per cent of primary-school-aged girls and 81 per cent of boys of the same age attended school in 2012. In developed

[^93]Figure 3.1
Pre-primary gross enrolment ratios by sex and region, 1990, 2000 and 2012


Source: UNESCO Institute for Statistics, 2014.
Note: Regions are listed in ascending order of the pre-primary gross enrolment ratio for girls in 2012.

Figure 3.2
Primary adjusted net enrolment rates by sex and region, 1990, 2000 and 2012


Source: UNESCO Institute for Statistics, 2014.
Note: Regions are listed in ascending order of the primary adjusted net enrolment rate for girls in 2012.
regions, Eastern Asia and Northern Africa, enrolment was nearly universal, with the enrolment rates of girls and boys generally exceeding 95 per cent in 2012. The average rates for both girls and boys exceeded 90 per cent in the Caucasus and Central Asia, Latin America and the Caribbean, South-Eastern Asia, and Southern and Western Asia.

> Most countries have reached gender parity in primary education, but in those that have not, disparities to the disadvantage of girls are stark

The GPI ${ }^{8}$ based on GERs ${ }^{9}$ in primary education was 0.97 in 2012. This falls within the range of parity ( 0.97 to 1.03 ), implying that, at the global level, boys and girls are equally likely to participate in primary education. The GPI for developed regions, Eastern Asia, Latin America and the Caribbean, South-Eastern Asia, Southern Asia and the Caucasus and Central Asia also fell within the range of parity, and Northern Africa was on the cusp. The average GPI value was lower than the range of parity in sub-Saharan Africa (where the GPI was 0.92 ), Oceania ( 0.93 ) and Western Asia (0.93). ${ }^{10}$

The nature and extent of gender disparities in primary enrolment are more apparent at the country level. Worldwide, 192 countries have available data on gross enrolment ratios in primary education for the period 2005-2012. Of these, some 113 countries (about 60 per cent) have reached gender parity, with as many girls as boys enrolled in primary school. ${ }^{11}$ Of the 79 countries that reported gender disparities in participation in primary education, four out of five (63 countries) reported disparities to the disadvantage of girls. In terms of geographic distribution, 34 of these countries are in Africa, 14 in Latin America and the Caribbean, 7 in Western Asia and 4 in South-Eastern Asia. Large disparities to the disadvantage of girls (a GPI less than 0.90 ) were found in 21 of the 63 countries, of which 16 were in sub-Saharan Africa, where

[^94]children's access to school was more limited and the disparities affecting girls more severe. In contrast, there were relatively few countries (16 out of the 79 that showed gender disparities) where boys were at a disadvantage. Moreover, the disparities to the disadvantage of girls are typically more extreme (see also figure 3.8). Poverty is a significant contributing factor, although not the only one, which negatively affects their access to and participation in education. Other factors include ethnicity, disability and residence in rural, remote or scattered communities, slums and in conflict affected areas. ${ }^{12}$

## Out-of-school children of primary school age

Most out-of-school children of primary school age live in sub-Saharan Africa and Southern Asia

Great strides have been made towards achieving universal education for all. The global number of out-of-school children ${ }^{13}$ of primary school age ${ }^{14}$ declined for two decades, falling from about 104 million in 1990 to about 58 million in 2012-31 million girls and 27 million boys (figure 3.3). Most of these children live in developing regions. Sub-Saharan Africa accounted for more than half ( 57 per cent) of them and had the highest out-of-school rate of all regions. Almost one in four girls of primary school age and one in five boys in the region had either never attended school or left school without completing primary education. Some 10 million children were out of school in Southern Asia, representing nearly 17 per cent of the global total. Other regions had significantly fewer children out of school: SouthEastern Asia (4 million), Latin America and the Caribbean ( 3.8 million), Eastern Asia ( 2.7 million), and Western Asia (1.5 million).

## Girls comprise the majority of the out-of-school population

Despite progress towards gender parity in school enrolment, girls comprise the majority of the world's out-of-school children. In 2012, the share

12 UNESCO, 2007.
13 These are primary-school-age children not attending either primary or secondary education, having either not started school or dropped out before completion. They may also be in some type of non-formal education that is not recognized as fully equivalent to formal primary education.
14 Typically between 6 and 11 years of age.
of girls in the out-of-school population amounted to 53 per cent, down from 62 per cent in 1990. Gender disadvantage was most pronounced in Northern Africa and Western Asia, where girls accounted for over two thirds of children out of school. In sub-Saharan Africa, girls accounted for 56 per cent of such children, while in Oceania the figure was 60 per cent. Over the period 1990-2012, the proportion of girls in the total number of out-of-school children fell to less than one half in Eastern Asia, Latin America and the Caribbean, South-Eastern Asia and Southern Asia.

## Poverty and other barriers further reinforce gender disparities in learning opportunities

The reasons why children do not attend school vary, but they are often associated with poverty, ethnicity, social exclusion, living in a rural area or slum, geographic remoteness, disasters, armed conflict, lack of basic facilities and poor-quality education. These barriers often interact with gender to create even greater disadvantages in learning opportunities. Countries face different challenges and need different policies depending on their circumstances. Among interventions that have successfully been used to reach the disadvantaged and the marginalized, especially girls include: the abolishment of school fees; increased education budgets; social cash transfers, especially to support poor families, making it easier for them to send their children to school; increasing attention to ethnic and linguistic minorities; overcoming conflicts that keep children out of school because of hostilities; and improving the quality of education. ${ }^{15}$

## School progression at the primary level

In order to achieve universal completion of primary education, it is important that all boys and girls of primary school age attend school and progress through primary education. High levels of repetition and drop out hinder a considerable number of children from transitioning to secondary education. Difficulty in progressing through the primary grades (repeating) or leaving school before completing the last grade of primary education (dropping out) occur for a variety of reasons, mostly related to the educational system and social and economic factors. Gender plays a significant role in school progression and completion in most countries.

[^95]
## a. Repetition

Repetition at the primary level remains relatively high in Latin America and the Caribbean, sub-Saharan Africa, Southern Asia and Western Asia

A considerable number of children experience difficulty in progressing from one grade to the next at the primary level. The percentage of repeaters at the primary level was the lowest for both boys and girls in developed regions, Eastern Asia, and the Caucasus and Central Asia. ${ }^{16}$

Box 3.3
Gender parity and equality in education-what's the difference?
Gender parity and gender equality in education mean different things. Gender parity is a purely numerical concept. Reaching gender parity in education implies that the same proportion of boys and girls would enter the education system and participate in its various cycles.
Gender equality, on the other hand, means that boys and girls would experience the same advantages or disadvantages in educational access, treatment and outcomes. In so far as it goes beyond questions of numerical balance, equality is more difficult to define and measure than parity.
The achievement of full gender equality in education would imply:

- Equality of opportunities, in the sense that girls and boys are offered the same chances to access school, i.e. parents, teachers and society at large have no gender-biased attitudes in this respect;
- Equality in the learning process, i.e. girls and boys receive the same treatment and attention, follow the same curricula, enjoy teaching methods and teaching tools free of stereotypes and gender bias, are offered academic orientation and counselling not affected by gender biases, and profit from the same quantity and quality of appropriate educational infrastructures;
- Equality of outcomes, i.e. learning achievements, length of school careers, academic qualifications and diplomas would not differ by gender;
- Equality of external results, i.e. job opportunities, the time needed to find a job after leaving full-time education, the earnings of men and women with similar qualifications and experience, etc., would all be equal.
The last condition, while not strictly part of a notion of educational equality, is nevertheless affected by it: the persistence of gender discrimination in the labour market prevents the attainment of equality of access, treatment and outcomes in education by affecting the relative costs and perceived benefits of educating girls and boys. Accordingly, if full gender equality in education were to be achieved, ending labour market discrimination in all its gendered forms would probably be required.

Source: UNESCO, 2003.

[^96]Figure 3.3
Number of out-of-school children of primary school age by region and sex, 1990-2012


Among the 46 developed countries or areas with data for the period 2005-2012, the percentage of repeaters was below 1 per cent for both boys and girls, except in Israel, Latvia, Poland, Romania and Switzerland, where the value ranged between 1 and 2 per cent for girls and/or boys, and in Andorra, Austria, Belgium, Hungary, Slovakia and Spain, where the values ranged between 2 and 4 per cent (figure 3.4). In the Caucasus and Central Asia, once enrolled in school, boys and girls rarely repeated primary grades. The case was similar in all countries of Eastern Asia, except for the Macao Special Administrative Region of China, where the repetition for boys was 6 per cent and 3 per cent for girls. Repetition in SouthEastern Asia is also relatively low, although some of the countries in the region (Cambodia, Lao People's Democratic Republic, Thailand and Ti-mor-Leste) have recorded repetition in the range of 5 to 20 per cent. In several countries in the regions mentioned above, repetition is relatively low, in part due to the practice of automatic promotion.

Repetition at the primary level is fairly high in Latin America and the Caribbean, Northern and sub-Saharan Africa, and Southern and Western Asia. ${ }^{17}$ The phenomenon of repetition has been
the most persistent and its incidence the highest in sub-Saharan Africa, where the percentage of primary repeaters ranges between zero and 33 per cent in 46 countries with data. In 23 of these countries the percentage of repeaters, for both boys and girls, surpasses 10 per cent (figure 3.4). Repeaters account for about a fifth of enrolment in Burundi, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Madagascar, Malawi and Togo. Repetition for boys and girls is 5 per cent or higher in the Western Asia countries of Iraq, Lebanon, the Syrian Arab Republic and Yemen and in the Southern Asia countries of Bangladesh, Bhutan, India and Nepal. Out of 38 countries with data in Latin America and the Caribbean, 30 have repetition of less than 5 per cent for girls, whereas only 18 countries show such low values for boys. In most cases, repetition tends to be concentrated in the early grades and, though not exclusively, among children from poor families, those living in rural areas and among disadvantaged social groups. ${ }^{18}$ Countries that experience difficulty enrolling children in school at the official entrance age often encounter further problems in keeping them in school until they graduate from primary education.

[^97]Girls tend to progress through primary school in a more timely manner than boys

Once they have enrolled in school, girls tend to progress in a more timely manner than boys through primary education. In 126 countries out of 190 with data for the period 2005-2012, girls repeated at a lower percentage than boys. ${ }^{19}$ The GPI was in the range of parity in 51 countries (the difference was less than 1 percentage point for boys and girls). Girls repeated at a higher percentage than boys in only 13 countries.

## b. Survival to the last grade of primary school

Enrolling boys and girls in school is an indispensable first step towards universal primary education, but the success in achieving that goal depends on whether they stay in school long enough to benefit from a full course of primary education. A large number of children leave school before completing primary education due to social and economic factors, including poverty, the hidden costs of schooling, civil conflict, disasters, disease, displacement, migration, language barriers and the low quality of primary education. ${ }^{20}$

The survival rate up to the last grade of primary school-defined as the proportion of students starting first grade who are expected to reach the last grade regardless of repetition-is used to measure the ability and efficiency of an education system to retain students. It can also indicate the magnitude of the incidence of drop out. Survival rates approaching 100 per cent indicate a high level of retention or a low incidence of drop out.

## Survival rates to the last grade of primary school show considerable variation across regions and countries

Globally in 2011, survival rates up to the last grade of primary school reached 74 per cent and 76 per cent for boys and girls, respectively (figure 3.5). Those rates were generally high, ranging from 93 to 98 per cent, in developed regions, Eastern Asia, Northern Africa, and the Caucasus and Central Asia. Survival rates of between 75 per cent and 83 per cent for boys and 78 per cent to 88 per cent for girls were recorded in Latin America and the Caribbean, South-Eastern Asia

[^98]Figure 3.4
Percentage of primary repeaters by sex and region, 2005-2012 (latest available)


Source: UNESCO Institute for Statistics, 2014.
Note: Data are presented for countries where at least 5 per cent of boys or girls repeated.
and Western Asia. In contrast, between half and two thirds of pupils completed primary education in sub-Saharan Africa, Southern Asia and Oceania. Among countries with data for the period 2005-2011, the survival rates ranged from 25 per cent to 100 per cent. The survival rate for girls was less than 50 per cent in 10 countries, while it exceeded 90 per cent in 78 countries. ${ }^{21}$

## Progress has been slow in improving survival rates at the primary school level

Between 1990 and 2011, the global survival rate at the primary school level improved by 7 percentage points for girls and 4 for boys. All regions of the world, except Oceania, improved their survival rate, but progress has been slow towards reaching the goal of universal completion (figure 3.5). Marked progress in the survival rate up to the last grade of primary education was witnessed in Eastern Asia, Latin America and the Caribbean, Northern Africa, and SouthEastern Asia, where rates improved by 14 to 22 percentage points for girls and by 12 to 15 percentage points for boys. Modest improvements in survival rates were registered in sub-Saharan Africa, Southern Asia and Western Asia. In Southern Asia, the gain for boys (4 percentage points) was much smaller than that for girls (14 percentage points). Oceania is the only region that made no progress at all and even fell back in this indicator.

## c. Transition from primary to secondary education

A successful outcome of primary education is an increase in enrolment at the secondary level. The transition rate from primary to secondary education is based on the number of new entrants to the first grade of secondary education (general programmes only) in a given year, expressed as a percentage of the number of students enrolled in the final grade of primary education in the previous year who do not repeat the last grade of primary in the following year.

[^99]Globally, most students who reach the end of primary education continue their studies

Worldwide, more than 91 per cent of primary school students transitioned to lower secondary school in $2012^{22}$ (figure 3.6). High rates of transition from primary to lower secondary education are observed in most countries, indicating that the end of primary education is not the most common exit point from the education system. In developed regions, all countries, except Bosnia and Herzegovina (with transition rates of 83 per cent for girls and 85 per cent for boys), reported transition rates above 95 per cent for both girls and boys. Transition rates were above 95 per cent also in Eastern Asia, Latin America and the Caribbean, and the Caucasus and Central Asia, and between 85 and 95 per cent in Northern Africa, South-Eastern Asia, Southern Asia and Western Asia. Some of the lowest transition rates were found in sub-Saharan Africa, where only 77 per cent of girls and 79 per cent of boys moved on to secondary education. Slightly over a third of the countries in the region recorded rates over 90 per cent, while about another third of countries registered rates below 75 per cent. In three countries in this latter group (Angola, Guinea and the United Republic of Tanzania), the rate was less than 50 per cent for girls and/or boys.

> The transition to secondary education has improved for developing regions as a whole during the past decade

The transition to general secondary education improved for developing regions as a whole from 1990 to 2011, by 13 percentage points for girls and 9 points for boys. Progress in the transition rate from primary to secondary school was substantial in Eastern Asia, South-Eastern Asia, Southern Asia and Western Asia, especially for girls. The Caucasus and Central Asia and Latin America and the Caribbean have moved to near universal transition (98 per cent or higher) from the primary to secondary level. Progress in Northern Africa was relatively modest.
Currently, the GPI of transition rates to secondary education shows parity across all regions of the world and in most countries. In 106 out of the

[^100]154 countries with data for the period 2005-2011, girls and boys who reached the end of primary education continued their studies at the lower secondary level at more or less the same rate. ${ }^{23}$

## 3. Secondary education

While successful completion of primary education provides the foundation for a lifetime of learning, secondary education is the key to acquiring more complex skills and knowledge, which in turn offer individuals more opportunities in life, including preparation for tertiary education and better jobs.

## Participation in secondary education

Secondary enrolment ratios for both boys and girls have increased since 1990 but remain lower than the corresponding ratios at the primary level

Participation in secondary education ${ }^{24}$ has expanded steadily in all regions of the world (figure 3.7). Globally, the secondary GER improved by 26 percentage points for girls and 20 percentage points for boys over the period 1990-2012. Despite this remarkable improvement, only 72 per cent of the world's girls and 74 per cent of boys attended secondary school in 2012. The global enrolment ratios in secondary education for both boys and girls were lower than the corresponding ratios in primary education. ${ }^{25}$ In addition, when compared to those at the primary level, secondary enrolment ratios show significant variation among regions. It was close to 100 per cent for both boys and girls in developed regions and the Caucasus and Central Asia, and was close to 90 per cent in Eastern Asia, Latin America and the Caribbean, and Northern Africa. Despite the steady expansion of post-primary education, secondary enrolment was low in many developing countries. In sub-Saharan Africa, the secondary enrolment ratio was 45 per cent for boys and 38 per cent for girls. Similarly, in Oceania, it was 52 per cent for boys and 45 per cent for girls. Secondary GERs were close to or

[^101]lower than 75 per cent for both boys and girls in the other regions, namely South-Eastern, Southern and Western Asia.

Figure 3.5
Survival rates to last grade of primary school by sex and region, 1990 and 2011


Source: UNESCO Institute for Statistics, 2014.
Note: Regions are listed in descending order of the survival rate for girls in 2011.

Figure 3.6
Transition rates from primary to secondary education by sex and region, 1990 and 2011


Source: UNESCO Institute for Statistics, 2014.
Note: Regions are listed in descending order of the transition rate for girls in 2011.

Despite progress in reducing gender disparities in secondary enrolment, girls still face significant disadvantages in many regions

Between 1990 and 2000, the gender gap between the global GERs for boys and girls declined from 9 to 5 percentage points (figure 3.7). The decline continued steadily through 2012, shrinking to only 2 percentage points. Despite the gains made over the past two decades, girls are still less likely than boys to enrol in secondary school in Oceania, sub-Saharan Africa, and Southern and Western Asia-all regions with low overall enrolment rates for both boys and girls. In regions with higher overall secondary enrolment ratios-such as Eastern Asia and Latin America and the Caribbean-gender-based disparities favour girls. Developed regions and the Caucasus and Central Asia are the only regions that have achieved and maintained equal access to secondary education for both boys and girls throughout the period 1990-2012.

The number of countries reporting gender parity at the secondary level was lower than that at the primary level in most regions

Although gender disparities in access to secondary education have been reduced, they remain more prevalent and wider than those at the primary level (figure 3.8). In those countries where girls are severely disadvantaged, gender differences at the secondary level are partly a reflection of cumulative gender disparities at the primary level and those at the transition to the secondary level. ${ }^{26} \mathrm{~A}$ small number of countries are near gender parity in secondary education than in primary education. Out of 184 countries with data for the period 2005-2012, gender parity has been attained in only 62 countries, in contrast to 113 countries at the primary level. Gender disparities in secondary education favouring girls over boys have been observed in 58 countries with data. On the other hand, gender disparities favouring boys were found in 64 countries with data. In 36 countries, the GPI was less than $0.90 .{ }^{27}$

[^102]Out-of-school adolescents of lower secondary school age

A large number of young adolescents of lower secondary school age ${ }^{28}$ are out of school. ${ }^{29}$ In 2012, 62 million, or one in five adolescents of lower secondary school age, were out of school worldwide. ${ }^{30}$ The problem is most widespread in sub-Saharan Africa and Southern Asia, which together account for more than three quarters (77 per cent) of all out-of-school adolescents in this age group. Many out-of-school adolescents are likely to face the prospect of social and economic marginalization. ${ }^{31}$ Out-of-school adolescent girls face additional challenges, including early marriage and pregnancy and the burden of domestic responsibilities.

## Girls make up half of the global out-of-school adolescent population of lower secondary age

Globally in 2012, girls made up 50 per cent of out-of-school adolescents of lower secondary age, compared to 53 per cent in 1999. Substantial variations are found among and within regions. In Western Asia, girls accounted for 60 per cent of all out-of-school adolescents of lower secondary school age. In sub-Saharan Africa and the Caucasus and Central Asia, the share of girls in the out-of-school adolescent population was well over half. Girls made up slightly less than half of the out-of-school adolescents in the other regions.

Progress at the global level has been notable since 1999, especially for girls. During the period 1999-2012, the global rate of out of school adolescent girls declined from 28 to 17 per cent, while that for boys dropped from 23 to 16 per cent. ${ }^{32}$ Less than 10 per cent of adolescent girls and boys of lower secondary age were out of school in the developed regions, Eastern Asia, Latin America and the Caribbean and the Caucasus and Central Asia. The out of school rates were much higher in sub-Saharan Africa (36 per cent of adolescent girls and 31 per cent of adolescent boys) and in

[^103]Southern Asia ( 26 per cent of boys and girls). Among countries with available data, the rate was higher than 20 per cent for girls and/or boys in 36 countries. The difference between the rate for girls and that for boys was larger than 15 percentage points in Angola, Antigua and Barbuda, Bangladesh, Central African Republic, Ethiopia, Guinea, Iraq, Mali, Swaziland, Togo and Yemen. ${ }^{33}$

## Graduation from lower secondary education

## Completion ratios for lower secondary education are inadequate in several countries

The gross graduation ratios ${ }^{34}$ for lower secondary education exceeded 80 per cent for both girls and boys in almost all countries with available data for 2012 (or latest available year since 2005) in developed regions, Eastern Asia and the Caucasus and Central Asia. Similarly, completion of lower secondary education was relatively high in Latin America and the Caribbean and Western Asia, where several countries reported graduation ratios close to or above 80 per cent. On the other hand, in sub-Saharan Africa, graduation ratios were lower than 40 per cent in nearly three quarters of countries with available data (figure 3.9).

Girls completed lower secondary education at a higher ratio than boys in the majority of countries with data

Girls completed lower secondary education at a higher ratio than boys in more than half of the countries with available data (figure 3.9), despite being more disadvantaged in participation at the secondary level in many developing regions. Out of 101 countries reporting data, girls graduated at a higher ratio than boys in 57 countries. In Latin America and the Caribbean, this was the case in 24 out of 29 countries and areas with available data. The exceptions were Anguilla, the Bahamas, the British Virgin Islands, Cuba and Saint Lucia, where boys outperformed girls. Girls completed lower secondary education at a higher ratio than boys in Northern Africa, Oceania, Southern Asia (except Afghanistan and Pakistan) and Western

[^104]Asia (except Yemen). However, the reverse was observed in 22 of the 28 countries reporting data by sex in sub-Saharan Africa. The exceptions were Botswana, Cabo Verde, Mauritius, Seychelles, South Africa and Swaziland, where girls graduated at a higher ratio than boys. Gender differences were minor (less than 5 percentage points) or at parity in developed regions and Eastern Asia. A similar situation prevailed in SouthEastern Asia (except in the Philippines, where

Figure 3.7
Secondary gross enrolment ratios by sex and region, 1990, 2000 and 2012


Source: UNESCO Institute for Statistics, 2014.
Note: Regions are listed in ascending order of the secondary gross enrolment ratio for girls in 2012.
Figure 3.8
Gender parity index (GPI) for gross enrolment ratios in primary, secondary and tertiary education, 2005-2012 (latest available)


Source: UNESCO Institute for Statistics, 2014.

Figure 3.9
Gross graduation ratios for the lower secondary level by sex and region, selected countries, 2005-2012 (latest available)


Source: UNESCO Institute for Statistics, 2014.
Note: Data are presented for countries where the difference between the gross graduation ratios for girls and boys is at least 5 percentage points. The ratio can exceed 100 per cent because the number of graduates in the calculation includes children who are over-aged and under-aged relative to the theoretical graduation age.
girls graduated at a ratio of 15 percentage points higher than that for boys) and the Caucasus and Central Asia (except in Armenia where the ratio was in favour of girls by 26 percentage points, and in Tajikistan, where it was to the advantage of boys by 10 percentage points).

## Participation in technical and vocational education and training

Technical and vocational education and training (TVET) programmes develop skills and competencies valued by employers and/or are useful for self-employment. Such programmes equip young women and men with capabilities that can broaden their opportunities in life and prepare them for the transition from school to work. TVET encompasses a wide range of fields-from teacher training programmes to commercial studies and to various technical fields in industry and engineering.

More boys than girls participate in TVET in all regions except Latin America and the Caribbean

Between 1990 and 2012, the global share of girls enrolled in TVET programmes at the secondary level remained unchanged at 44 per cent (figure 3.10). This proportion has fallen slightly-from 45 to 43 per cent-in developed regions. Among developing regions, the share of girls enrolled in TVET has declined slightly in Latin America and the Caribbean, Oceania and South-Eastern Asia. The share has increased, however, in Eastern Asia, sub-Saharan Africa, and Southern and Western Asia.

Of the 163 countries for which data were available for the period 2005-2012, girls had lower TVET enrolment than boys in 140 countries. ${ }^{35}$ In 34 of those countries, young women were considerably underrepresented, at only one third of enrolment or less. In several Southern Asian countries, including Afghanistan, Bangladesh, Bhutan, India and Nepal, the share of girls was between 12 and 33 per cent. In Western Asia, the share of girls enrolled in such programmes was between 5 and 19 per cent in Bahrain, Iraq, Kuwait, Saudi Arabia, United Arab Emirates, Yemen and the State of Palestine. Similarly, in sub-Saharan Africa, the majority of countries showed lower

[^105]enrolments among girls than boys. In Angola, Comoros, Madagascar, Sao Tome and Principe, Sudan and Tunisia, girls' shares were only a third or less. However, in six countries in the region (Ethiopia, Kenya, Lesotho, Liberia, Niger and Senegal), girls represented half or over half of TVET enrolment. More girls were enrolled than
boys in 16 of the 163 countries with data. Most of those countries were located in Latin America and the Caribbean, including Brazil, Colombia, Costa Rica, Dominica, Dominican Republic, El Salvador, Guatemala, Mexico, Nicaragua and the Bolivarian Republic of Venezuela. ${ }^{36}$

Box 3.4
Learning achievement of girls and boys

The main purpose of any education system is to impart skills to young people so that they can effectively participate in the social, economic and political life. Getting children into school is not an end in itself. The ultimate measure of success is not only the extent to which children learn, but the quality of their education experience. Student assessment surveys provide a measure for assessing learning outcomes and the quality of education. Such surveys allow some assessment to be made of the relative achievements of girls and boys in terms of the subjects they study in school. The Organisation for Economic Co-operation and Development (OECD) Programme for International Student Assessment (PISA)—which surveys school performance among 15-yearolds around the world, particularly in reading, mathematics and science-makes it possible to measure disparities among and within countries in terms of the skills students attain after a given period of learning. Typically, this is done after about eight years of schooling, near the end of compulsory education in many countries.
Results from a PISA survey ${ }^{\text {a }}$ conducted in 2012 in 34 OECD member States and 31 other countries and areas showed large gaps in learning achievement among countries. In general, low-income countries lag far behind high-income countries in learning achievement. Also, there is less variation among OECD countries than among non-OECD countries. Furthermore, differences among countries represent only a fraction of the overall variation in student performance. In all three subjects tested-reading, mathematics and science-the differences between the low-est- and the highest-performing students within the countries were large and the inequality in learning achievement across population groups was closely related to wealth distribution. Gender differences in educational performance were considerably less prominent than differences between the countries and within countries in educational performance. ${ }^{\text {b }}$ Nevertheless, existing gaps underscore the importance of a gen-der-sensitive approach in teaching.

Girls outperformed boys in reading skills in every country that participated in the 2012 PISA survey
Results from the PISA 2012 reading assessment showed that girls outperformed boys in every participating country. The OECD average score for reading performance was 478 points for boys and 515 for girls (a gender gap of 38 score points, which is roughly equivalent to one year of schooling). Similarly, the non-OECD average showed a gap of 41 points to the advantage of girls. Gender gaps in students' performance were related to gender differences in attitudes towards reading. Fifteen-year-old girls were more likely to read for enjoyment and read complex works of fiction and non-fiction, whereas boys were more likely to read comic books, which could partly be the result of their weaker reading skills. Girls also tended to be more skilled in understanding, remembering and summarizing the material they read. ${ }^{\text {c }}$
Boys did slightly better than girls in mathematics in most countries

Performance in mathematics was also characterized by gender differences, which tended to be smaller and less systematic than those related to reading. Boys performed better in mathematics than girls in the majority of countries that participated in the PISA survey ( 52 out of 65 countries or areas). The average OECD score in mathematics was 499 for boys and 489 for girls (a 10-point gender gap), while for non-OECD countries or areas, the average score was 453 for boys versus 448 for girls (a 5-point gap). In contrast to what was observed for reading, the gender gaps were not significant in many countries. In 13 countries, the gender disparities were actually in the favour of girls, albeit the size of the gaps being small. Girls appear to be narrowing the gaps in achievement in mathematics where boys have historically held an advantage. Gender differences in science performance showed much narrower gaps than in mathematics and reading for most countries or areas-both OECD and non-OECD-and in most cases the gaps were not statistically significant. ${ }^{\text {d }}$
a OECD, 2014.
Ibid.
c lbid.
d Ibid.

## 4. Tertiary education

Tertiary education builds on secondary education and imparts knowledge and skills as well as qualifications in specialized fields. It also brings extensive social and private benefits. At the individual level, pursuing and completing a tertiary education are linked to better employment opportunities and higher levels of earning (see, for example, Chapter 4 on Work). At the societal level, tertiary education graduates contribute to human capital, which is essential for economic development, productivity growth, innovation and the healthy functioning of government and civil society. ${ }^{37}$

## Participation in tertiary education

Tertiary enrolment of women and men globally has seen substantial growth over the past two decades

Globally, participation in tertiary education showed remarkable progress between 1990 and 2012, reflecting the steady expansion of education systems around the world and the increasing demand for a highly skilled labour force. Over that period, participation, as measured by

Figure 3.10
Share of girls participating in TVET at the secondary level, 1990, 2000 and 2012


Source: UNESCO Institute for Statistics, 2014.
Note: Regions are listed in descending order of the share of girls in 2012.
the tertiary GER, ${ }^{38}$ rose from 13 to 33 per cent for women, and from 14 to 31 per cent for men (figure 3.11). Substantial progress was observed across the world, with developing countries as a whole registering a threefold increase for men and a fourfold increase for women.

## Participation in tertiary education shows large regional disparities

Despite considerable expansion of tertiary education across the board, tertiary GERs show large regional disparities. Gross enrolment ratios are high for both women and men in regions where tertiary education participation has historically been high. Developed regions, Latin America and the Caribbean, and Western Asia remain the global leaders. Developed regions expanded tertiary enrolment from 42 to 66 per cent for men and from 46 to 85 per cent for women. In Latin America and the Caribbean, the tertiary GER more than doubled for men and almost tripled for women. In terms of progress since 1990, Eastern Asia enjoyed a nearly fivefold increase for men and a tenfold gain for women. Growth in tertiary enrolment in this region has been especially remarkable since the year 2000. Similarly, Western Asia saw nearly a tripling of growth for men and almost a quadruple rise for women.
In contrast, despite significant progress, tertiary GERs for women and men remain low in other regions. In sub-Saharan Africa, it only rose from 4 to 10 per cent for men and from 2 to 6 per cent for women over the period 1990-2012. Similarly, in Southern Asia, GERs are lower than global averages at 25 per cent for men and 20 per cent for women. When India is excluded from the averages, these ratios drop to 19 per cent for men and 17 per cent for women. Between 1990 and 2012, the Caucasus and Central Asia was the only region in the world to experience stagnation in tertiary participation in the mid- to low- 20 per cent range for both men and women.

[^106]Enrolment in tertiary education is increasing faster for women and exceeding that of men in most regions, but in sub-Saharan Africa and Southern Asia women remain at a serious disadvantage

Changing patterns of participation in tertiary education between 1990 and 2012 have shifted gender disparity from a male to female advantage in the world and in most regions (figure 3.11). In 1990, men's participation was higher than that of women as reflected in a worldwide GPI of $0.90 .{ }^{39}$ Since then, the global participation of women has increased at a faster rate than that of men, enabling the tertiary enrolment ratios of men and women to reach parity around the year 2000. Subsequently, the global participation of women exceeded that of men, shifting gender disparity from a male to female advantage. In 2012, the GPI of the global tertiary enrolment of women and men stood at 1.08 , reflecting a gender disparity highly favouring women. ${ }^{40}$

In most regions of the world, women outnumber men in tertiary education. In 2012, the GPI surpassed the parity range in developed regions (GPI of 1.28), Northern Africa (1.22), Latin America and the Caribbean (1.28), Eastern Asia (1.08), South-Eastern Asia (1.12) and the Caucasus and Central Asia (1.07). However, considerable disparity in favour of men persists in sub-Saharan Africa and Southern Asia (GPI of 0.64 and 0.81 , respectively). Overall, there are almost as many women as men enrolled in tertiary education in the Western Asia, but the regional average conceals very low participation among women in several countries. For instance, the GPI was 0.44 for Yemen and 0.60 for Iraq. ${ }^{41}$
Out of 168 countries with available data for the period 2005-2012, only six countries showed gender parity at the tertiary level. In 106 countries, disparities were in favour of women, while in the other 56 countries they favoured men. Women outnumber men in tertiary enrolment in almost all countries in developed regions, but only in half of the countries in developing regions (see figure 3.8). For instance, women's participation in tertiary education was less than half that of men's (GPI of less than 0.50) in several countries with low tertiary enrolment in sub-Saharan Africa and Western Asia, including Benin, Chad, Eritrea,

[^107]Figure 3.11
Tertiary gross enrolment ratios by sex and region, 1990, 2000 and 2012


Source: UNESCO Institute for Statistics, 2014.
Note: Regions are listed in ascending order of the tertiary gross enrolment ratio for women in 2012.
Ethiopia, Guinea, Mauritania, Niger and Yemen. ${ }^{42}$ It is important to consider gender equality in the context of the overall level of participation in tertiary education. Where tertiary GERs remain low, countries must address gender inequalities as they seek to broaden access to tertiary education for all students, women and men alike.

## Tertiary graduates by field of study

The field of study that men and women choose has an impact on their future lives, careers, incomes and roles in society. Many factors drive students' subject preferences in tertiary education, including performance in secondary education, perception of one's own abilities, social, economic and family background, career aspirations and labour market expectations. Genderbased stereotypes and gender differences in the balance between job and family responsibilities are also a significant factor.

Figure 3.12 presents data on the proportion of women and men graduates in eight broad fields of study: education; health and welfare; humanities and arts; social science, business and law; science; engineering, manufacturing and con-

42 Ibid.
struction; agriculture; and services. The figure illustrates that women and men choose very different fields of study in tertiary education. This observation holds across many developing and developed countries.

## Women are more likely to graduate in fields related to education, health and welfare, and humanities and arts

Fields of study traditionally dominated by women-education, health and welfare, and humanities and arts-continue to be more often preferred by women than by men (figure 3.12). Women are particularly prominent in education and in health and welfare. Women were at least twice as likely to graduate in education as men in three quarters of the 111 countries reporting data by field of study for the period 2005-2012. In the case of health and welfare programmes, women were at least twice as likely to graduate in that field as men in four out of five countries. Among women graduates, on average, one out of six graduated in the field of education compared to one out of 10 men graduates; and one in seven women graduated in health and welfare, compared to one in 15 men.

## Women are less likely than men to graduate in fields related to science and engineering

Despite enjoying better access to tertiary education than ever before, women continue to face challenges in participating in some fields of study traditionally dominated by men. Women are less likely than men to graduate in science, engineering, manufacturing, construction, agriculture, and services. This is particularly so in the case of engineering and to a lesser extent science among countries with data for the period 2005-2012 (figure 3.12). Among men graduates, on average, one in five graduated in engineering compared to one out of 20 women graduates, and one in nine men graduated in science compared to one in 14 women. In all countries with data, with the exception of Cyprus (where 16 per cent of men and 11 per cent of women graduated in engineering) and Myanmar (4 per cent of men and women), men were at least twice as likely to graduate in engineering as women. In a third of these countries, representing different regions, the percentage of men graduating in this field was at least 5 times higher than that of women. As for the field of science, in 6 out of 10 countries with data, the percentage of men graduating in this field was at least twice that of women.

## B. Women in research and development

Researchers are professionals engaged in the conception or creation of new knowledge, products, processes, methods and systems, as well as the management of these projects. Innovation is an acknowledged determinant of economic growth. ${ }^{43}$ Since research and development is one of the key components of innovation, it is important to assess the gender-balance in the research workforce. Despite improved access to tertiary education, women still face considerable barriers as they transition from higher education to careers in research. As a result, women continue to be underrepresented in research and development. This limits their ability to contribute to innovation on an equal basis with men. It also affects the overall quality of research given the different perspectives women bring to any project. ${ }^{44}$

## 1. Participation in research

## Less than a third of world's researchers are women

In 2011, women constituted 30 per cent of all researchers worldwide (figure 3.13). This figure has remained almost constant over the past decade, highlighting the lack of progress towards gender parity in this area. Developed regions ( 30 per cent) and developing regions ( 31 per cent) are similar in terms of the average shares of women researchers. Only one region-the Caucasus and Central Asia (45 per cent)—has achieved gender parity, defined here as a share of between 45 and 55 per cent (inclusive) for each sex. Latin America and the Caribbean (44 per cent), South-Eastern Asia (43 per cent) and Northern Africa (40 per cent) follow closely. By comparison, the share of women researchers is lowest in Eastern Asia (18 per cent) and Southern Asia ( 20 per cent).

Women accounted for less than half of researchers in 108 out of 120 countries with available data ${ }^{45}$ in the period 2005-2012. In 53 countries, women's share is less than a third. This is the case in 19 out of 30 countries with available data in sub-Saharan Africa.

[^108]Figure 3.12
Proportion of tertiary graduates by field of study, women and men, 2005-2012 (latest available)


Source: UNESCO Institute for Statistics, 2015. UIS Data Centre. http://www.uis.unesco.org (accessed in February 2015).
Note: Each point represents data for one country. Data correspond to reference year 2012 or latest available in the period 2005-2012. The diagonal line is a gender parity line for the respective field of study. Below the gender parity line, more men than women are shown to graduate in the respective field of study. Above the line, more women than men are shown to graduate in that field of study.

## 2. Field of research

The current gender distribution of researchers in the various fields of science is the cumulative result of variations in graduation from tertiary education, particularly at the highest level required for a research career, and in the labour market. Figure 3.14 presents the share of women among researchers by region in six specific fields of science: natural sciences; engineering and technology; medical sciences; agricultural sciences; social sciences; and humanities.

## Men dominate in all fields of research globally

At the global level, gender disparities reflect the advantage men have in participation in all the six areas of research. Most regions display the same pattern of male domination, with the exception of South-Eastern Asia, which has registered parity in participation across all six research fields.

In two fields-medical sciences and humani-ties-the global share of women is relatively higher (42 per cent and 44 per cent, respectively)
and comes close to parity. ${ }^{46}$ Several regions display parity for these two fields. For instance, four regions-Latin America and the Caribbean, Northern Africa, South-Eastern Asia and Western Asia-show parity in medical sciences. In the Caucasus and Central Asia, women are actually at an advantage in this field. In addition, more than one third of the 67 countries or areas with available data in the field of humanities in the period 2005-2012 reported gender parity. In 10 countries or areas, women represented over 55 per cent of the total researchers in the humanities, whereas their share was lower than a third in 21 countries or areas.

Globally, women's participation is the lowest in engineering and technology ( 17 per cent). Only South-Eastern Asia achieved parity (45 per cent) in this field, while in the remaining regions, the overwhelming majority of researchers in this field are men. Only four countries-Azerbaijan, Guatemala, Malaysia and Mongolia—out of 74

46 Here gender parity is defined as a share of between 45 and 55 per cent (inclusive) for each sex.

Figure 3.13
Women's and men's share of the total number of researchers by region, 2011


Source: UNESCO Institute for Statistics, 2014.
Note: Data on researchers are based on the total number of persons who are mainly or partially employed in research and development. This includes staff employed both full-time and part-time. Regions are listed in ascending order of women's share in 2011.
with available data for this field recorded parity in the period 2005-2012. ${ }^{47}$ In 55 countries, men outnumbered women researchers by more than two to one. Much remains to be done to increase women's participation in research and to strengthen their influence in the science and technology agenda.

## C. Women in teaching

Teachers represent a key educational resource. Trained, qualified and well-motivated teachers are fundamental for an effective learning environment and better quality in education. The teaching staff has an important role in the creation of a gender-sensitive learning and social environment in which girls and boys are treated equally and encouraged to achieve their full potential. Policies that promote gender balance in teaching workforces have been found to have a positive impact on access to education and completion rates, especially for girls and young women. ${ }^{48}$ The mere presence of female teachers is, however, insufficient to ensure that girls enrol and complete schooling. In this regard, training teachers to be gender sensitive is crucial.

[^109]Teaching at the primary level is dominated by women
The participation of women in the teaching profession has increased over the period 1990-2012 at all levels of education in most regions (figure 3.15). Women accounted for about two thirds of primary school teachers worldwide in 2012, up from 56 per cent two decades ago. They constitute the majority of primary school teachers in most regions of the world, although the data show significant variations across countries. In the developed regions as a whole, women teachers accounted for 84 per cent of the primary teaching staff in 2012 compared to 58 per cent in developing regions. The share was highest in the Caucasus and Central Asia at 89 per cent and lowest in sub-Saharan Africa at 44 per cent.
In 82 countries out of 164 reporting data for the period 2005-2012, the proportion of female primary school teachers exceeded 75 per cent. ${ }^{49}$ The proportion exceeded 90 per cent in 22 countries, while in 15 countries it was less than 30 per cent. All but one of these countries was in sub-Saharan Africa. The proportion of women primary teaching staff is lower in countries with low levels of overall enrolment.

## Women's share in teaching staff declines at successive levels of education

The share of women teachers is lower at the postprimary levels of education. Globally, 52 per cent of teachers at the secondary school level were women in 2012, up from 48 per cent in 1990. The proportion for developing regions as a whole was 48 per cent, and 63 per cent for developed regions. Regionally, the proportion ranged from 69 per cent in the Caucasus and Central Asia to 31 per cent in sub-Saharan Africa. Women teachers throughout sub-Saharan Africa are vastly outnumbered by men. In 16 countries in the region, the proportion of female teachers at the secondary level was below 20 per cent. Similarly, in the majority of Southern Asia countries, including Afghanistan, Bangladesh, Bhutan, India and Nepal, women's share was below half. ${ }^{50}$
At the tertiary level, most teaching staff in the world are men. Women represented 42 per cent

[^110]Figure 3.14
Share of women among researchers by region and field of science, 2011

of teachers at this level globally in 2012. The share was about the same in both developing and developed regions. Tertiary-level data for 135 countries reported during the period 2005-2012 showed that in 110 countries, the proportion of women teachers was below 50 per cent. Despite this general pattern, there are more women teachers than men at the tertiary level in Eastern Europe (Albania, Belarus, Latvia, Lithuania, Republic of Moldova and the Russian Federation), Latin America and the Caribbean (Aruba, Colombia, Cuba, Guyana and Saint Lucia), the Caucasus and Central Asia (Armenia, Azerbaijan, Georgia, Kazakhstan and Kyrgyzstan) and South-Eastern Asia (Malaysia, Myanmar, the Philippines and Thailand). ${ }^{51}$

## D. Educational outcomes and lifelong learning

## 1. Literacy

Literacy ${ }^{52}$ is essential for accessing information, knowledge and skills, for acquiring the abilities to cope with the challenges and complexities of life, and to participate fully in society. A lack of literacy is strongly correlated with poverty and exclusion from social and economic opportunities.

## Women make up nearly two thirds of illiterate adults, a

 proportion that has remained unchanged for two decadesIn 2012, an estimated 781 million adults aged 15 and over were illiterate, nearly all ( 99 per cent) of whom were found in developing regions. Nearly two thirds of the world's illiterate adults ( 496 million) were women, a share that has held steady since 1990 . Women make up more than half of the illiterate population in all regions of the world. In Eastern and Western Asia, they make up nearly three quarters of the illiterate population.

[^111]Source: UNESCO Institute for Statistics, 2014b.
Note: Statistics on researchers are based on the total number of persons who are mainly or partially employed in research and development. This includes staff employed both full-time and part-time.

Figure 3.15
Share of women among teaching staff by level of education and region, 1990, 2000 and 2012


Source: UNESCO Institute for Statistics, 2015. UIS Data Centre. http://www.uis.unesco.org (accessed in February 2015).
Note: Regions are listed in ascending order of women's share among teaching staff in primary.

## Adult literacy rates have improved in all regions of the

 world for both women and menGlobally, in the period 1990-2012, the adult literacy rate ${ }^{53}$ for men rose from 82 to 89 per cent, and for women from 69 to 80 per cent (figure 3.16). Northern Africa, sub-Saharan Africa, Southern Asia and Western Asia-all regions that in 1990 had literacy rates for both sexes significantly below global averages-have registered gains. Developing regions that had adult literacy rates above the global averages in 1990—namely, Eastern Asia, Latin America and the Caribbean, South-Eastern Asia and the Caucasus and Central Asia-have also seen progress, with Eastern and South-Eastern Asia showing considerable improvement, especially for women. At the country level, less than 50 per cent of adult women had basic literacy skills in 24 out of 158 countries with data for 2012 (or the latest year over the period 2005-2012). With the exception of Afghanistan, Bhutan, Haiti, Nepal and Pakistan, the other 19 countries were in sub-Saharan Africa. In com-

[^112]parison, the rate was less than 50 per cent for adult men in 8 out of the 158 countries. ${ }^{54}$

> Gender disparities in adult literacy rates have diminished globally, but women are still losing out to men in four developing regions

Between 1990 and 2012, the gender gap in adult literacy rates decreased in all regions (figure 3.16). The gap between the global rates for men and women was 8 percentage points in 2012, down from 13 percentage points in 1990. Developed regions, Latin America and the Caribbean, and the Caucasus and Central Asia have attained gender parity in adult literacy, while Eastern Asia, South-Eastern Asia and Oceania are close to attaining that goal. Gender disparity remains a serious concern in Northern Africa, sub-Saharan Africa, Southern Asia and Western Asia, where the gender gap was in the range of 10 to 22 percentage points to the advantage of men. The gap in Southern Asia and sub-Saharan Africa remains wide and persistent. In Southern Asia,

[^113]progress was rapid in the period 1990-2000, but only modest gains have been made for women since 2000.

Of the 158 countries with data for 2012 (or the latest year over the period 2005-2012), 74 attained gender parity in adult literacy, 4 countries showed disparities to the disadvantage of men and 80 to the disadvantage of women. Women's literacy rates were less than two thirds those of men's in 22 of those countries, four of which are located in Southern Asia (Afghanistan, Bhutan, Nepal and Pakistan), one in Western Asia (Yemen), and the rest in sub-Saharan Africa. ${ }^{55}$

The vast majority of young men and women have basic reading and writing skills

The vast majority of young people (aged 15 to 24) in the world are literate. Over the period 19902012, the global literacy rate for young women rose from 79 to 87 per cent and from 88 to 92 per cent for young men (figure 3.17). This reflects increased participation in formal schooling among younger generations. Youth literacy is almost universal in the more developed regions, in Eastern Asia and in the Caucasus and Central Asia; it is close to being universal in Latin America and in South-Eastern Asia. In parts of the world where many boys and girls do not attend school or drop out, youth literacy rates are much lower than global averages. In sub-Saharan Africa, where the rates are among the lowest in the world, only 64 per cent of young women and 76 per cent of young men are literate. In Oceania and Southern Asia, young men and women have attained basic literacy skills at rates significantly lower than the global averages for each sex.

From 1990 to 2012, gender gaps in youth literacy rates have decreased in all regions that showed disparities at the beginning of this period. However, gender gaps, to the disadvantage of young women, remain significant in Northern Africa, sub-Saharan Africa, Southern Asia and Western Asia, where they range between 4 to 12 percentage points in favour of young men.

[^114]The gender gaps in literacy rates among older persons show marked disparities against women

All regions of the world have shown progress in literacy for those aged 65 years and older. In 2012, the global literacy rate for this age group was 70 per cent for women and 81 per cent for men (figure 3.18). In 1990, the rates were much lower, at 56 per cent and 67 per cent, respectively. Developed regions and the Caucasus and Central Asia were the only regions approaching universal literacy for this age group in 2012. Latin America and the Caribbean was a distant second, with 75 per cent and 80 per cent of older women and men, respectively. The other regions had rates below the global averages for each sex. In developing regions as a whole, 51 per cent of older women and 72 per cent of older men were literate. The vast majority of older persons were illiterate in Northern Africa, sub-Saharan Africa and Southern Asia, where less than a quarter of women and less than half of men were literate.

In 2012, in developing regions as a whole, older women barely reached the 1990 literacy levels of older men. Among those regions that showed a significant gender gap in 1990, Eastern Asia, South-Eastern Asia and Western Asia have seen rapid progress in closing it. In contrast, Northern Africa, sub-Saharan Africa and Southern Asia saw a slight widening of the gap over the same period, despite rising literacy rates for both men and women.

## 2. Educational attainment in the population

Educational attainment-the highest level of education an individual has completed-is a measure of human capital and the skills available in a given population. Whereas current enrolment rates only provide information on the school population at a given time, educational attainment indicates the education level of an entire adult population, reflecting long-term trends in participation and completion of primary, secondary and tertiary education. Higher levels of educational attainment are reflected in the availability of a relatively high level of skills and knowledge in the labour force. Progress in educational attainment contributes to economic growth ${ }^{56}$ and improved labour market outcomes, including in productivity, participation, and income and career progression. Beyond labour

56 Thévenon and others, 2012.

Figure 3.16
Adult literacy rates (age 15 and over) by sex and region, 1990, 2000 and 2012


Figure 3.17
Youth literacy rates (age 15 to 24) by sex and region, 1990, 2000 and 2012


Figure 3.18
Literacy rates among older persons (age 65 and over) by sex and region, 1990, 2000 and 2012


Source: UNESCO Institute for Statistics, 2014.
Note: Because literacy data are not collected annually, the Institute for Statistics-UNESCO reports regional and global data on literacy rates in reference to census decades. For ease of reading, this chapter refers to data for the 1985-1994 census decade as data for 1990, and the most recent data, for the 2005-2014 census decade, as data for 2012. Regions are listed in ascending order of the literacy rate for women in 2012.
markets, a high level of educational attainment is also associated with positive social outcomes, including improvements in participation and representation in government and political influence, ${ }^{57}$ volunteering and interpersonal trust, ${ }^{58}$ and the health status and survival of children and other family members. Lastly, raising educational attainment is a key mechanism for the empowerment of women.
Figure 3.19 presents the highest level of educational attainment among men and women aged 25 and older as a percentage of respective populations in each region according to four educational levels: "no schooling", "primary", "secondary" and "tertiary". There are significant variations in educational attainment across regions, suggesting a strong association with the general level of social and economic development. In developed regions, where universal primary education has been attained, the proportions of women and men with no schooling or whose highest attainment is at the primary level are small, while those whose highest attainment is at or above the secondary level are substantial. Most countries in Eastern Asia, Latin America and the Caribbean, South-Eastern Asia, Western Asia, and the Caucasus and Central Asia display a similar profile. In contrast, in subSaharan Africa and Southern Asia, where the goal of universal primary education has not yet been achieved, the proportions of women and men without schooling or whose highest educational attainment is the primary level are significant, but modest for those whose highest educational attainment is at the secondary or tertiary level.

## Gender disparities against women are most evident among those with no schooling, particularly in sub-Saharan Africa and Southern Asia

Gender differences in the educational attainment of women and men aged 25 years or older are the starkest for the category of the population with no schooling. Some of the largest gaps are found in sub-Saharan Africa, where, on average, 44 per cent of women have never attended school, compared to 34 per cent of men. A gender gap of more than 15 percentage points in favour of men was observed in Benin, Burkina Faso, Chad, Ethiopia, Ghana, Malawi, Mali, Senegal, Togo, the United Republic of Tanzania and Zimbabwe.

[^115]Figure 3.19
Distribution of population aged 25 and over by sex, region and the highest level of education attained, 2005-2012 (latest available)


On the other hand, Kenya and Lesotho exhibited gender differences to the advantage of women among the adult population with no schooling. Gender differences are also large in Southern Asia. There, 34 per cent of women on average have no education at all, compared to 25 per cent of men. In Pakistan, 64 per cent of women have never attended school, 29 percentage points higher than for men. In Bangladesh, more than 57 per cent of women have no education, compared to 45 per cent of men. In the Western Asian countries of Bahrain, Jordan, Oman and the Syrian Arab Republic, gender gaps over 10 percentage points were recorded, all in favour of men. Some countries in South-Eastern Asia also showed moderate gender gaps in the range of 5 to 10 percentage points in favour of men.

Over a quarter of the adult population in developing regions has not completed education beyond the primary level. Primary education is the highest level of attainment for over 30 per cent of women and men in Latin America and the Caribbean, sub-Saharan Africa, Southern Asia, and South-Eastern and Western Asia. In the case of South-Eastern Asia, 43 per cent of women and 40 per cent of men have attained education only up to the primary grades. The corresponding figures for sub-Saharan Africa are 32 per cent and 34 per cent of women and men, respectively. On the other hand, in developed regions, as well as in Eastern Asia and the Caucasus and Central Asia, the proportions are less than 20 per cent for both women and men.

Secondary education is the highest educational level attained by most women and men across both developed and developing regions

Compared to other levels of education, secondary education is the level attained by most adults across both developed and developing regions. Worldwide, the average is 49 per cent of women and 54 per cent of men. In the Caucasus and Central Asia, for nearly three quarters of both men and women secondary education is the highest level of educational attainment. In developed regions and Eastern Asia, more than half of adult women and men have attained that education level, and is the most common highest education level achieved for about 4 in 10 men and women in Latin America and the Caribbean, South-Eastern Asia and Western Asia. Twenty-two per cent (one in five) of women in sub-Saharan Africa on average have some secondary education, compared to 29 per cent of men. Secondary education is also the highest level of attainment for 26 per cent of women and 33 per cent of men in Southern Asia, whereas in Bangladesh, Maldives and Pakistan, the number is less than 25 per cent. These countries display a gender gap in the range of 3 to 21 percentage points, revealing moderate to severe educational disadvantages for women.

On average, 18 per cent of adult women and men globally have attained tertiary education. Tertiary education is most common in the developed regions, Eastern Asia and the Caucasus

Source: Computed by the United Nations Statistics Division based on data from the UNESCO Institute for Statistics, 2014.
Note: Unweighted averages for regions with data for at least three countries. The educational attainment category of "no schooling" refers to all persons who have attended less than one grade at the primary level; "primary" comprises those who completed primary education (ISCED 1) or at least one grade of primary; "secondary" represents those who attended lower secondary (ISCED 2), upper secondary (ISCED 3) or post-secondary non-tertiary (ISCED 4); and "tertiary" comprises those who attended any tertiary education level (ISCED 5-6). The population whose education level is unknown has been proportionately distributed over the four categories of educational attainment. Regions are listed in descending order of the percentage of women with no schooling.
and Central Asia, where more than one in five of men and women have attended or graduated from post-secondary education. Tertiary education is least common in sub-Saharan Africa and Southern Asia, where those who have attained post-secondary education constitute only a small minority of the population.

## 3. Adult education

UNESCO defines adult education as "education specifically targeting adults to improve their technical or professional qualifications, further develop their abilities, enrich their knowledge with the purpose to complete a level of formal education, or to acquire knowledge, skills and competencies in a new field or to refresh or update their knowledge in a particular field. ${ }^{59}$ Adult education programmes are extremely diverse ${ }^{60}$ and may differ in terms of objectives, focus, target groups, content, pedagogy and scale. In the more developed countries, adult education tends to be more focused on the enhancement of skills, while in the less developed countries the emphasis is more on literacy programmes and the completion of basic education. Providers are also very diverse, consisting of governments, non-governmental organizations, local communities and employers. Adult learning can play an important role in helping adult men and women to re-enter the labour market, and provide skills to meet the needs of a changing social and economic context, or new knowledge and skills to enhance employment opportunities, including self-employment and entrepreneurship. Adult learning can also contribute to non-economic goals, such as personal fulfilment, improved health, civic participation, social inclusion, volunteerism and traditional knowledge.

[^116]In most European Union countries, women participate slightly more than men in adult education

Available data ${ }^{61}$ from a 2013 European Union (EU) survey ${ }^{62}$ on adult lifelong learning involving 28 countries showed that the average participation rate in adult education and training among the 25 to 64 age group, regardless of the respondent's level of education, stood at 11 per cent for women and 10 per cent for men (figure 3.20). Those figures were only slightly higher than the corresponding figures for 2004. Participation in adult education and training varied considerably across countries. Denmark had the highest participation rate ( 27 per cent of women and 36 per cent of men), while at the opposite extreme, Bulgaria had only 2 per cent of women and men who were engaged in adult education. In most countries, women were more likely to participate in learning activities than men, except in Germany, Greece and Romania; however, the sex differential in participation rates in those countries was small.

Adults with already high levels of education participate in adult learning at a higher rate than those with lower educational attainment

The data show a strong positive relationshipconsistent across countries-between participation in adult education and the level of educational attainment. Adults with already high levels of education participate at a higher rate, while those with lower levels participate at a lower rate (figure 3.20). There are a number of reasons to explain this. For one, demand for training might be higher among individuals with higher levels of education because they already have the skills that facilitate learning, and are more likely to be in jobs that demand ongoing training. Regardless of the educational level, in most countries,

[^117]women's participation rates are higher than those of men. Gaps between women's and men's participation rates are significant in the group with tertiary education. For lower educational attainment levels, gaps between women and men are smaller or insignificant.

In Latin America and the Caribbean, women constitute the majority of participants in adult education programmes

In Latin America and the Caribbean, women constitute the majority of participants in adult education. However, participation and completion vary widely across countries. In 11 out of 13 countries with available data, the women's share exceeded that of men's in adult literacy programmes. ${ }^{63}$ In the case of primary education for adults, a similar gender pattern is observed. Participation in lower and upper secondary education programmes for adults show stronger gender parity ${ }^{64}$ in most countries with data. The proportion of women and men participating in lower secondary education is in the range of 45 to 55 per cent in 8 out of 16 countries with data. The corresponding figure is 10 out of 14 countries for upper secondary education. Where participation is out of the parity range, women tend to participate at a higher rate than men in both lower and upper secondary education. ${ }^{65}$

Figure 3.20
Adult education and training participation rates in 28 European Union countries by sex and level of educational attainment, 2004 and 2013


Source: EUROSTAT database, 2014. http://ec.europa.eu/eurostat/data/database (accessed 5 December 2014). Note: The annual European Union Labour Force Survey collects statistics on lifelong learning for the population aged 25 to 64 years. The reference period for participation is four weeks prior to the survey.

[^118]
## Chapter 4

## Work

## Key findings

- Globally, about three quarters of men and half of women participate in the labour force; the gender gap in participation has narrowed in only some regions and remains widest in Northern Africa, Western Asia and Southern Asia.
- Since 1995 , both young women and men (aged 15 to 24 ) have experienced a large decline in labour force participation. Women aged 25 or older, however, recorded an increase of participation in most regions.
- Women's unemployment rate remains higher than men's in most countries, and the differences remain substantial.
- Vulnerable employment-that is, own-account and contributing family work-constitutes half of women's and men's employment globally, but is most common in Africa and Asia, especially among women.
- Women predominate in the services sector of employment, especially in education, health and social work, and private households as employers.
- The occupational segregation of women and men continues to be deeply embedded in all regions.
- Women earn less than men across all sectors and occupations, with women working full-time earning between 70 and 90 per cent of what men earn in most countries.
- Women spend, on average, three hours more per day than men on unpaid work in developing countries and two hours more per day than men in developed countries; when all work-paid and unpaid-is considered, women work longer hours than men.
- Over half of countries offer at least 14 weeks maternity leave and the proportion has increased over the past 20 years.
- Paternity leave is becoming more common - 48 per cent of countries have provisions on paternity leave in 2013, compared to 27 per cent in 1994.


## Introduction

Women constitute roughly half of the global population and thus, potentially, half of its work force. As a group, women do as much work as men, if not more. However, the types of work they do, as well as the conditions under which they work and their access to opportunities for advancement, differ from that of men. Women work less than men in the labour market but more within households on domestic activities. In the labour market, women are more disadvantaged than men: They are more likely to be unemployed; less likely to be employed as wage and salaried workers in most developing regions; and are more likely to work as contributing family workers who typically do not receive a monetary income. Their work is concentrated in sectors and occupations that tend to have low pay, is subject to long hours
and carries no social protections. Women are less likely to hold managerial positions, and earn less than men everywhere.

The Beijing Platform for Action identifies women's role in the economy as a critical area of concern, and calls attention to the need to promote and facilitate their equal access to employment and resources, improved employment conditions, as well as the harmonization of work and family responsibilities for women and men. ${ }^{1}$

Some progress has been made since 1995 in women's position in the labour market, as well as in the equal sharing of family responsibilities. Women aged 25 and older have increased their

[^119]participation in the labour force in most regions. They are currently more likely than in the past to be employed as wage and salaried workers and less likely to be contributing family workers. Although women still do not earn as much as men, evidence from many developed countries has shown signs that the gender gap in pay is narrowing. More countries have adopted measures to
provide maternity leave to help strengthen women's attachment to the labour market. Measures are also being instituted to grant paternity leave, which helps to promote greater involvement of fathers in childcare and hence more equal sharing of family responsibilities. Indeed, the gender difference in the sharing of those responsibilities has narrowed over time.

## Box 4.1

Gaps in gender statistics on work

Monitoring the status and progress of women and men in the area of work requires reliable and timely data on labour force and on time use. However, national capacity for producing these data is far from satisfactory. ${ }^{\text {a }}$

As shown in the following table, since 2005, slightly more than 60 per cent of countries provided data on labour force participation and unemployment by sex for at least two years. Half of the countries have employment data disag-
gregated by sex which are further disaggregated by status in employment and by occupation for at least two years; only 40 per cent have data on earnings by sex since 2005. When an additional two data points are required for an earlier period (1995-2004), the proportion of countries that have such data is lower, especially for data on earnings. The divide between developing and developed countries in terms of data availability is significant across all labour force indicators.

Proportion of countries that reported main labour force indicators by sex, developed and developing countries

|  | Labour force <br> participation rate | Unemployment <br> rate | Employment by status <br> in employment | Employment <br> by occupation | Earnings |
| :--- | :---: | :---: | :---: | :---: | :---: |
| At least 2 data points in 2005-2014 | 64 | 55 | 50 | 39 |  |
| All countries | 64 | 53 | 42 | 37 | 30 |
| Developing countries | 53 | 98 | 98 | 93 | 70 |
| Developed countries | 100 | 60 |  |  |  |
| At least 2 data points in $1995-2004$ and 2005-2014 | 47 | 44 | 17 |  |  |
| All countries | 59 | 51 | 34 | 31 | 13 |
| Developing countries | 49 | 89 | 89 | 89 | 28 |
| Developed countries | 93 |  |  |  |  |

The production of time-use statistics has been increasingly integrated into regular social statistics programmes in many countries. Since 2005, 75 countries ( 38 per cent) have collected timeuse statistics through a time-use survey or have included a time-use module in a multipurpose household survey; time use statistics are available at the international level for 67 of them.
Even with regular surveys on labour force and time use, accurate measurement of women's work remains a challenge. Work activities such as
subsistence agriculture are often underestimated or excluded, for reasons such as limitation of data sources, gender-based stereotypes, and concepts and definitions adopted in data collection. "Work activities", which were re-defined by the International Conference of Labour Statisticians in 2013 to include all forms of work, including unpaid domestic and care work performed by women and girls in households, could help in better measuring and understanding the full range of work carried out by women (box 4.3).
a The assessment of nationa capacity to produce the necessary data for gender analysis carried out in this section is only based on national data that were either reported to the international statistical system or accessible in national reports and databases. The analysis described in the chapter, however, is based on both national data and international estimates.
Source: Statistics on labour force data availability were compiled by the United Na tions Statistics Division, based on the International Labour Office, 2014a, ILOStat database and International Labour Office, 2014b, Key Indicators of the Labour Market, 8th edition (accessed January 2015).

## A. Women and men in the labour force

1. Labour force participation

## Globally, the gender gap in labour force participation remains very large

Globally, men are much more likely than women to participate in the labour force. ${ }^{2}$ In 2015, 77 per cent of men and 50 per cent of women of working age were in the labour force (figure 4.1). ${ }^{3}$ Women's labour force participation rate remained steady at 52 per cent from 1995 to 2006, declined to 50 per cent in 2010, and is projected to remain at that level in 2015. Labour force participation for men declined steadily from 80 per cent in 1995 to 77 per cent in 2010, and has remained unchanged. The gender gap in labour force participation narrowed only marginally over the past 20 years due to the slightly larger decline in men's labour force participation rate than that of women (for concepts related to the labour force, see box 4.2).

The gender gap in labour force participation has narrowed in most regions, but remains large

The labour force participation rates of women and men vary greatly across regions. In 2015, women's labour force participation rates were 30 per cent or lower in Northern Africa, Western Asia and Southern Asia and below 50 per cent in Southern Europe. In the other regions of the world, women's rates were between 50 and 70 per cent. In contrast, men's labour force participation rates ranged less widely, from 62 per cent in Southern Europe to 82 per cent in South-Eastern Asia (figure 4.2).
Trends in the labour force participation of women and men also varied markedly by region. Over the past two decades, all regions except Eastern and Southern Asia showed some increase in women's participation rates. The most notable increases were recorded in Latin America and the Caribbean and Southern Europe, where participation rates of women increased by 8 percentage points. In contrast, women's labour force participation decreased in Eastern and Southern Asia (figure 4.2), mainly due to patterns observed

[^120]Figure 4.1
Estimated and projected global labour force participation rate, persons aged 15+ years, by sex, 1995 to 2015

in China and India where, between 1995 and 2013, women's participation in the labour force declined from 72 to 64 per cent and from 35 to 27 per cent, respectively. ${ }^{4}$

The labour force participation rates of men revealed different trends than those for women. They increased slightly in the Caucasus and Central Asia and in Oceania, remained unchanged in Eastern Europe, and declined in the other regions. The sharpest decline was recorded in Eastern Asia, where the participation rate fell by more than 6 percentage points (figure 4.2).

As a result, the difference between the labour force participation of women and men has narrowed in most regions. The largest decline was observed in Latin America and the Caribbean and Southern Europe. Yet, in no region was women's labour force participation rate equal to that of men. In Eastern Asia, Oceania, and sub-Saharan Africa women's participation in the labour force is the highest among all regions (around 65 per cent), but is still about 10 percentage points lower than men's (around 75 per cent). The regions with the largest gender gap, at over 50 percentage points in 2015, remained the same over the past two decades-Northern Africa, Western Asia and Southern Asia.

## Labour force participation across age groups

Age patterns of labour force participation are shaped differently across regions and countries. Labour force participation of young women and men (aged 15 to 24) is generally low (figure 4.3)

[^121]Figure 4.2
Labour force participation rate, persons aged 15+ years, by sex and region, 1995 and 2015


Source: ILO, Estimates and Projections of the Economically Active Population (EAPEP), 2013 edition (April 2014 update).
Note: Other developed regions include countries in Northern and Western Europe, as well as Australia, Canada, Japan, New Zealand, and the United States. 2015 figures are projections.
and reflects the availability and differential access to educational opportunities as well as the capacity of the labour market to integrate new cohorts of graduates. During prime working ages ( 25 to 54 years), labour force participation is typically the highest, indicating availability of opportunities for employment as well as differences in the roles and responsibilities of women and men in childbearing and caring. Finally, labour force participation among older workers ( 55 to 64 years and 65 years and over) is low and reflects existing retirement policies, access to social safety nets for older persons as well as attitudes towards retirement and staying actively engaged in later years.

> The gender gap in labour force participation is considerable at all ages, except the young adult years

As shown in figure 4.3, women's labour force participation is lower than that of men at all stages of the life cycle. The narrowest gender gap is in the young adult years (ages 15 to 24), while the widest gap is generally during prime working ages ( 25 to 54 years). The gender gaps narrow slowly thereafter and tail off at the older ages without totally disappearing. Even after retirement age, men tend to stay more active than women. Northern Africa and Western and Southern Asia have the widest gender gap across all age groups. (figure 4.3).

Box 4.2
Definitions used in labour force, employment and unemployment statistics

The statistics presented in this chapter on the labour force, employment and unemployment are based on concepts and definitions laid out in the resolution adopted by the 13th International Conference of Labour Statisticians in 1982.
Accordingly: "Labour force" comprises all persons above a specified minimum age of either sex who furnish, or are available to furnish, the supply of labour for the production of goods and services included in the System of National Accounts (SNA) production boundary, during a specified time reference period, usually one week or one day. The SNA production boundary includes the production of goods and services for the market (for pay or profit); some types of non-market production (such as services provided by governments and nonprofit institutions); and own-account production of all goods that are retained by their producers for their own final use (production and processing of primary products for own consumption, such as subsistance agriculture, own-account construction and other production of fixed assets for own use). It excludes services produced by a household for its own use, such as cleaning, cooking, caring for houshold members and volunteer community services.
"Employed" comprises all persons above a specified age who, during the short reference period, either worked for pay or profit or contributed to a family business (farm and non-farm) without receiving any remuneration, or produced/processed products/goods for their own (or their family's) consumption.
"Unemployed" comprises all persons above a specified age, who, during a specified reference period:

- Did not have any work/job-that is, were not employed.
- Were currently available for work-that is, were available for paid employment or selfemployment.
- Were seeking work-that is, had taken specific steps in a specified recent period to seek paid employment or self-employment (this condition is relaxed in situations where the conventional means of seeking employment are not relevant).
These international standards used by countries to produce their statistics on the labour force, employment and unemployment have been recently replaced. In October 2013, the 19th International Conference of Labour Statisticians adopted a resolution concerning statistics of work, employment and labour underutilitzation (see box 4.3 for more details). Activities to implement the new standards are currently under way in a number of countries, and updated data are expected in the coming years.

Source: Hussmanns, Mehran and Verma, 1990, chapters 2 and 3; ILO, 1982.

Figure 4.3
Labour force participation rates by age group and sex, 1995 and 2013


Young women and men (aged 15 to 24) are entering the labour market later

Labour force participation among young women and men (aged 15 to 24 ) is generally low, as many of them are still pursuing education at upper secondary or tertiary levels. Currently, Northern Africa and Western Asia remain the regions with the lowest labour force participation rate of young women, at around 18 per cent. Young women in Eastern Europe, Southern Asia, Southern Europe and the Caucasus and Central

Asia participate at a level of between 20 and 40 per cent. In the other regions, the participation of young women ranges from 40 to 53 per cent (figure 4.3). For young men, Southern Europe has the lowest labour force participation rate (36 per cent), followed by Eastern Europe, Northern Africa and Western Asia, where the rate is between 40 and 50 per cent. The rate among young men in other regions is above 50 per cent, with the highest rate recorded in Latin America and the Caribbean ( 62 per cent).

Source: Calculated by the United Nations Statistics Division based our Office 2014b. Key Indicators of the Labour Market, 8th edition, table 1a (accessed January 2015). ote: Other developed regions include countries in Northern and tralia, Canada, Japan, New Zealand, and the United States.

For most regions, labour force participation rates for women and men aged 15 to 24 have declined since 1995, contributing to the slight decline in the overall global rate. For young adults, the decline may be linked to either expanding educational opportunities for young women and men ${ }^{5}$ or a growing proportion of young people who are neither pursing education nor engaged in employment and are not seeking and available for work. The largest decline for young women occurred in Eastern Asia, with a decline of 21 percentage points. Young women in Eastern and Southern Europe also registered a 10 -percentage-point decline in labour force participation. For young men, the most notable decrease was recorded in Eastern Asia, with a 16 percentage points decrease, followed by Southern Asia and Southern Europe, where labour force participation of young men declined by at least 10 percentage points.

In most regions, a higher proportion of women aged 25 to 54 are participating in the labour force than in the past

Women and men reach their peak in labour force participation between the ages of 25 and 54 . In most regions, the participation rate for women aged 25 to 54 ranged between 65 and 85 per cent in 2013. Women in Northern Africa, and Western and Southern Asia, however, participated at a much lower rate-around 30 per cent. For men of that age group, the rate is above 80 per cent in all regions (figure 4.3).

Between 1995 and 2013, labour force participation rates for women and men in their prime working ages showed different trends. For men, participation rates remained constant or declined slightly over the past two decades across most regions. By comparison, women experienced an increase in labour force participation in many regions except Eastern and Southern Asia and Eastern Europe and the Caucasus and Central Asia (showing a slight decrease) (figure 4.3). A large increase in women's participation was observed in Latin America and the Caribbean and Southern Europe ( 10 percentage points or more). In Latin America and the Caribbean, the increase seems to be associated with additional education and changes in family formation-that is, later marriage and lower fertility levels, ${ }^{6}$ while in Southern Europe, it may be related to changes in attitudes towards women's participation in the

[^122]labour market in countries with traditionally low women's participation, and to labour market reforms aimed at improving work flexibility and increasing fiscal/tax benefits for working women. ${ }^{7}$

In contrast, a notable decline in labour force participation was observed for women aged 25 to 54 in Southern and Eastern Asia from 1995 to 2013 (figure 4.3), dominated by declines in India and China. In India, where women lack job opportunities because of occupational segregation, job growth disproportionately benefited men. That, along with a change in the measurement methodology between survey rounds and, to a lesser extent, an increase in household incomes that reduced the need for women from wealthy families to work, have contributed to the decline. ${ }^{8}$
In the case of China, significantly fewer govern-ment-sponsored childcare facilities may have contributed to the decline in women's labour force participation rate. The proportion of more affordable state-owned and community-based childcare centres decreased from 86 per cent in 1997 to 34 per cent in $2009 .{ }^{9}$ Studies also showed that the restructuring of the state-owned sector of the economy in the late 1990s resulted in large layoffs and early retirement for urban workers, affecting women and older workers disproportionately. ${ }^{10}$

## Older women workers currently remain longer in the labour market

Between the ages of 55 and 64, both women and men participate in the labour force at a much lower level compared to those aged 25 to 54 . In 2013, the participation rate of women aged 55 to 64 was the lowest in Northern Africa and Western Asia (15 per cent), followed by Southern Asia at 27 per cent. The highest participation rate for women in this age group was in sub-Saharan Africa (66 per cent), followed by a slightly lower rate ( 57 to 59 per cent) in Oceania, South-Eastern Asia and the developed regions except Eastern and Southern Europe. In other regions, labour force participation for women aged 55 to 64 ranged from 36 to 50 per cent. The rates for men aged 55 to 64 ranged from 55 to 85 per cent, with the highest levels recorded in Southern Asia, South-Eastern Asia and sub-Saharan Africa, at above 80 per cent.

[^123]In all regions, except Oceania, Southern and Western Asia, labour force participation increased for older women during the period 19952013. The largest increase was recorded in Eastern Europe, Southern Europe and the other developed regions, as well as in Latin America and the Caribbean (figure 4.3). The prolonged time people remain in the labour market in more recent years can be attributed in part to changes in national policies on retirement and pension systems. ${ }^{11}$
National policies encouraging longer working lives for both women and men at older ages, through higher statutory retirement ages and pension reforms, have been in place in many developed countries. This has been reflected in upward trends in the effective retirement age ${ }^{12}$ since the mid-1990s among Organisation for Economic Co-operation and Development (OECD) member States and non-OECD European Union (EU) countries. ${ }^{13}$ It is also noteworthy that the trend of raising the statutory retirement age, which affects women more than men, will eventually lead to a higher and equal retirement age for both sexes. Among the 25 European countries with plans for a statutory retirement age, 14 had unequal legal retirement ages in 2012 and this number is expected to be reduced to 8 by 2030. ${ }^{14}$
From 1995 to 2013, labour force participation for men aged 55 to 64 decreased in 7 out of 12 regions, with the largest decrease observed in Northern Africa, where the participation for male workers in that age group declined from 79 per cent to 62 per cent (figure 4.3). The decline was registered in a number of countries in the region, including Algeria, Egypt, Morocco and Tunisia. Egypt, however, recorded the largest decline in older men's labour force participation (a drop of 23 percentage points, from 88 per cent in 1995 to 65 per cent in 2013). ${ }^{15}$ Such a drop in participation could be associated with the implementation of the Economic Reform and Structural Adjustment Programme in Egypt that aimed to downsize public sector employment by encouraging early retirement of public sector employees. ${ }^{16}$

[^124]
## Women and men remain active after retirement age

The participation of women and men in the labour force further declines after they reach age 65, although a certain percentage of both sexes remain active. In 2013, women in sub-Saharan Africa were more likely to remain in the labour force after age 65 ( 41 per cent) compared to women in other regions, due to their heavy participation in subsistence agriculture. In SouthEastern Asia and Oceania, 25 per cent and 35 per cent of women aged 65 or over, respectively, participated in the labour force. In the other regions, the participation rate for women in that age group was below 20 per cent (figure 4.3). In most regions, the labour force participation for men aged 65 and older ranged from 20 to 50 per cent. The exceptions include Eastern Europe, Southern Europe, and other developed regions, where men at that age participated less (less than 20 per cent), and sub-Saharan Africa, where men participated at a much higher level ( 63 per cent).
For women aged 65 and over, changes in labour force participation between 1995 and 2013 were smaller in all regions. The participation of men in this age group has also been stable over time in most regions, except in Northern Africa and Western Asia, where it declined by more than 10 percentage points.

## 2. Unemployment

## Total unemployment

Women's unemployment rates remain higher than men's in most countries

Unemployment rates ${ }^{17}$ in many countries around the world clustered under 10 per cent for both women and men aged 15 and above in 2013 (figure 4.4). For most countries ( 121 out of 177 countries with data), the unemployment rate for women was higher than that for men. In particular, women in Northern Africa and Western Asia experienced much higher unemployment rates than men. Out of 11 countries where women's unemployment rates were at least 10 percentage points higher than men's, 7 were from Northern Africa and Western Asia. A number of countries (52) recorded lower unemployment rates for women than for men, but only by a small degree.

[^125]The highest unemployment rates of women were found in many countries in Northern Africa and Western Asia, Southern Europe, and in sub-Saharan Africa; for men, unemployment was highest in many countries in Southern Europe and in selected countries in sub-Saharan Africa.

Figure 4.4
Unemployment rates of women and men, aged 15+ years, 2013


Source: Compiled by the United Nations Statistics Division based on data from the International Labour Office, 2014b. Key Indicators of the Labour Market, 8th edition, table 9a (accessed October 2014).
Note: Other developing regions include countries in Eastern Asia, Latin America and the Caribbean, Oceania, South-Eastern Asia, Southern Asia and the Caucasus and Central Asia. Other developed regions include countries in Northern and Western Europe, as well as Australia, Canada, Japan, New Zealand, and the United States.

In terms of trends, since 1995, the gender gap in unemployment has remained relatively constant in all regions, with the exception of Southern Europe and Western Asia. The increase in Western Asia (from 4 to 9 percentage points) was due to a larger increase in the unemployment rate for women than for men, while Southern Europe experienced the opposite trend, a decreased gender gap (from 7 to 4 percentage points) due to a higher increase in unemployment among men. ${ }^{18}$

## Youth unemployment

## Unemployment is highest among young women and men

In all regions, unemployment is more prevalent among young persons aged 15 to 24 than among adults aged 25 and older. Higher unemployment among young people, especially women, can be attributed to several factors, including the lack

[^126]of needed work skills due to limited job experience and a mismatch between young women and men's skill supply and labour market demand. ${ }^{19}$ In many countries, the gains in education have outpaced economic development and the demands of the labour market. Women are particularly susceptible to skills mismatch due to the fields of study they favour, such as education and humanities and arts (see Chapter 3 on Education). Finally, in countries where public sector jobs are associated with higher social status, stability and even better pay, young women and men may choose to be unemployed until a public sector job is available. ${ }^{20}$

In 2015, unemployment rates for young women and young men were twice or even three times higher than for adults in the majority of the regions analysed (figure 4.5). The Caribbean, Northern Africa, Southern Europe, and Western Asia have the highest unemployment rates for young people and some of the largest disparities between them and other adult workers.

The difference between the youth and adult unemployment rate has been relatively stable over the past 20 years in most regions. ${ }^{21}$ A few exceptions, however, stand out. From 1995 to 2015, the unemployment rate among young women rose, for example, from 45 per cent to 54 per cent in Northern Africa, and from 22 per cent to 36 per cent in Western Asia. Changes in the past 20 years in adult women's unemployment rates in both regions, however, have been small. During the same period, in Southern Europe, young men experienced a 12-percentage-point increase in the unemployment rate (from 30 per cent to 42 per cent), compared to an increase of 7 percentage points among adult men. Such increase, for both youth and adult men in the region, occurred only after 2007 and may be linked to the recent economic and financial crisis. ${ }^{22}$

[^127]Figure 4.5
Unemployment rates of adults (aged 25+ years) and youth (aged 15 to 24 years), by region and sex, 2015


Unemployment rates are higher for young women than young men in most regions

In 2015, young women are more likely to be unemployed than young men in all regions except Eastern Asia and developed regions other than Eastern and Southern Europe, where youth unemployment among women is slightly lower than that for men. At the other end of the spectrum, high gender differentials are found in

Northern Africa (where 54 per cent of young women are unemployed compared to 25 per cent of young men), Western Asia ( 36 per cent of young women versus 22 per cent of young men), and the Caribbean ( 27 per cent of young women versus 17 per cent of young men). In contrast, the unemployment rates for young women and men in Southern Europe are roughly the same, though both are still high, at above 40 per cent (figure 4.5).

[^128]Source: ILO, Estimates and Projections of the Economically Active Population (EAPEP), 2013 edition (April 2014 update). Note: Other developed regions include countries in Northern and Western Europe, as well as Australia, Canada, Japan, New Zealand, and the United States. 2015 figures are projections.

## Box 4.3

New standards for measuring work, employment and labour underutilization

The resolution concerning statistics of work, employment and labour underutilization, adopted by the 19th International Conference of Labour Statisticians in 2013, provides new standards to be used by countries to produce statistics on the labour force, employment, unemployment and underemployment.

The new standards introduce a number of important revisions that redefine the way the work of women and men is to be captured and reflected in official statistics. These revisions aim to support the comprehensive but separate measurement of all forms of work-both paid and unpaid. Among the most important revisions are the introduction of:

- The first international statistical definition of work, aligned with the SNA general production boundary. The new definition recognizes all productive activities, including unpaid household services provided by household members or by volunteers, as work.
- A refined concept and measure of employment that refers to "work for pay or profit". This will support more targeted monitoring of participation in remunerated work needed to inform labour market policies aimed at promoting job creation and reducing gender disparities in access to remunerated work opportunities.
- A new concept and measure of own-use production work, comprising production of goods and provision of services for final use by the household or family. This will support the valuation of their common contribution to household material welfare, household income and well-being. At the same time, it will enable an assessment of gender
and age differences in the allocation of labour within the household.
- A new concept and measure of volunteer work covering non-compulsory work performed without pay for others. This will support the measurement of or-ganization-based volunteering and direct volunteering to households, resulting in more comprehensive assessments of their prevalence and contributions to social cohesion, well-being and national production.
- A set of measures of labour underutilization beyond the traditional measurement of unemployment. This will encourage wider monitoring of situations of unmet need for employment due to insufficient working time among the employed, and to the lack of access to remunerated work among those outside the labour force, including due to labour market conditions as well as to social and cultural barriers to employment.
- Finally, the terms "economically active population" and "economically inactive population" were replaced by more neutral terms-"labour force" and "persons outside the labour force". This recognizes that persons outside the labour force may be engaged in other forms of work, particularly in ownuse provision of services that also contribute to production and economic growth.
These new concepts are expected to be especially relevant in countries and areas where subsistence activities are widespread, where labour markets are of limited scope and where labour absorption is at times insufficient. They will also be relevant for groups predominantly engaged in forms of work that are unpaid, especially women, youth and workers in rural areas.

Source: International Labour Office, 2013b.

## B. Employment conditions of women and men <br> 1. Economic sector of employment

For both women and men, employment in agriculture continues to decline while employment in the services sector keeps growing

Globally, the services sector is currently the largest source of employment for both women and men. In 2015, 52 per cent of employed women and 43 per cent of employed men were engaged in this sector. By comparison, in 1995, agriculture was the main source of employment for both sexes and in particular for women. Globally, the transition from agriculture to services occurred in 2000 for women and in 2004 for men (figure 4.6).

Over the past 20 years, agriculture has declined in importance as a source of employment, more so for women than for men. In fact, the difference between women's and men's share of employment in this sector has disappeared (from 44 per cent for women and 41 per cent for men in 1995 to 30 per cent for both in 2015). The sector of employment with the fewest women and men is industry. The proportion of employed persons working in this sector remained stable from 1995 to 2005 , at around 16 per cent for women and 25 per cent for men. After 2005, both women and men experienced a slight increase in employment in the industry sector, reaching 18 per cent of employed women and 27 per cent of employed men in 2015 (figure 4.6).

Figure 4.6
Distribution of employed persons by economic sector of employment, by sex, 1995 to 2015


Source: ILO, Estimates and Projections of the Economically Active Population (EAPEP), 2013 edition (April 2014 update).
Note: 2014 and 2015 figures are projections.

Women work predominantly in the services sector, while men tend to be more spread out across the three economic sectors

In four regions-Latin America and the Caribbean, Eastern Europe, Southern Europe and other developed regions-more than 70 per cent of employed women work in the services sector in 2015. In those regions, men's employment in the services sector, while relatively high compared to agriculture and industry, is at least 20 percentage points lower than that of women. Southern Asia and, to a lesser extent, Oceania, are the only regions where the services sector is a more important source of employment for men than for women ( 36 per cent versus 20 per cent for men and women, respectively, in Southern Asia, and 33 per cent and 30 per cent for men and women, respectively, in Oceania) (figure 4.7).

Agriculture remains the largest sector for women's employment in three regions-Oceania, Southern Asia and sub-Saharan Africa-with around 60 per cent of women employed in it. In Oceania and sub-Saharan Africa, agriculture is also the primary source of employment-for around 60 per cent of men (figure 4.7). The diminishing gender gap in agricultural employment at the global level masks differences across regions. In six out of 12 regions -Northern Africa, Oceania, Southern Asia, sub-Saharan Africa, the Caucasus and Central Asia and Western Asia-women are more likely than men to be working in the agriculture sector. One region-South-Eastern Asia—shows no gender difference in the percentage of women and men working in agriculture ( 37 per cent for both). In the other regions-Eastern Asia, Latin America and the Caribbean, Eastern Europe, Southern Europe and other developed regionsmen are more likely to be working in agriculture than women.

In 2015, between 20 and 40 per cent of male employment was in the industrial sector in most regions, with the exception of sub-Saharan Africa and Oceania. Among women, the share engaged in industry is under 20 per cent in most regions except Eastern Asia (30 per cent) and Southern Asia (21 per cent). In all regions, men are more likely to work in the industrial sector than women, with a gender difference ranging from 3 percentage points in Oceania to 22 percentage points in Eastern Europe, which is also the region with the highest share of men working in this sector (around 40 per cent).

Figure 4.7
Distribution of employed persons by economic sector of employment, by sex and region, 2015


## - Services <br> - Industry <br> - Agriculture

Source: ILO, Estimates and Projections of the Economically Active Population (EAPEP), 2013 edition (April 2014 update).
Note: Other developed regions include countries in Northern and Western Europe, as well as Australia, Canada, Japan, New Zealand, and the United States. 2015 figures are projections.

## Share of women in sub-categories of the services sector

Women dominate in three services subsectors: education, health and social work, and private household as employers

As more jobs for women gradually move into services, the share of women in the services sector has surpassed their share in total employment. In 2015, women's share among people employed was 40 per cent globally, and 44 per cent among those employed in the services sector. The representation of women in the services sector increased slightly by 2 percentage points, from 42 per cent in 1995, but their share in total employment remained unchanged in the 20 years since. Meanwhile, the share of women in agriculture during those 20 years declined by 2 percentage points. ${ }^{23}$
Within the services sector, women are the majority of workers in specific subcategories (figure 4.8). Among 24 developing countries ${ }^{24}$ with recent data available, the average women's share is above 50 per cent (or women "dominate") in three services subsectors, in the order of importance: private households as employers, education, and health and social work. In the category "private households as employers", mainly consisting of paid domestic workers providing services to private households, women dominate in most of the countries in developing regions

[^129]for which data are available and on average they represent 73 per cent of workers in this subsector of employment. ${ }^{25}$ The exceptions are Egypt and Yemen, where the female share in this category is around 20 per cent. ${ }^{26}$ Yemen, among all 24 developing countries, also has the lowest female share of workers in education and health and social work, two subsectors that are usually dominated by women in other developing countries. In Yemen, more than 50 per cent of employed women are in services overall, although within each service subsector, women's share is much lower than that of men, due to the extremely low percentage of working women (only 15 per cent of women 15 and over were employed in 2012 compared to 65 per cent of men of the same age).
For 36 countries in developed regions with available data, private households as employers, health and social work, and education are also the top three subsectors, in the order of importance, dominated by women (figure 4.8). However, less variation is observed among countries in developed regions, especially with respect to the health and social work and education subsectors, where women outnumber men in all countries considered. In addition, on average the financial and insurance and hotels and restaurants subsectors are also the source of employment for a slightly higher number of women than men. With respect to the "private households as employers" sector, the average women's

[^130]share among workers in this category in developed countries with data is 83 per cent and all countries except New Zealand ( 38 per cent) have a higher share of women than men.

Services that tend to have low pay, long hours and no social protection are more likely to be provided by women than men. ${ }^{27}$ These unfavourable employment conditions are particularly prevalent for workers in the category "private households as employers". Such workers include maids, cooks, waiters, valets, butlers, laundresses, gardeners, gatekeepers, stable hands, chauffeurs, caretakers, babysitters, tutors and secretaries, among others, ${ }^{28}$ and are usually referred to as paid domestic workers. They tend to work long hours per week, with no entitlement to a weekly rest period or paid annual leave, receive very low wages and have less access than other workers to social security schemes and measures to ensure occupational safety and health. ${ }^{29}$
Men in both developing and developed countries tend to dominate in other subsectors within the services sector, such as transportation and storage, administrative and support services, information and communication, and real estate.

## 2. Occupational segregation

Women and men tend to work in different occupations (horizontal segregation) and in different positions within the same occupation or occupational group (vertical segregation). The segregation of women and men in different occupations is closely associated with gender roles or stereotypes about women (for example, that they are caring or home-based). Gender-based occupational segregation also reflects the difference between women and men in terms of their choice of education and vocational training (see Chapter 2 on Education). Occupational segregation can negatively affect the flexibility of the labour market ${ }^{30}$ and the economy as a whole. It also has direct negative effects on women in particular, partly because women's employment is concentrated in a more limited number of occupations than that of men. ${ }^{31}$ Such concentration imposes more restrictions on women than on men in terms of what types of jobs they can undertake. Occupational segregation, both horizontal and vertical, also contributes greatly to the pay differentials between women and men (see section in this chapter on the gender pay gap).

Figure 4.8
Share of women in subcategories of the services sector, 2008-2012 (latest available)


[^131]

30 Segregation causes labour market inflexibility because it constrains mobility between male and female occupations. When a firm needs a large group of new workers for an industry that is clearly male- or female-dominated, it may not find a sufficient number of qualified candidates for the posts. Source: Melkas and Anker, 1997.

31 A study covering 41 countries showed that there are seven times more male-dominated occupations than fe-male-dominated occupations-defined as an occupation in which either men or women, respectively, comprise at least 80 per cent of workers. United Nations, 2000.

Figure 4.9
Share of women in nine occupational groups, 2008-2012 (latest available)


Differences between women and men in terms of the distribution of their employment by occupation or type of job performed ${ }^{32}$ can be observed in some regions. In Eastern Asia, Latin America and the Caribbean, Southern Europe and other developed regions, women predominantly work as services and sales workers, while men tend to be craft and trade workers. For regions that are heavily agricultural such as Oceania, Southern Asia and South-Eastern Asia, both women and men tend to work as skilled agricultural and fishery workers. In sub-Saharan Africa, also dominated by a large agricultural sector, men are most likely to be employed as skilled agriculture and fishery workers, while women mostly work in "elementary" occupations, such as unskilled labourers in agriculture, fisheries or mining or in refuse collection, cleaning or food preparation industries. This pattern of women working in elementary occupations and men in skilled ones also applies to women and men in the Caucasus and Central Asia and Eastern Europe. ${ }^{33}$

[^132]

Gender segregation in various occupations persist in all regions

Women are highly represented and even outnumber men among certain occupational groups, based on available data. In 40 developing countries for which data were available for the period 2008-2012, the average share of women was the highest among clerks ( 50 per cent), followed closely by professionals (44 per cent), service workers and shop and market sales workers (43 per cent), and technicians and associated professionals (42 per cent). Although women did not outnumber men in the same occupation, their representation in all of the above occupational groups exceeded their share in total employment, which was, on average, 37 per cent among the 40 developing countries with data. However, large variations were found among those countries (figure 4.9). Countries in Northern Africa, Southern Asia and Western Asia tended to have lower shares of women in each occupational group compared to countries in other regions, due to the very low share of women in employment overall (see Statistical Annex for data by regions). ${ }^{34}$
Over the period 2008-2012, relative to their overall share in total employment ( 46 per cent), women in 42 developed countries were also highly represented and outnumbered men among clerks ( 70 per cent), service workers and shop and market sales workers ( 63 per cent), professionals (56 per cent), elementary occupations

34 Available at http://unstats.un.org/unsd/gender/worldswomen.html.
$\mid$ Mean

- Minimum
- Maximum
| Average share of women in total employment among countries with data

Source: Calculated by United Nations Statistics Division based on data from the International Labour Office, 2014b. Key Indicators of the Labour Market, 8th edition, tables 5a and 5b (accessed June 2014). Note: The numbers in brackets indicate the number of countries with available data. Only data based on ISCO-08 and ISCO-88 classifications are included. Countries that have data only based on ISCO-68 are not included in the analysis due to large differences between ISCO-68 and later classifications (ISCO-88 and ISCO-08). These countries include Bahrain, Chile, Colombia, Cuba and Japan.
(53 per cent) and technicians and associated professionals ( 51 per cent) (figure 4.9).
In both developing and developed countries, women were significantly underrepresented among the following occupations: plant and machine operators and assemblers; craft and related trade workers; legislators, senior officials and managers; and skilled agricultural and fishery workers. Women's underrepresentation as legislators, senior officials and managers, demonstrates the inequality in participation of women and men in decision-making processes and access
to power. Studies based on detailed occupations within this group show that women are even less represented in occupations with the highest degree of power and influence (such as directors and chief executive officers), and that this phenomenon is true across all regions, all cultures and all levels of economic and social development. ${ }^{35}$ In the United Kingdom, for example, 34 per cent of legislative or managerial positions were held by women in 2014, while only 17 per cent of chief executives and senior officials were women ${ }^{36}$ (see also Chapter 5 on Power and decision-making).

## Box 4.4

Occupational segregation: A more in-depth look

The following two country examples illustrate sharp differences in the representation of women in subcategories of various occupations.
In 2014, "professional jobs", as a group of occupations, were equally shared between women and men in the United Kingdom. However, an analysis of data at detailed levels of occupations in that country reveals that women are more concentrated in certain types of professional jobs than others. For example, 89 per cent of nurses and midwives were women compared to only 7 per cent of engineers. Among teaching professionals, women represented 88 per cent of primary and nursery school teachers but only 47 per cent of higher education teaching professionals (see also Chapter 3 on

Education). For health-care professionals, women tend to dominate occupations such as medical radiologists, psychologists, podiatrists, pharmacists and veterinarians, in contrast to occupations such as dentists.

In Liberia, women's share among agricultural, forestry and fishery labourers ( 53 per cent) is much higher than their share among market-oriented skilled agricultural workers (43 per cent) and market-oriented skilled forestry and fisheries workers ( 15 per cent). Women outnumber men in unskilled elementary occupations (share of women is 58 per cent), and even more so as cleaners and helpers ( 63 per cent) and as refuse workers and other elementary occupations ( 79 per cent).

Women's share of employment in selected subcategories of professionals, United Kingdom, 2014


Women's share of employment in skilled agricultural/fishery and elementary occupations, Liberia, 2014


[^133]36 United Kingdom, Office for National Statistics, 2014.

Major groups of occupations should be analysed in more detail to fully understand the depth of occupational segregation and better distinguish between male- and female-dominated occupations. The group "professionals", for example, is dominated by women (more women than men work in this occupation) in both developing and developed countries. However, it includes subcategories such as "health" and "teaching professionals", which are more likely to be dominated by women, as well as "science and engineering professionals" and "information and communication technology professionals", which are more likely to be dominated by men. Furthermore, based on data for EU member States, it appears that while teaching professionals, nursery care workers and pre-primary school teachers are almost all women, the share of women among college, university and higher education teaching professionals ranges between 20 and 50 per cent. In addition, among college and university teachers, women's share in grade-A teaching positions (that is, the highest grade/post at which research is normally conducted within these institutions) is only between 0 and 20 per cent ${ }^{37}$ (see also box 4.4 and Chapter 3 on Education, section on women in teaching).

## 3. Status in employment

To understand the employment conditions and position in the labour market of women and men, it is essential to identify their status in employment. This entails classifying jobs with respect to the type of employment contract a person has with her or his employer or other persons. ${ }^{38}$ Such classification provides the statistical basis for analysing employment conditions in terms of a job's level of security, protection and rights.

Globally, half of employed women and men are wage and salaried workers, but variations are found across regions

The extent to which women have access to wage and salaried employment can reflect their integration into the monetary economy and access to a regular income. This, in turn, could have a positive impact on their autonomy and financial independence within the household and enhance their personal development and decisionmaking power. ${ }^{39}$

[^134]Globally, wage and salaried workers constituted half of all employed persons in 2015. This is true for both women and men (figure 4.10). Across regions, however, significant variations are found in terms of status in employment and gender. In Eastern Europe and other developed regions, the vast majority of employed women and men are wage and salaried employees (around 90 per cent with little gender difference). In Southern Europe and Latin America and the Caribbean, wage and salaried workers also represent a big portion of employed women and men (around 60 to 70 per cent), with women even more likely than men to be in these types of employment, particularly in Southern Europe.

There is no gender difference in the share of wage and salaried employment in total employment in the Caucasus and Central Asia, with around 60 per cent of both women and men engaged in this type of employment. In the other developing regions, men are more likely than women to be engaged in wage and salaried employment, although some variations are found among regions. In Eastern Asia, Northern Africa and Western Asia, more than half of employed women are in wage and salaried employment, while for men the percentage is higher ( 57 per cent in Eastern Asia and 70 per cent in Western Asia and Northern Africa). In SouthEastern Asia, the share of wage and salaried employment for women is 37 per cent; for men it is 41 per cent.

In Oceania, Southern Asia and sub-Saharan Africa, the share of wage and salaried employment is low for both women and men (below 20 per cent for women and slightly below 30 per cent for men) and the majority of women and men are either own-account or contributing family workers (figure 4.10).

> Women are more likely than men to be contributing family workers

People working as own-account workers and contributing family workers tend to lack basic social protection and are subject to low income and difficult working conditions. Because of their precarious employment conditions, they are considered to be in "vulnerable" types of employment. Globally in 2015, the share of vulnerable employment was 49 per cent for women and 47 per cent for men, hence a very small gender difference. However, among all forms of vulner-

Figure 4.10
Distribution of employment by status in employment, by sex and region, 2015


Source: ILO, Estimates and Projections of the Economically Active Population (EAPEP), 2013 edition (April 2014 update).
Note: Other developed regions include countries in Northern and Western Europe, as well as Australia, Canada, Japan, New Zealand, and the United States. 2015 figures are projections.

able employment, women were more likely than men to work as contributing family workers. The proportion of employed men working as contributing family workers was 7 per cent, compared to 19 per cent among employed women. On the other hand, own-account workers made up 39 per cent of male employment compared to 29 per cent of female employment. Similar patterns were observed in all regions with larger gender differences in developing regions than in the more developed ones (figure 4.10).

The share of women among employers remains small, but has increased steadily

Only a small proportion of women and men are employers-that is, having one or more persons working for them in their businesses as employees. Globally in 2015, 3 per cent of employed men and 1 per cent of employed women were employers. Among all regions, men are more likely than women to be included in this category (figure 4.10). The share of women among employers has shown a slow but steady rise since 1995 globally ( 16 per cent in 1995 and 21 per cent in $2015^{40}$ ) and across most regions. However, women's representation among employers remains far from parity. In 2015, the share of women among all employers was the smallest in Northern Africa and Western Asia (around 5 per cent), followed

[^135]by Oceania and Southern Asia at between 10 and 20 per cent. A number of regions have 20 to 25 per cent of women among employers, including: Eastern Asia, Latin America and the Caribbean, South-Eastern Asia, Southern Europe, the Caucasus and Central Asia and other developed regions. Eastern Europe and Sub-Saharan Africa had the largest share of women among employers in 2015, approaching 35 per cent (figure 4.11).

Figure 4.11
Share of women among all employers, by region, 1995 and 2015


[^136]Employers and own-account workers are closely associated with the concept of entrepreneurs who create employment for themselves and employment opportunities for others. The promotion of micro and small-scale enterprises has also been identified as a strategy for advancing the economic empowerment of women, while reducing poverty and gender inequality. Measuring entrepreneurship from a gender perspective has remained a challenge and the methodology for collecting data on this topic is currently being developed by the Evidence and Data for Gender Equality Project (box 4.5).

## 4. Informal employment ${ }^{41}$

Contrary to predictions in the 1950s and 1960s that informal employment, including petty traders, small producers and a range of casual jobs, would be absorbed into the more formal "modern" economy, informal employment has not only persisted since the 1970s but has also emerged in unexpected places, such as in formal sector enterprises. ${ }^{42}$ Informal employment offers a survival strategy in countries that do not provide sufficient formal employment opportunities. It is also associated with the lack of social protection, labour legislation and protective measures in the workplace. ${ }^{43}$

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Informal employment is an important source of employment for both women and men in developing countries
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Informal employment is an important source of employment and livelihoods in many countries. Among 43 countries with available data, it accounted for more than 70 per cent of total non-agricultural employment for women in 15 countries-6 in sub-Saharan Africa and in Latin America and the Caribbean, respectively, and 3 in Southern and South-Eastern Asia. In 7 of the 15 countries (Bolivia, Guatemala, India, Mali, Nicaragua, Pakistan and the United Republic of Tanzania), a majority of men (more than 70 per cent) working in the non-agriculture sector were also employed informally (figure 4.12).

[^137]Box 4.5
Measuring entrepreneurship from a gender perspective: The Evidence and Data for Gender Equality (EDGE) project

> Measuring entrepreneurship from a gender perspective can provide a better understanding of how women and men differ in their entrepreneurial activities. Research has found that gender is a factor in entrepreneurial participation and in the characteristics and performance of enterprises. In both developing and developed countries, women are less likely than men to become entrepreneurs and more likely to be motivated by "push" factors, such as poverty or divorce, to start an enterprise. ${ }^{\text {a Women's enterprises }}$ also tend to be smaller, to operate with lower capital, to be more embedded in family structures and to be less sustainable than men's enterprises. ${ }^{\text {b }}$
> Evidence on gaps in sales and profits between femaleand male-owned enterprises suggests that many women might face more challenges than men to fulfil their productive and innovative potential. In France, for example, start-up enterprises founded by women tend to have turnovers that are 25 per cent lower than that of men. ${ }^{\text {c }}$ However, traditional performance measures, such as growth and profits, are not always the top priority for women entrepreneurs. ${ }^{\text {d }}$ Women are often motivated by objectives other than profit maximization when starting a business, such as greater flexibility to set their own schedules and balance work and family life. ${ }^{e}$
> Despite the clear policy relevance of measuring entrepreneurship from a gender perspective, official statistics on female and male entrepreneurs and their enterprises are lacking in most countries. Furthermore, the data that are collected are not comparable across countries because different methodologies are used in different contexts to measure entrepreneurship.
> To address these data and methodological gaps, the Evidence and Data for Gender Equality (EDGE) project, a joint initiative of the United Nations Statistics Division and UN-Women, is developing methodological guidance on measuring entrepreneurship from a gender perspective in collaboration with OECD. 1997.
> b Robb and Watson, 2010.
> c OECD, 2012. Turnovers of an enterprise refer to total sales.
> d Carter and others, 2003; Kepler and Shane, 2007.
> e Walker and Webster, 2004; Walker, Wang and Redmond, 2008.

The proportion of informal non-agricultural employment is higher for women than for men in many countries in Latin America and the Caribbean and sub-Saharan Africa. For some countries (Poland, Serbia, Sri Lanka, the Republic of Moldova, the former Yugoslav Republic of Macedonia and the State of Palestine), however, the proportion of men engaged in informal employment is higher than that of women (figure 4.12).
Although women and men are both in informal employment, women are often concentrated in the more disadvantaged categories of employment, such as domestic workers, piece-rate home-based workers and assistants in small family enterprises, all of which are among the most vulnerable and lowest paid types of informal
work. A large share of domestic workers, who are frequently excluded from the scope of labour laws or are only covered by less favourable legislation, are women. Globally in 2010, 83 per cent of domestic workers were women, slightly lower than the 86 per cent in $1995 .{ }^{44}$
For international comparability, ${ }^{45}$ statistics presented so far on informal employment have been restricted to non-agricultural employment. However, much of the employment in agriculture lacks

Figure 4.12
Proportion of informal employment among all non-agricultural employment, by sex, 1998-2012 (latest available)


Source: Compiled by the United Nations Statistics Division based on data from the International Labour Office, 2014b. Key Indicators of the Labour Market, 8th edition, table 8 (accessed May 2014). Data for India (2011/2012) was obtained from Raveendran (2015); data for Pakistan (2009/2010), the Philippines (2008) and the United Republic of Tanzania (2005/2006) were extracted from the International Labour Office and Women in Informal Employment: Globalizing and Organizing, 2013.

[^138]social protection and job security, both characteristics of informal employment. ${ }^{46}$

## Informal employment in the agricultural sector is also important

For countries with a large agricultural sector, total informal employment increases substantially when agricultural employment is included in the calculation.

For example, in the Republic of Moldova in 2009, the proportion of informal employment among all non-agriculture employment was 11 per cent for women and 21 per cent for men (figure 4.12). However, when the agriculture sector is taken into account, the proportion of informal employment among all employed-in agricultural and non-agricultural activities-is much higher, reaching 27 per cent for women and 33 per cent for men. ${ }^{47}$ Similarly, in India in 2011-2012, the proportion of informal employment among all non-agricultural employment was 86 per cent for women and 84 per cent for men. However, when the agriculture sector is included, the proportion of informal employment rises to 95 per cent for women and 91 per cent for men. ${ }^{48}$

## 5. Part-time employment ${ }^{49}$

Part-time work may offer an effective way to balance time spent on paid work, household responsibilities and childrearing. The possibility of being able to work for fewer hours is also seen as a means to increase employment levels, particularly among women. ${ }^{50}$ In addition, part-time work facilitates the gradual entry into, participation in and exit from the labour market. ${ }^{51}$

However, part-time work also comes at a cost. Part-time workers face difficult working conditions, including lower hourly wages and lesser job security, and receive less training and promotion opportunities than their full-time counterparts. They are also at a higher risk of falling

[^139]into poverty and are less likely to have access to social protection such as unemployment benefits. ${ }^{52}$ Some forms of part-time work in developed countries are non-standard types of work with employment conditions similar to those described for informal employment. ${ }^{53}$

Women are more likely than men to be engaged in parttime employment

In 2012, developed regions (except Eastern and Southern Europe) recorded the highest proportion of women working part time ( 28 per cent) (figure 4.13). Part-time employment was particularly prevalent among women in Northern and Western European countries. Sixty per cent of employed women in the Netherlands worked part time, the highest percentage by far in the world, and over 35 per cent in Germany, Ireland, the United Kingdom and Switzerland. Outside of Northern and Western Europe, employed women in Australia recorded a 38 per cent part-time rate (see Statistical Annex for country-level data). ${ }^{54}$

Latin America and the Caribbean also recorded high proportions of employed women in parttime work (26 per cent in 2012). Among countries within the region, Argentina and Nicaragua registered the highest proportion of women working part-time, at 35 per cent or more (see Statistical Annex for country-level data). ${ }^{55}$ Women's parttime employment was not as prevalent in Eastern and Southern Europe, where, in 2012, the average proportion of employed women working part time was 9 and 15 per cent, respectively (figure 4.13).

In all four regions with data, part-time employment was more common among women than men, with prevalence rates for women almost twice or higher than those of men. In 2012, employed men in Latin America and the Caribbean constituted the highest proportion of part-time workers (13 per cent), followed by developed regions (except Eastern and Southern Europe, 10 per cent). As was the case for women in Eastern and Southern Europe, men's part-time employment was also low in those two regions (figure 4.13).

[^140]Figure 4.13
Proportion of employed people working part-time by region and sex, 2012


Part-time employment continues to increase for men in most countries, but the trend with regard to women is mixed. Between 1995 and 2012, out of 31 countries with available data, part-time employment increased for men in 30 countries. For women, 17 countries showed an increase of parttime employment while 14 countries showed a decrease (figure 4.14). ${ }^{56}$
Particularly high increases were observed for women in Austria, Chile, Ireland, Italy and Turkey. ${ }^{57}$ A large decrease (14 percentage points) in part-time employment during the period was observed for women in Iceland, while a decrease of 8 and 5 percentage points, respectively, was observed for women in Norway and Sweden (figure 4.14).

[^141]
## - Women <br> - Men

Source: Calculated by the United Nations Statistics Division based on (1) data from the OECD, 2014a, Labour market statistics: full-time part-time employment-common definition: incidence. OECD Employment and Labour Market Statistics (database). Doi: 10.1787/ data-00299-en (accessed May 2014); and (2) International Labour Office, 2014b. Key Indicators of the Labour Market, 8th edition, table 9a, (accessed November 2014).
Note: Unweighted averages. Data from the OECD are harmonized based on a common definition of part-time employment, which is based on a common 30 -usual-hour per week cut-off in the main job. Data from the ILO uses a countryspecific approach and the definition of part-time employment may vary from country to country. The numbers in brackets indicate the number of countries with available data. Data for countries in other regions are not shown due to limited data availability. Other developed regions include countries in Northern and Western Europe, as well as Australia, Canada, Japan, New Zealand, and the United States.

Figure 4.14
Proportion of part-time workers among all employed (age 15 years and over), 1995 and 2012, by sex


Part-time employment is not always a choice. A substantial number of part-time workers would prefer to be working full-time. This phenomenon is measured by the time-related underemployment rate. ${ }^{58}$ In four regions with data, more than 10 per cent of employed women working part-time indicated that they would like to work additional hours. Women in Southern Asia recorded the highest rate of time-related underemployment ( 21 per cent), followed by women in Northern Africa (17 per cent), sub-Saharan Africa (16 per cent), and Latin America and the Caribbean (10 per cent). Among employed men working part-time, more than 10 per cent in subSaharan Africa and Southern Asia indicated that they would like to work more hours (figure 4.15).

[^142]Women are more likely than men to be in timerelated underemployment in most regions. The largest gender difference is observed in Northern Africa and Southern Asia. In Northern Africa, women's time-related underemployment rate is 17 per cent, compared to 4 per cent for men. Women in Southern Asia recorded a 21 per cent underemployment rate, compared to 12 per cent for men (figure 4.15).

## 6. Gender pay gap

Differences in pay for men and women may result from a multitude of factors. They include individual characteristics of workers, such as their level and field of education and work experience, as well as factors connected to the job they perform, such as occupation, type of contract, economic sector and size of the establishment in which they work. Gender inequalities in all these areas are associated with traditions and stereotypes (influencing the choice of education, professions and career paths of women and men) and the difficulties in balancing work and family life that often lead to part-time work and career breaks, mainly for women. ${ }^{59}$

## Gender pay gap—levels and trends

A gender pay gap is found in all countries with available data

In all countries with data, women earn less than men. Among 28 European countries that have comparable data on the gender pay gap during the latest period (2008-2012), women working full-time earned between 80 to 90 per cent of what men earned in 19 countries. In four countries (Austria, Germany, Hungary and Slovakia), women's earnings were slightly less than 80 per cent of men's (figure 4.16). ${ }^{60}$
Women also earned less than men in 15 nonEuropean countries with available data. Women working full-time earned between 94 and 98 per

[^143]Figure 4.15
Time-related underemployment rate by sex, 2010-2012 (latest available)


Figure 4.16
Ratio of female-to-male earnings, 2008-2012 (latest available)


Source: Compiled by United Nations Statistics Division based on data from EUROSTAT, 2014, Structure of Earning Survey 2010; International Labour Office,2014a, ILOStat database (accessed August 2014).
Note: Data on European countries were calculated based on hourly earnings for full-time workers, for those working in industry, construction and services but excluding public administration, defence and compulsory social security (based on NACE rev. 2, industry sector classifications); for non-European countries, only data for full-time workers were included.
cent of what men earned in five countries. In nine countries, women's earnings were between 70 per cent and 90 per cent of men's earnings. Finally, the difference in earnings between women and men was largest in Pakistan, where women earned only 63 per cent of what men earned in recent years.

Most developed countries show a long-term decline in the gender pay gap, but the trend has been mixed in recent years

Among the 12 European countries that have comparable trend data on the gender pay gap, no consistent trend from 2007 to 2012 was observed. Some countries showed a slightly decreased gender difference in earnings (for example, Iceland, Lithuania and the Netherlands), while others showed an increased difference (such as Bulgaria, Hungary and Portugal). The largest decline in pay differences between women and men was observed in Lithuania, where women's earnings were 78 per cent those of men's in 2007, and 88 per cent in 2012. The largest increase in gender differences in earnings was recorded in Portugal, where women's earnings were 91 per cent of men's in 2007, dropping to 86 per cent in 2012 (figure 4.17). The other countries with available data, however, did not show a clear trend over the period considered.
Analysis based on a longer time series of data, however, showed an overall downward trend in the gender pay gap for many of the developed countries. Out of 19 countries with data for the periods 1995-1999 and 2009-2013, 17 showed an increase in the ratio of women's earnings relative to men's. The largest increase occurred in Ireland, Japan and the United Kingdom, where the ratio of women's to men's earnings increased by more than 10 percentage points. ${ }^{61}$

[^144]Figure 4.17
Trends in female-to-male earnings, selected European countries, 2007 to 2012

$$
\begin{array}{r}
\text { Iceland } \\
\text { Bulgaria } \\
\text { Lithuania } \\
\text { Hungary } \\
\text { Portugal }
\end{array}
$$

Source: Calculated by United Na tions Statistics Division based on data from EUROSTAT, 2014, Structure of Earning Survey (accessed August 2014).
Note: Earnings ratios are calculated based on hourly earnings for full-time workers, for those working in industry, construction and services but excluding public administration, defence and compulsory social security (based on NACE rev. 2, industry sector classifications).


## Box 4.6

Measuring the gender pay gap
A simple indicator-the ratio of women's to men's earnings-is used in this section to examine the gender pay gap.
Earnings is defined as "remuneration in cash and in kind payable to employees, as a rule at regular intervals, for time worked or work done, as well as for time not worked, such as annual vacation and other paid leave or holidays". Earnings exclude employer contributions to their employees' social security and pension schemes and also the benefits received by employees under those schemes. ${ }^{\text {a }}$
Statistics on earnings are obtained from different sources. ${ }^{b}$ Most developing countries ( 37 out of 51 countries where data were available) rely on labour force or household income and expenditure surveys, while developed countries seem to rely mainly on establishment surveys ( 20 out of 38 countries where data were available). Comparability of earnings data from different sources is affected by the type of workers covered, the inclusion and exclusion of overtime pay, incentive pay, bonuses, payment in kind and other allowances, as well as the unit of time used (per hour, per day, per week or per month). Furthermore, some sources use average earnings while others use wage rates. International comparability is also hampered by differences across countries in the size criterion adopted in their surveys or censuses of establishments. In addition, the average earnings of any particular group such as women are affected by the different elements that make up the group, including women with different educational qualifications and different occupations, and the number of full-time and part-time workers in each group.
Income generated from self-employment, due to scarcity of data, is not included in the analysis. ${ }^{\text {c }}$ In addition, earnings referred to in this section reflect earnings for full-time employment only, to account for the impact of the difference in the number of hours worked by women and men and the difference in average hourly earnings between part-time and full-time workers. This is particularly relevant given that women are more likely to hold part-time jobs than men (see section in this chapter on part-time employment) and that part-time workers tend to have lower hourly earnings than full-time workers.
a International Labour Office, 1973.
b Compiled by the United Nations Statistics Division, based on the International Labour Office, 2014a. ILOStat database (accessed January 2015).
c Only data from 21 countries and areas were available at International Labour Office, 2014a, ILOStat database.

Education increases earnings for both women and men, but the level of benefits varies

Increasing levels of education benefit both women and men in terms of higher earnings, particularly when people move from secondary to tertiary education. The level of benefits in earnings, however, is different for women and men. This has been illustrated by data from European countries. While both women and men make higher earnings when they move from secondary to tertiary levels of education, the improvement in earnings for men is higher than that for women in many European countries. Women seem to benefit more in terms of earnings than men do when they move from primary to secondary levels of education (figure 4.18). ${ }^{62}$ The difference in earnings by field of study might be one contributing factor to the lower returns for women than for men when they both move from secondary to tertiary education. ${ }^{63}$

## Seniority benefits men's earnings more than women's

In addition to education, work experience is another important factor in explaining pay gaps between women and men. ${ }^{64}$ Using seniority as a proxy for work experience shows that work experience benefits men more than women in terms of earnings. The difference in earnings between women and men is smaller at the beginning of their careers in the same company.

[^145]Seniority leads to increased earnings for both women and men. However, the increase benefits men much more than women. The gender pay gap is much larger between women and men at the end of their career, after more than 30 years of working with the same company, than between those at the start of their careers. Exceptions were noticeable in the financial and insurance sector and the information and communication sector, where the gender pay gap that existed when women and men entered the workforce held steady throughout their career and after 30 years of service (figure 4.19).

## Segregation and the gender pay gap

## The gender pay gap persists across all economic sectors and occupations

A gap in earnings between women and men persists across all economic sectors (figure 4.20). However, significant variations are found in the gender pay gap from one industry to another. Based on 2010 data for EU member States, in 15 out of 17 economic sectors, women earned between 70 and 95 per cent of what men earned. Within the manufacturing and financial and insurance industries sectors, women earned 68 and 64 per cent of what men earned, respectively.

Variations are also found within each sector, depending on the occupation a person holds, as illustrated in figure 4.21, which shows the gender difference in earnings for two sectors with the largest gender gap in pay (the financial and insurance and manufacturing sectors), as well as two other sectors (the human health and social work sector and education), where employed women are usually concentrated and have relatively lower gender gaps in earnings.

Among all people who work in the financial and insurance sector, the pay gap between women and men (favouring men) is highest for managers and professionals (women earn around 65 per cent of what men earn), compared to supporting clerks (where women earn 83 per cent of what men earn) (figure 4.21). For the manufacturing sector, the highest gender gap in pay is found among craft and related trade workers, with women earning 55 per cent of what men earn. This is in contrast to supporting clerks, among whom the ratio of women's to men's earnings is 89 per cent.

Figure 4.18
Gains in earnings from increasing educational levels, by sex, European countries, 2010


Source: Calculated by United Nations Statistics Division based on data from EUROSTAT, 2014, Structure of Earning Survey 2010 (accessed July 2014).
Note: Gains in earnings from primary to secondary education is calculated as the ratio of earnings of those with secondary education to those with primary education. Gains in earnings from secondary to tertiary education are calculated as the ratio of earnings of those with tertiary education to those with secondary education. This reflects earnings for full-time workers and for those working in industry, construction and services but excluding public administration, defence and compulsory social security (based on NACE rev. 2, industry sector classifications).

Figure 4.19
Hourly earnings by industrial sector and the number of years in the same company, average of European countries, 2010


Source: Calculated by United Nations Statistics Division based on data from EUROSTAT, 2014, Structure of Earning Survey 2010 (accessed July 2014).
Note: Data cover 27 EU member States, except Croatia, which joined the EU in 2013. Data reflect earnings for fulltime workers and for those working in industry, construction and services but excluding public administration, defence and compulsory social security (based on NACE rev. 2, industry sector classifications).

Figure 4.20
Gender gap in hourly wage by industrial sector, average of European Union, 2010


Source: Calculated by United Nations Statistics Division based on data from EUROSTAT, 2014, Structure of Earning Survey 2010 (accessed July 2014).
Note: Data cover 27 EU member States, except Croatia, which joined the EU in 2013. Data reflect earnings for fulltime workers and for those working in industry, construction and services but excluding public administration, defence and compulsory social security (based on NACE rev. 2, industry sector classifications).

Variations within the two sectors traditionally dominated by women-human health and social work, and education-differ greatly. Within the human health and social work sector, professionals have the highest gender pay gap. Here, women's earnings are only 67 per cent of those of men; among managers, the ratio of women's to men's earnings is 72 per cent. Variations in the gender pay gap within the education sector are smaller across occupations; the ratio of women's to men's earnings range from 80 to 95 per cent.

## The unexplained gender pay gap

As called for by the Beijing Platform for Action, women and men have the right to equal pay for equal work or work of equal value. However, as illustrated in this section, women earn less than men, even when they are equally educated, graduated in the same field, have the same number of years of experience or work on the same type of job. Even when a large number of characteristics are taken into consideration together, pay differentials between women and men may be explained only to a certain degree. ${ }^{65}$ Those that cannot be explained could be attributed to discrimination.

[^146]Discrimination against women is reflected in direct ways such as paying women and men differently when they have the same qualifications and work on the same job. However, indirect discrimination, or traditions and stereotypes about women's role in the society and family, impact women's earnings also through the choice they make in fields of study and later on in their occupations and how they respond to the challenge of work and family life balance. The gender pay gap seems to be particularly wide for occupations that have higher demand on workload, such as on-call, emergency or night shifts performed on a regular basis. ${ }^{66}$

## C. Reconciliation of work and family life

## 1. Sharing unpaid work

Women are the primary caretakers of the family
Although their participation in the labour force has increased in most countries, women continue to bear the majority of responsibilities at home and perform most unpaid work including taking care of children and other adult household members, cooking, cleaning and other housework. These activities, although productive, are not included within the SNA production boundary. ${ }^{67}$

In the statistics on time-use presented in the current chapter, work within the SNA production boundary is referred to as "paid work" (even if some may actually be unpaid, such as work falling within the SNA production boundary performed by contributing family workers). Work that falls outside the SNA production boundary, that is, household production of services for own consumption, is referred to as "unpaid work" and consists mainly of domestic work

[^147]Figure 4.21
Gender gap in hourly wage by industrial sector and occupation, European Union, 2010


Source: Calculated by the United Nations Statistics Division based on data from EUROSTAT, 2014, Structure of Earning Survey 2010 (accessed July 2014).
Note: Data cover 27 EU member states, excluding Croatia, which joined the EU in 2013. Data reflect earnings for full-time workers.
and community or volunteer work. Domestic work includes food preparation, dishwashing, cleaning and upkeep of a dwelling, laundry, ironing, gardening, caring for pets, shopping, installation, servicing and repair of personal and household goods, childcare, and care of the sick, elderly or disabled household members, among others. Community or volunteer work includes volunteer services for organizations, unpaid community work, and informal help to other households, among other activities.

Based on available data, women in developing countries spend, on average, 4 hours and 30 minutes per day on unpaid work, and men 1 hour and 20 minutes. The gender difference is smaller in developed countries, where women spend less time ( 4 hours and 20 minutes) and men spend more time ( 2 hours and 16 minutes) per day on unpaid work than their counterparts in developing countries (figure 4.22).

Based on data for 10 developing and 25 developed countries, gender differences are found in the time spent on major household tasks such as pre-
paring meals, cleaning and caring for household members. Yet, the difference between women and men in time spent on these tasks is smaller in developed countries covered by the analysis than in developing ones. For example, on the task of preparing meals, which is the most time-consuming household task for women, women in the 10 developing countries spend around 1 hour 40 minutes more than men per day, while women in the 25 developed countries spend around 1 hour more per day than men. ${ }^{68}$

[^148]Figure 4.22
Time spent on unpaid work by sex, developing and developed countries, 2005-2013 (latest available)

Source: Calculated by the United Nations Statistics Division based on country-level data from EUROSTAT (2011), OECD (2014c), UNECE (2014), UNECLAC (2014) and national statistics offices (as of August 2015). Note: Unweighted averages. The numbers in brackets indicate the number of countries included in the average.


This divide applies to the other two household tasks considered: cleaning and caring for household members. One exception is time spent on shopping, with men in the nine developing countries with data spending as much time as women on this activity.

> Gender differentials in time spent on unpaid work are narrowing over time

Although women and men still spend vastly different amounts of time per day on unpaid activities, the differentials appear to have decreased over time, as shown by data from various countries (figure 4.23). Variations are found, however, among countries in terms of how the decrease in gender differentials on time spent on unpaid work was reached, the pace of progress as well as the type of activities that contributed to the narrowing gender differentials.
In Norway, for example, the gender difference in time spent on unpaid work decreased from 1 hour and 46 minutes to 50 minutes between 1990 and 2010. However, comparable data from 1970 showed that the narrowing of gender differentials on unpaid work-a decrease of 1.5 hours from 1970 to 1990 -was sharper than the 56 minutes of the later period, mainly due to significantly reduced time women spent on unpaid activities. Men in the same period (1970-1990), on the other hand, did not record much increase in time spent on unpaid work: most of the increase in men's unpaid activities occurred between 2000 and 2010 and was mainly due to an
increase in time spent on caring for household members. ${ }^{69}$
In the United States, time spent by both women and men on unpaid activities declined from 2003 to 2013 and the gender gap narrowed slightly (around 10 minutes) (figure 4.23). Earlier data have shown that in the country, most of the narrowing in the gender difference of time spent on unpaid work was recorded between the mid-1960s and the mid-1990s. During that period, a large reduction in women's time spent on household chores-mainly meal preparation and cooking (almost 2 hours) was accompanied by a small increase in time spent by men on those activities ( 10 additional minutes). ${ }^{70}$ Between 1993 and 2003, there was not much change in time spent on household tasks, but both women and men experienced an increase in time spent on childcare. ${ }^{71}$

The narrowing of gender differences in the time spent on unpaid work is mostly attributable to the decrease in women's time spent on housework. The time spent by both women and men on care for household members, dominated by childcare, has not changed much or has even increased over time. The increasing amount of time spent on childcare was confirmed by a study covering 16 countries (mostly developed) for the period 1971-1998. The study further noted that not only have parents increased the amount of time they spend with children, but that the increase was mainly spent on interactive activities (such as actively playing with children), rather than on passive activities (such as minding them). ${ }^{72}$
In discussions on what contributed to the narrowing of gender differentials in time spent on domestic work, women's economic empowerment, particularly their increased participation in the labour market, seems to have been an important contributing factor. ${ }^{73}$ Additional income from women for their families could make outsourcing domestic services or dining out more affordable. Smaller family size may also be one of the factors contributing to reduced work for women in the family.

[^149]Figure 4.23
Trends in time spent on unpaid work per day, selected countries


Box 4.7
Time-use statistics: Interpretation and comparability

Time-use surveys collect information on a set of activities people engage in during a specific period of time. These activities include those that are paid or for profit (such as time spent at work), unpaid work (such as cleaning, cooking, caring for household members), and personal activities (such as sleeping and eating). From a gender perspective, time-use surveys provide uniquely important data not only on the time spent on domestic work but also on the total workload, including both domestic work and work for pay or profit.
Data on time-use may be summarized and presented as either "participant averages" or "population averages". In the participant average, the total time spent by the individuals who performed an activity is divided by the number of persons who performed it (participants). In the population average, the total time is divided by the total relevant population (or a sub-group thereof), regardless of whether people performed the activity or not. In this chapter, all statistics presented on time spent in various activities are population averages. Population averages can be used to compare groups and assess changes over time. Differences among groups or over time may be due to a difference (or change) in the proportion of those participating in the specific activity or a difference (or change) in the amount of time spent by participants, or both.
When time spent is expressed as an average per day, it is averaged over seven days of the week (weekdays and weekends are not differentiated). Thus, for paid work, a five-day work week averaging seven hours per day would show up as an average of five hours of paid work per day ( 35 hours divided by 7 days).
International comparability of time-use statistics is limited, however, by a number of factors, including:

- Diary versus stylized time-use survey. Data on time-use can be collected through a 24 -hour diary or stylized questionnaire. With diaries, respondents are asked to report on what activity they were performing when they started the day, what activity followed, and the time that activity began and ended, and so forth through the 24 hours of the day. Stylized time-use questions ask respondents to recall the amount of time they allocated to a certain activity over a specified period, such as a day or week. Often, stylized time-use questions are attached as a module to a multipurpose household survey. The 24-hour diary method yields better results than the stylized method but is a more expensive mode of data collection. Data obtained from these two different data collection methods are not comparable.
- Time-use activity classification. As much as possible, the analysis in this section has been based on the trial International Classification of Activities for Timeuse Statistics (ICATUS), a according to which paid and unpaid work are delineated by the SNA production boundary. National classifications of time-use activities may differ from the trial ICATUS, resulting in data that are not comparable across countries.
- Activities related to unpaid care. Time-use data presented refer to the "main activity" only. Any "secondary activity" performed simultaneously with the main activity is not reflected in the average times shown. For instance, a woman may be cooking and looking after a child simultaneously. For countries reporting cooking as the main activity, time spent caring for children is not accounted for and reflected in the statistics. This may affect international comparability of data on time spent caring for children; it may also underestimate the time women spend on this activity.

Source: Compiled by the United Nations Statistics Division based on country-level data from EUROSTAT (2011), OECD (2014c), UNECE (2014), UNECLAC (2014), and national statistics offices (as at August 2015).

Women

- Men

The role of government, in terms of providing social services such as affordable childcare and offering incentives for men such as paternity leave, is important in determining how much time family members, women in particular, spend on unpaid work for their households. For example, the reduction of time women spent on domestic work was much faster in Denmark, Norway and Sweden than in other countries. In these Scandinavian countries, social equality is considered to be a major goal of public policy and many familyfriendly social services are available. ${ }^{74}$

## 2. Combining family responsibilities with employment

Women work longer hours each day than men when unpaid work is factored in

Time-use surveys and studies collect information on time spent on various activities, including paid work. On average, women spend less time on paid work than men. However, when the hours of paid and unpaid work are combined, women work longer hours per day than men, in both developing and developed countries (figure 4.24). Women in developing countries spend a total of 7 hours and 9 minutes per day on paid and unpaid work, while men spend 6 hours and 16 minutes per day. Women in developed countries spend 6 hours and 45 minutes per day on paid and unpaid work ( 25 minutes less than women in developing countries), while men spend around 6 hours and 12 minutes per day. The gender difference in total working hoursincluding paid and unpaid work-is slightly smaller in developed than in developing countries: around 30 minutes in comparison to 50 minutes, respectively (figure 4.24).

Balancing work and family life is particularly challenging for employed women

On average, employed women in the 23 developing countries with data spend 9 hours and 20 minutes per day on paid and unpaid work. Employed men in those countries spend 8 hours and 7 minutes per day, which is about 1 hour and 10 minutes less than women (figure 4.25).

[^150]Figure 4.24
Time spent on paid and unpaid work by sex, developing and developed countries, 2005-2013 (latest available)


Source: Calculated by the United Nations Statistics Division based on country-level data from EUROSTAT (2011), OECD (2014c), UNECE (2014), UNECLAC (2014), and national statistics offices (as of June 2015).
Note: Unweighted averages. The numbers in brackets indicate the number of countries included in the average.

Figure 4.25
Time spent on paid and unpaid work by persons employed, by sex, 2005-2013 (latest available)


Source: Calculated by the United Nations Statistics Division based on country-level data from UNECE (2014) and national statistics offices (as at August 2015).
Note: Unweighted averages. The numbers in brackets indicate the number of countries averaged.

Employed women and men in the 23 developed countries with data spend less time than their counterpart in developing countries. Women spend, on average, 8 hours and 9 minutes, while men spend 7 hours and 36 minutes per day on paid and unpaid work.
The gender difference in total working time for people who are employed is smaller in developed countries (slightly more than 30 minutes per day) than in developing ones (about 1 hour and 10 minutes). However, the gender division
of labour between paid and unpaid work still exists among all countries reviewed. Employed women spend more time than men on unpaid work (such as cooking, cleaning and caring for children), while employed men spend more time than women on paid work.

## 3. Maternity and paternity leave and related benefits

Maternity protection is a fundamental human right and an important element of policies aimed at balancing the participation of women and men in family and work life. Maternity protection covers various aspects, including the prevention of exposure to health and safety hazards during and after pregnancy; entitlement to paid maternity leave and breastfeeding breaks; maternal and child health care; protection against discrimination in employment and occupation, including with respect to recruitment and dismissal; and the guaranteed right to return to the job after maternity leave.
Maternity protection not only contributes to the health and well-being of mothers and babies; it also promotes effective gender equality at work. Three maternity protection conventions were adopted by the International Labour Organization (ILO) in 1919, 1952 and 2000. The latest one is the Maternity Protection Convention (No. 183), adopted in 2000, which stipulates that women should be entitled to no less than 14 weeks of maternity leave, with paid cash benefits of at least two thirds of their previous earnings. ${ }^{75}$
Many countries have adopted maternity and paternity benefits through legislation. Both mothers and fathers benefit from the legislation. However, the coverage is not universal. Workers in specific sectors or categories of employment (defined by working-time, type of contract, etc.) are often explicitly excluded from maternity and paternity benefits in legislation in many countries. More specifically, workers such as paid domestic workers, own-account workers and contributing family workers, casual and temporary workers, and agricultural workers are usually not eligible for maternity and paternity benefits.

[^151]
## Maternity leave

Over half of countries offer at least 14 weeks maternity leave; the proportion has increased over the past 20 years

In 2013, more than half ( 53 per cent) of the 174 countries with available data offered 14 weeks minimum statutory (that is, specified in national laws and regulations) maternity leave, as recommended by ILO Convention No. 183.

All countries in the Caucasus and Central Asia, and Eastern and Southern Europe offer at least 14 weeks of maternity leave. Most countries in the other developed regions also follow the Convention. The length of statutory maternity leave is shorter than 14 weeks for many countries in other regions. In Eastern Asia and sub-Saharan Africa, for example, between 40 and 50 per cent of countries offer 14 weeks or more of maternity leave. In other regions, namely, Latin America and the Caribbean, Northern Africa and Western Asia, Oceania, Southern Asia and South-Eastern Asia, less than 30 per cent of countries offer at least 14 weeks for maternity leave (figure 4.26).
From 1994 to 2013, the number of countries offering 14 weeks minimum statutory maternity leave increased from 38 to 53 per cent. In Eastern Europe and the Caucasus and Central Asia, 75 per cent of countries specified at least 14 weeks of maternity leave in 1994, and all countries currently offer 14 weeks at a minimum. For developed regions (excluding Eastern Europe), countries having at least 14 weeks of maternity leave increased from 77 to above 90 per cent. Improvements were also made in Africa, Asia, Latin America and the Caribbean, Northern Africa and Western Asia. ${ }^{76}$

## Fewer than half of countries meet the criteria set by ILO Convention No. 183 on maternity leave benefits

The ILO Convention No. 183 specifies that women should be granted paid cash benefits of at least two thirds of their previous earnings for at least 14 weeks of maternity leave. Out of 174 countries that have information on maternity leave, 83 ( 48 per cent) met the criteria set by the Convention in 2013, including all countries in Eastern Europe and the Caucasus and Central Asia (100 per cent). The proportion of countries that meet the criteria is slightly lower in Southern

76 International Labour Office, 2014c.

Figure 4.26
Distribution of countries with maternity leave provisions by length of leave and by region, 2013

$$
\begin{array}{r}
14 \text { weeks or more } \\
12 \text { to } 13 \text { weeks } \\
\text { Less than } 12 \text { weeks }
\end{array}
$$

Source: Calculated by the United Nations Statistics Division using data from the International Labour Office, 2014c, Maternity and Paternity at Work: Law and Practice across the World.
Note: Other developed regions include countries in Northern and Western Europe, as well as Australia, Canada, Japan, New Zealand, and the United States.


Figure 4.27
Maternity leave duration and cash benefits by region, 2013

Source: Calculated by the United Nations Statistics Division, based on data from International Labour Office, 2014c, Maternity and Paternity at Work: Law and Practice across the World.
Note: Other developed regions include countries in Northern and Western Europe, as well as Australia, Canada, Japan, New Zealand, and the United States.

(b) Distribution of countries by sources of cash benefits for maternity leave by region, 2013


Employer liability only


Europe (92 per cent) and other developed regions (79 per cent). The proportion of countries meeting the required criteria is much lower in developing regions, ranging from 50 per cent in Eastern Asia to 0 per cent in Oceania (a). Only two countries do not have legal provisions on cash benefits for maternity leave: Papua New Guinea and the United States.

The source of cash benefits for maternity leave is also significant. Using social security or social insurance instead of having employers bear the cost for paying such benefits should reduce discrimination against women, especially those of reproductive age in the labour market. In 2013, all countries in Eastern Europe and the Caucasus and Central Asia covered cash ben-
efits for maternity leave through social insurance schemes. The percentage of such countries was lower in Southern Europe ( 92 per cent) and other developed regions ( 83 per cent). The percentage was much lower in the other regions, at 60 per cent or less. Twenty-eight countries fund maternity leave cash benefits through a combination of social security and employer contributions, among which nine are in Latin America and the Caribbean and in sub-Saharan Africa, respectively (figure 4.27b).

## Paternity leave

## Paternity leave is becoming more common

Paternity leave, in general, is a short period of leave for the father immediately following the birth of his child. It is intended to encourage fathers to assist mothers in recovering from childbirth to take care of the newborn and other children, and to attend to other family-related responsibilities. A recent OECD study carried out for four countries-Australia, Denmark, the United Kingdom and the United Stateshas shown that fathers who take leave around the birth of their child, especially those taking two weeks or more, are more likely to engage in childcare-related activities when the children are young. ${ }^{77}$

In 2013, out of 163 countries with available data, 78 (48 per cent) had provisions on paternity leave. Southern Europe and the other developed regions have the highest proportion of countries with such provisions ( 80 per cent and 63 per cent, respectively). More than half of subSaharan African countries ( 53 per cent) offer paternity leave. Very few countries in Southern Asia offer paternity leave (14 per cent), and no country in Oceania has a provision on paternity leave. In other regions, the prevalence of paternity leave ranges from between 30 and 50 per cent (figure 4.28).

Paternity leave is becoming more common: The proportion of countries with such leave provisions has increased from 27 per cent in 1994 to 48 per cent in 2013. Countries in Southern Europe and the other developed regions also witnessed an increase in the length of time granted for paternity leave. In 2013, 19 countries in those two regions offered seven days or more, compared to five countries in 1994. ${ }^{78}$

The duration of statutory paternity leave varies from one day to more than two weeks, mostly paid. Among the 78 countries that provide paternity leave in 2013, 69 offer cash benefits. In more than half ( 44 countries), cash benefits are covered by employers only. One major issue in discussing paternity leave is the difference between statutory paternity leave and the actual rates of fathers

Figure 4.28
Proportion of countries with paternity leave provisions by length of leave and region, 2013


[^152][^153]
## 1 to 6 days <br> - No paternity leave

Source: Calculated by United Nations Statistics Division, based on data from International Labour Office, 2014c, Maternity and Paternity at Work: Law and Practice across the World.
Note: Paternity leave as referred to here includes both dedicated paternity leave and general family leave. These two bear different weight when considering a father's involvement after the birth of a child. General family leave may be used for other family events and not necessarily used for the birth of a child. Other developed regions include countries in Northern and Western Europe, as well as Australia, Canada, Japan, New Zealand, and the United States.
taking that leave. Data are not available to show cross-country comparisons on paternity leave take-up rates. However, as discussed in the case of maternity leave, cash benefits paid by social security systems rather than by employers not
only help reduce potential employment discrimination against fathers with family responsibilities but also help improve the take-up rates for paternity leave.

## Chapter 5

## Power and decision-making

## Key findings

- The number of female Heads of State or Government reached 19 in 2015, only seven more than in 1995.
- Women's representation in lower or single houses of parliament has increased, yet globally only about one in every five of parliamentarians is a woman.
- Around 30 per cent of electoral candidates in lower or single houses of parliament are women.
- Women's representation among cabinet ministers increased from 6 per cent in 1994 to 18 per cent in 2015.
- Women's participation in local government has grown in many countries, yet remains far from parity.
- Women are outnumbered by men among judges and magistrates in about half of the countries with data. At higher levels up the judicial hierarchy, women's representation declines drastically.
- The media remains a male-dominated industry that reinforces gender stereotypes.
- The glass ceiling appears to be most impenetrable in the world's largest corporations; less than 4 per cent of Chief Executive Officers (CEOs) are women and the gender composition of executive boards of private companies is far from parity.


## Introduction

In societies around the world, men typically hold most positions of power and decision-making, an area in which gender inequality is often severe and highly visible. Advances over the past two decades are evident in all regions and most countries, but progress has been slow. Women continue to be underrepresented in national parliaments. They are seldom leaders of major political parties, participate as candidates in elections in small numbers and, during electoral processes, face multiple obstacles deeply rooted in inequality in gender norms and expectations. The use by some countries of gender quotas has improved women's chances of being elected. Yet, once elected, few women reach the higher echelons of parliamentary hierarchies.

Women are also largely excluded from executive branches of government, and female Heads of State or Government are still the exception. Only a minority of women are appointed as ministers and, when they are, they are usually not assigned
to core ministries (such as to the cabinet of the prime minister, or to ministries of home affairs, finance, defence and justice). Women continue to be outnumbered by men in the highest-ranking positions in the civil service. They are not equally represented among government ambassadors and representatives to the United Nations, nor in local government. The underrepresentation of women is even more extreme in the private sector. The glass ceiling appears to be most impenetrable in the largest corporations, which are still essentially male dominated, particularly at the level of CEO.

This chapter provides an assessment of the current situation in the participation of women and men in positions of power and decision-making across the world, as well as trends over the past two decades. Three main areas are covered: politics and governance, the media, and the private sector.

## Box 5.1

Gaps in statistics on women in positions of power and decision-making

Women's representation in positions of power and decision-making in public office, corporations and the media has garnered growing attention over the past two decades. Moreover, data for monitoring progress in these areas are also increasingly available. The most readily available information on decision-making relates to the number and proportion of women in national parliaments and key elected positions, collected under the auspices of the Inter-Parliamentary Union (IPU). For instance, the number of countries from which data on women's representation in lower or single houses of parliament were available increased from 167 in 1997 to 190 in 2015. ${ }^{\text {a }}$ Data on women's representation in ministerial positions were available for 181 countries in 1994 and 192 countries in 2015. ${ }^{\text {b }}$
For other topics, data are available for fewer countries. For example, as at March 2015, sexdisaggregated data on candidates in the latest parliamentary elections, compiled by the IPU, are available for $99^{c}$ countries compared to 65 countries in $2010^{\mathrm{d}}$. Sex-disaggregated data, as at April 2015, on the number of female judges and magistrates, compiled annually by the United Nations Office on Drugs and Crime (UNODC), are available for 76 countries. ${ }^{\text {e }}$
Data on power and decision-making are also collected by regional organizations for their member States. The European Commission, for example, regularly monitors the numbers of men and women in key decision-making positions for the 28 countries of the European Union (EU), as well as candidate countries (such as Iceland, Serbia, the former Yugoslav Republic of Macedonia and Turkey) and two other European countries (Liechtenstein and Norway) ${ }^{\text {f. Indicators main- }}$ tained in its database cover positions in politics, public administration, the judiciary, business and finance, social partners and non-governmental organizations (NGOs), environment and the media. The United Nations Economic Commission for Europe (UNECE) also maintains indicators on positions of decision-making in public life and the private sector for its Member States. ${ }^{9}$ The United Nations Economic Commission for Latin America and the Caribbean (UNECLAC) maintains indicators on autonomy in decision-making in the Gender Equality Observatory for Latin America and the Caribbean ${ }^{h}$, as well as indicators on women in power and decision-making in

CEPALSTAT (Statistics on Latin America and the Caribbean). ${ }^{\text {i }}$ Data are available from 1998 to 2013 for countries in Latin America and the Caribbean, as well as for some countries in Europe such as Portugal and Spain.
Consistently measuring the participation of women in local governments across countries and regions remains a challenge, since internationally agreed standards, definitions and indicators for monitoring this area are yet to be developed. Moreover, local government structures vary from one country to the next. Depending on the region or country, data collected may differ in the level or type of positions taken into consideration, and the metadata needed to understand those differences are often missing. Currently, data on participation in local governments are regularly collected and maintained by some regional agencies only, including by the European Commission and UNECE for Europe and by UNECLAC for Latin America and the Caribbean. All together, these sources provided data on mayors for 59 countries and on city or town councils for 55 countries in Europe and Latin America and the Caribbean. ${ }^{j}$ In Asia and Oceania, information on the percentage of subnational (all tiers of government below national level) women's representation has been published in ad hoc regional reports prepared by the United Nations Development Programme (UNDP) and is available for 29 countries. ${ }^{\text {k }}$ The United Nations Economic and Social Commission for Western Asia (UNESCWA) produced the electronic publication "Gender in Figures" in 2011, 2013 and 2013-2014, and in the latest edition', published data on women in local councils or municipalities for eight countries in Northern Africa and Western Asia.

At the international level, official data also tend to be sparse on women's access to high-level deci-sion-making positions in the media and the private sector. Statistics and analysis on these topics are based in large part on private and NGO sources. Most of the indicators for measuring the participation of women in power and decisionmaking focus on their individual participation. However, women's collective action is of equal importance if women's issues are going to be taken into consideration by policy makers. ${ }^{m}$ Yet, the measurement of collective action is challenging as the concept is broad and requires many different aspects to be measured.

## A. Politics and governance

Equal participation of women and men in politics is central to more inclusive and democratic governance. As stated in the Universal Declaration of Human Rights, "everyone has the right to take part in the government of his country, directly or through freely chosen representatives." ${ }^{1,2}$ Greater representation of women in national and local government can bring a different perspective on women's needs and priorities when framing national and local policies and allocating budgets. The election of women to parliament can be a first step towards gender-sensitive reforms. In some contexts, greater representation of women in public decision-making has already been associated with policy and budgetary shifts. For instance, a study conducted in 2006-2008 among parliamentarians from 110 countries showed that women in parliament were more likely than men to prioritize gender and social issues such as childcare, equal pay, parental leave, pensions, reproductive rights and protection against gender-based violence. ${ }^{3}$

## 1. Parliaments

Women's representation in parliament has increased, yet globally only about one in five members of parliament are female

Although women make up about half of the electorate and have attained the right to vote and hold office in almost every country in the world, ${ }^{4}$ they continue to be underrepresented as members of national parliaments. Improvement in the representation of women in this domain has been steady, but there is still a long way to go. The proportion of seats held by women in single or lower chambers of national parliaments ${ }^{5}$ was

[^154]22 per cent in 2015, almost double the level recorded in 1997 ( 12 per cent). ${ }^{6}$

The share of women in parliament has increased steadily in most subregions (figure 5.1). In 2015, it was highest in the Caribbean, followed by developed regions, Latin America, Northern Africa and sub-Saharan Africa. All subregions in Asia and Oceania were below the global average. The lowest share of women in parliament continues to be found in Oceania, although minor improvements have been noted over time. Eastern Asia, which used to have one of the highest shares of women in single or lower houses of parliament in 1990, has made little progress and, in 2015, was below the global average.

A small number of countries have reached or surpassed the parity line of 50 percent. Since 2003, the record for women's representation in a national parliament is no longer held by any of the Nordic countries, which have been leading on this issue for decades. ${ }^{7}$ Instead, Rwanda is presently ranked as number one ( 64 per cent). Other countries or areas ranking high in the representation of women in parliament are Bolivia (53 per cent), Andorra ( 50 per cent) and Cuba (49 per cent). They are followed by a group of countries with representation by women ranging from 40 to 44 per cent and include Ecuador, Finland, Iceland, Mozambique, Namibia, Norway, Senegal, Seychelles, South Africa, Spain and Sweden. All these countries have reached and surpassed the international target of 30 per cent of women in leadership positions originally set by the United Nations Economic and Social Council (ECOSOC) in $1990^{8}$ and reaffirmed in the Beijing Platform for Action in 1995. ${ }^{9}$ In 2015, a total of 43 out of 190 countries reached or surpassed this target. These countries cut across all levels of economic development and democratic freedoms and liberties. Most of them are located in the three regions that progressed the most over the past two decades in terms of meeting the target: the developed regions (18 countries), sub-Saharan Africa (12 countries), and Latin America and the Caribbean ( 9 countries). At the other extreme, 70 countries (or close to one third of all countries with parliaments) have less than 15 per cent participation of women in the lower or single houses of national

[^155]Figure 5.1
Proportion of seats held by women in single or lower houses of parliament, by region as at January 2015


Source: United Nations, Millennium Development Goals 2015: Statistical annex (2015c), http://mdgs.un.org/unsd/mdg/Resources/Static/Products/Progress2015/Statannex.pdf (accessed 14 July 2015).
parliaments. In five of those countries, all with a relatively small population size, no women were represented as at January 2015 (Micronesia, Palau, Qatar, Tonga and Vanuatu).

## Factors affecting women's representation in parliament

Less women candidates, party dynamics favouring men, political interest and knowledge may explain women's lower participation in parliaments

Several factors may explain differences in the share of women in national parliaments across countries and over time, including: the use of legislated and voluntary party gender quotas; the representation of women in high-level positions in political parties; the supply of electoral candidates; equal access to resources in election campaigns; and gender differences in political interest and knowledge, along with gender perceptions and stereotypes.

## a. Gender quotas

Gender quotas aim to reverse discrimination in law and practice and to level the playing field for women in politics. They are numerical targets that stipulate the number or percentage of women that must be included in a candidate list or the number of seats to be allocated to women in a legislature. Gender quotas may be mandated in the constitution, stipulated in a country's national legislation, or formulated in a political party statute. Typically, three types of electoral quotas are used, the first two being legislated quotas (constitutional and/or legislative) and the third one voluntary: (a) reserved seats-reserves a number of seats for women in a legislative assembly; (b) legislated candidate quotas-reserves a number of places on electoral lists for female candidates; and (c) voluntary party quotas-refers to targets voluntarily adopted by political parties to include a certain percentage of women as candidates in elections. ${ }^{10}$

[^156]Gender quotas are more often used in countries in Africa and Latin America and the Caribbean

Gender quotas are increasingly used to improve women's representation in parliament. ${ }^{11}$ As at 2015, 74 countries had implemented some form of legislated gender quotas for single or lower houses of national parliaments. Reserved seats are used in 20 countries, all in developing regions. This type of quota is most often implemented in sub-Saharan Africa (11 countries). Legislated candidate quotas are the most frequently used type of quota, both in developing regions (36 countries) and developed regions ( 13 countries). They are most often used in Latin America and the Caribbean and sub-Saharan Africa. In five countries, both reserved seats and legislated candidate quotas are used (Algeria, Iraq, Kenya, Mauritania and Rwanda ${ }^{12}$ ). Finally, voluntary party quotas are used alone in 37 countries ${ }^{13}$ and in combination to legislated quotas in an additional 17 countries. In total, voluntary party quotas are used by 54 countries, 26 in developed regions and 28 in developing regions.

## Overall, countries using gender quotas have a higher representation of women in parliament

Overall, countries with any type of gender quota have higher proportions of seats held by women in lower or single houses of parliament -26 per cent for countries with voluntary party quotas, 25 per cent for countries using legislated candidate quotas and 23 per cent for countries using reserved seats, compared to only 16 per cent in countries without any type of quota (figure 5.2).

[^157]Figure 5.2
Proportion of seats held by women in single or lower houses of parliaments by the type of gender quota, as at 13 March 2015


Among the 43 countries with at least 30 per cent of representation of women in the lower or single house of the parliament, 36 ( 84 per cent) have implemented some type of gender quotas: 18 have legislated candidate quotas; 4 have reserved seats; 2 have both, reserved seats and legislated candidate quotas; and 12 have voluntary political party quotas. At the other extreme, among 39 countries with 10 per cent or less of representation of women in the lower or single house of parliament, 28 (72 per cent) have no gender quotas implemented.

Gender quotas have improved women's representation in
national parliaments in post-conflict settings
The success of Rwanda in achieving the highest proportion of women ever recorded by a parliamentary chamber (64 per cent in 2015) is based on the electoral framework adopted after the 1994 genocide in that country. Under the framework, women's political representation is envisioned as one of the pillars of post-conflict reconstruction and reconciliation. ${ }^{14}$ The electoral system in Rwanda provides for legislated quotas, both in terms of reserved seats ( 24 reserved seats out of 80 members in the Chamber of Deputies) and legislated candidate quotas ( 30 per cent women candidates for the 53 openly contested seats). ${ }^{15}$ In the 2013 elections, women took the 24 seats reserved by the Chamber of Deputies for women, 26 of the 53 openly contested seats, and one of the two seats reserved for youth. ${ }^{16}$

[^158]
## - Global average

Source: Compiled and calculated by the United Nations Statistics Division from data obtained from International IDEA and others, Quota project: global database of quotas for women. www.quotaproject. org/ (accessed 13 March 2015); International IDEA, IPU (Inter-Parliamentary Union) and Stockholm University, 2013. Atlas of Electoral Gender Quotas. Geneva: IPU; United Nations Millennium Development Goals indicators database, http://mdgs.un.org/unsd/ mdg/Default.aspx (accessed 14 July 2015).
Note: Numbers in parenthesis indicate the number of countries reflected in the analysis. For the purpose of this analysis, countries using voluntary party quotas combined with legislated quotas were classified under legislated quotas. The weighted average of the proportions of seats held by women in the five countries with both reserved seats and legislated candidate quotas is 29 per cent. Georgia, where supplementary public funding incentives are implemented, has a proportion of 11 per cent.

A number of other countries have also used the post-conflict reconstruction process to introduce stronger equality and non-discrimination provisions in women's political participation and representation rights, including through gender quotas. This has been the case, for example, in South Africa, as well as in Afghanistan, Bosnia and Herzegovina, Iraq, Kyrgyzstan, Libya, Serbia, the former Yugoslav Republic of Macedonia and Timor-Leste. ${ }^{17}$

## Recently implemented gender quotas are fast-tracking women's representation in national parliaments

In recent years, gains in women's representation in single or lower houses of parliament have been linked to the implementation of legislated or voluntary party quotas during elections. ${ }^{18}$ Some of the largest gains were observed in Africa, including in Algeria (from 8 per cent in 2012 to 32 per cent in 2013), Senegal ( 23 per cent in 2012 to 43 per cent in 2013), South Africa ( 33 per cent in 2009 to 45 per cent in 2010) and Zimbabwe (15 per cent in 2013 to 32 per cent in 2014). ${ }^{19}$ On the other hand, in Egypt, the revocation of quota legislation in the run-up to the 2011 election resulted in a decrease of women's representation, from 13 per cent in 2010 to 2 per cent in 2011. ${ }^{20}$
It is important to note, however, that the impact of quotas may vary depending on the electoral system. ${ }^{21}$ Gender quotas are more difficult to implement in "majority electoral systems" or singlewinner systems. Typically in these systems each party nominates a single candidate per district and women get to compete directly with men in their constituencies. In such cases, political parties tend not to field women candidates, or to field them in constituencies where the party is less likely to succeed. By comparison, electoral systems based on "proportional representation" are more favourable to the use of legislated candidate quotas. This allows more women to be in-

[^159]cluded in the list of candidates from a party and to eventually win a seat in the parliament. ${ }^{22}$

Furthermore, gender quotas are more effective when they include specific, measurable numerical targets; are accompanied by rules on the fair placement of women on candidate lists; and are enforced by sanctions for non-compliance with the law. Only 57 per cent of countries and territories that have legislated candidate quotas have instituted sanctions for non-compliance with the provisions of the law and only 13 per cent provide for financial sanction. ${ }^{23}$

## b. Political parties

## Women are underrepresented in senior positions

of major political parties
Gender equality in politics requires that women participate as equal members with men in political parties. Political parties are instrumental in forming future political leaders and supporting them throughout the election process. In particular, they are responsible for drawing up candidate lists, implementing legislated candidate quotas and taking up voluntary party quotas.

Yet political parties are still male-dominated at the highest levels. For instance, in European countries, only a few political parties have women as their leaders. In 2014, ${ }^{24}$ women represented only 13 per cent of all leaders of major parties ${ }^{25}$ in the 28 countries of the EU. In half of the EU countries, no woman leads a major political party. Among the countries with a better representation of women were Germany ( 3 in 7 party leaders), Denmark (2 in 6), Croatia ( 1 in 3) and the Netherlands (2 in 7). Other European countries with a high representation of women among party leaders included Norway (3 in 6) and Iceland (2 in 5). ${ }^{26}$
Similarly, in Latin American countries, few women hold senior positions in the organizational structures of political parties. On average, in 2009, women made up approximately 50 per cent of active party members in the seven countries for which data are available, but only 16 per cent of party presidents or secretaries-

[^160]general. ${ }^{27}$ Women also occupied only 19 per cent of the seats on national executive committees of the parties, where they were relegated to the least powerful positions. Men generally held the most senior or powerful positions, including president, secretary-general, economic secretary, and programming secretary, while women held less influential positions, including minutes secretary, archivists, or director of training or culture. This lack of gender balance in the structure of political parties was also reflected in the candidate lists offered to voters. On average, only one in every four candidates, and one in every seventh first-ranking candidates was a woman. ${ }^{28}$

## c. Electoral systems and candidates

Women are less than 20 per cent of candidates in political elections in most developing countries

Generally, the low proportion of seats held by women in lower or single houses of parliament is a reflection of the low share of female candidates in elections (figure 5.3). This means that an insufficient number of women candidates run for national parliament. Sex-disaggregated data on candidates for the lower or single house of parliament in 99 countries with available data show that on average 28 per cent of candidates are women. ${ }^{29}$ Among these countries, 55 have proportions lower than 20 per cent, mostly in developing regions. In Oceania, shares of women among electoral candidates lower than 10 per cent are common, with the exception of Fiji (18 per cent in the September 2014 elections) and Tonga ( 15 per cent in the November 2014 elections). In developed regions, the share of women among electoral candidates is higher than 20 per cent, except for Japan ( 17 per cent in the December 2014 elections) and Ireland ( 16 per cent in the February 2011 elections). Belgium and Cuba have the highest share of women among candidates at 49 per cent. They are followed by a group of countries with shares between 40 and 47 per cent: Tunisia ( 47 per cent), Sweden and Namibia (45 per cent), Poland (44 per cent), Andorra (43 per cent), Iceland (42 per cent) and France and Norway (40 per cent each).

[^161]Figure 5.3
Share of women among candidates for the lower or single houses of parliament in the latest election year, by the proportion of seats held by women in the lower or single house and by region, 2015


Female candidates are less likely than male candidates to win elections

In some countries, the low proportion of women in parliament is related not just to the lower proportion of female candidates but also to the lower election rates of women candidates compared to men candidates. For instance, out of 36 elections held in 35 countries for the lower or single house of parliament in 2011 or 2012, men had higher election rates than women in 18 elections, while only 10 had election rates higher for women than men. In the remaining eight elections, the rates were equal between women and men. ${ }^{30}$

## d. Gender norms and expectations

Gender norms and expectations drastically reduce the pool of female candidates even before elections begin. Women often report less interest and knowledge in politics than men. For example, data on interest in politics for 57 countries or areas conducting World Values Surveys in 2010-2014 show that men ( 52 per cent) are more likely than women ( 42 per cent) to be interested in politics, by 10 percentage points on average. The largest differences, of at least 19 percentage points, are noted in Poland, Tunisia, Turkey, Zimbabwe and the State of Palestine. The lowest differences, of 5 percentage points or less, but still to the advantage of men, were noted in Bahrain, Colombia,

30 IPU, 2011c and IPU 2013.

Ecuador, Jordan, Kyrgyzstan, Mexico, the Philippines, Ukraine, Uruguay and Yemen. ${ }^{31}$ Other research in 10 countries (most of them in developed regions) found that, in all of them, lower proportions of women than men were able to correctly answer questions on domestic and international news related to politics and economics. ${ }^{32}$
After women decide to run for office and are nominated by their parties, they face obstacles that may diminish their chances of being elected. For example, despite improvements in public attitudes towards gender equality, ${ }^{33}$ strong gender stereotypes about women not being as good as men in positions of political leadership persist around the world. In the last round of the 'World Values Survey' people were asked whether they agreed with the statement that, on the whole, men make better political leaders than women. Answers varied greatly from country to country. At one extreme were Egypt, Ghana, Jordan, Qatar and Yemen, where more than 80 per cent of people agreed with the statement. At the other extreme, were the Netherlands, Sweden and Uruguay, where 11 per cent or less of people agreed with that statement. ${ }^{34,35}$

Another obstacle to the election of women to political office is gender bias in media coverage. For instance, a study on media coverage during the 2009 and 2010 elections in Bolivia, Chile, Costa Rica, Colombia and the Dominican Republic ${ }^{36}$ showed that women candidates were allocated less time and space in the media than their male counterparts-in particular, time related to programmatic issues-and were subject to a higher negative bias in coverage. Lack of media coverage of women candidates was also noted in countries in other regions. ${ }^{37}$ A survey of daily election stories in the United Republic of Tanzania, for instance, revealed that men politicians dominated as both subjects and sources of election stories. In Sudan, there were reports that women were

[^162]losing out in terms of media coverage; and in Bosnia and Herzegovina, while photographs of women candidates were common, their opinions were rarely published. ${ }^{38}$

Table 5.1
Countries with a woman presiding over the lower or single house of parliament or upper house or senate, by region as at 1 January 2015

| Lower or single house | Upper house |
| :---: | :---: |
| Africa |  |
| Botswana | Equatorial Guinea |
| Mauritius | Gabon |
| Mozambique | South Africa |
| Rwanda | Swaziland |
| South Africa | Zimbabwe |
| Uganda |  |
| United Republic of Tanzania |  |
| Asia |  |
| Bangladesh |  |
| India |  |
| Lao People's Democratic Republic |  |
| Singapore |  |
| Turkmenistan |  |
| Latin America and the Caribbean |  |
| Bolivia | Antigua and Barbuda |
| Dominica | Bahamas |
| Ecuador | Barbados |
| Peru | Chile |
| Suriname | Dominican Republic |
| Oceania |  |
| Fiji |  |
| Developed regions |  |
| Australia | Austria |
| Austria | Belgium |
| Bosnia and Herzegovina | Netherlands |
| Bulgaria | Russian Federation |
| Italy | United Kingdom |
| Latvia |  |
| Lithuania |  |
| Netherlands |  |
| Portugal |  |
| Serbia |  |

Source: IPU and UN Women, 2015; IPU, 2015b.
Note: Out of a total 267 parliamentary chambers (lower or single and upper houses), two have an additional 2 speakers and three have 1 additional speaker, for a total of 274 speakers.

38 Ibid.

## Women in positions of parliamentary leadership

Once elected, women parliamentarians need to hold positions of power and authority and participate in committee work if they are to influence policy direction. They also need to be positive role models for other women, work to change parliamentary procedures and, ultimately, support women's rights and pursue gender equality. Nevertheless, few women in politics reach the higher echelons of parliamentary hierarchies, particularly at the top levels as president or speaker of the house. In 2015, women presided over the lower or single houses of parliament in only 28 out of 191 countries (or 15 per cent), and over the upper house or senate in only 15 out of 76 countries ( 20 per cent) (table 5.1). The highest concentration of female presiding officers was found in developed regions, followed by sub-Saharan Africa. At the opposite end of the spectrum, developing countries in Oceania, the region with the lowest share of women in parliament, have only one woman presiding in parliament (in Fiji). Developing countries in Asia have no women presiding in the upper house (or senate).

Women's representation among committee chairs in parliament remains low and confined to social affairs

Committees are smaller forums of parliamentarians where members investigate the workability of legislation and government policy and make recommendations to the broader parliamentary arena. An IPU survey on parliaments conducted in 2009 and 2010 showed that men represented the majority of committee members in almost all portfolio areas, in accordance with their numerical dominance in parliament. The only exceptions were committees on women's affairs and gender equality. There, women represented 57 per cent of committee members. Although not the majority, women were found relatively more often in committees related to social affairs. Globally, the share of women in committees related to family, children, youth, older persons and persons with disabilities was 40 per cent. In education, the share was 30 per cent, and in health, 35 per cent. In other committees, women constituted between 16 and 20 per cent of members. In terms of leadership, women constituted approximately 21 per cent of committee chairs of the parliaments surveyed, and 23 per cent of deputy chair positions. Consistent with the overall composition of committees, women were most commonly chairs of committees on women/gen-
der issues or social policy. About half of women chairs were leading committees on social affairs, family and culture, and a third on legislative, justice and human rights. Women have not been completely absent as chairs of commissions traditionally held by men, including committees on the economy or foreign affairs, although their presence has been infrequent. ${ }^{39}$

## 2. Executive branch

## Heads of State or Government

Very few women get to the top position of power within their government. As at March 2015, only 10 out of 152 elected Heads of State worldwide were women, and only 14 of 194 governments were headed by women (table 5.2). ${ }^{40}$ The total number of countries with a female Head of State or Government was 19, a slight improvement over the 12 countries in 1995. ${ }^{41}$ The vast majority of countries headed by women were from Latin America and the Caribbean and from developed regions.

Table 5.2
Countries with a female Head of State and/or Government by region, as at 17 March 2015

| Head of State | Head of Government |
| :--- | :--- |
| Africa |  |
| Central African Republic |  |
| Liberia | Liberia |
| Asia | Bangladesh |
| Republic Of Korea | Argentina |
| Latin America and the Caribbean |  |
| Argentina | Chile |
| Brazil | Jamaica |
| Chile | Peru |
| Trinidad and Tobago |  |
| Developed regions | Denmark |
| Croatia | Germany |
| Lithuania | Latvia |
| Malta | Norway |

39 IPU, 2011a.
40 United Nations Protocol and Liaison Service website. www.un.int/protocol/sites/www.un.int/files/Protocol\%20 and\%20Liaison\%20Service/hspmfm.pdf, accessed on 19 March 2015.
41 United Nations, 2010b and IPU, 2006.

Source: Compiled by the United Nations Statistics Division from the United Nations Protocol and Liaison Service website. www.un.int/ protocol/sites/www.un.int/files/ Protocol\%20and\%20Liaison\%20 Service/hspmfm.pdf (accessed 19 March 2015).
Note: Only elected Heads of State have been considered. Countries with King or Queens, GovernorGenerals or Sultans are excluded in the count of Heads of State.

## Ministers

Women continue to be underrepresented in cabinet appointments in all regions of the world. The cabinet-also called council of government, government, or council of ministers-is a group of senior officials who provide advice to the Head of State and/or Government. Globally, the share of women among cabinet ministers was 18 per cent in 2015. ${ }^{42}$ Although low, it represents important progress since 1994, when the average share was 6 per cent. ${ }^{43}$

Progress among regions over the past decade has been uneven (figure 5.4) and the highest level of representation of women among ministers reached by the developed regions was only 25 per cent followed by Latin America at 23 per cent. The share of women among ministers remained low, at 15 per cent or less, in all regions of Asia, Northern Africa and Oceania.

Between 1994 and 2015, the number of countries with no female minister declined notably, from 59 countries ${ }^{44}$ to eight. Over the same period, the number of countries with 30 per cent
or more women among ministers increased from five countries to 31 . In 2015, only three regions have countries reaching the 30 per cent threshold: the developed regions ( 18 countries), subSaharan Africa (8 countries), and Latin America and the Caribbean ( 5 countries). At the country level, only 5 countries have reached or surpassed gender parity among cabinet ministers: Finland ( 63 per cent), Cabo Verde ( 53 per cent), Sweden (52), France and Liechtenstein (50 per cent each). These countries are closely followed by Nicaragua, Norway and Netherlands (47 per cent each).

In 2015, at the global level, most of female appointed ministers were assigned portfolios related to social issues such as: social affairs; environment, natural resources and energy; women's affairs and gender equality; family, children, youth, older persons and persons with disabilities; and education. By comparison, fewer female ministers had portfolios related to finance and the budget, and the economy and development. ${ }^{45}$ More detailed data available for selected regions ${ }^{46}$ show that, overall, women continued to

Figure 5.4
Share of women among ministers by region, 2005-2015


Source: Compiled and calculated by the United Nations Statistics Division from the information available in IPU and United Nations Division for the Advancement of Women, Women in Politics (2005, 2008, 2010 editions) and IPU and UN Women, Women in Politics (2012, 2014 and 2015 editions). Note: Data as at 1 January of corresponding year.

[^163][^164]be underrepresented among core ministers, including the cabinet of the prime minister, and in the Ministries of Home Affairs, Foreign Affairs, Finance, Defence and Justice. There were no women among core ministers in five out of seven countries with available data in the Caucasus and Central Asia and in 15 out of 38 countries with available data in developed regions. On the other hand, women were represented among core ministers in the highest numbers in Denmark, Finland and Norway (3 out of 6), Switzerland (3 out of 7) and Sweden (2 out of 5).

## Civil service

Women are underrepresented among senior-level civil servants

Women also tend to be underrepresented among senior-level civil servants, ${ }^{47}$ including government administrators, administrators at intergovernmental organizations, ambassadors and consul-generals. The latest available data between 2006 and 2013 for 24 developed countries on sen-ior-level civil servants indicate that the share of women in those posts ranges widely, from 16 to 77 per cent. The lowest shares of women (below 30 per cent) are observed, in ascending order, in Luxembourg ( 16 per cent), Belgium (17 per cent), Ireland (19 per cent), Denmark and Norway ( 22 per cent), France ( 23 per cent) and Netherlands ( 26 per cent). The highest shares of women (above 60 per cent) are found, in descending order, in Hungary (77 per cent), Russian Federation ( 62 per cent) and Bulgaria ( 61 per cent). ${ }^{48}$
Women are particularly underrepresented among the highest-ranking civil servants, including chief statisticians, governors and board members of central banks, ambassadors and permanent representatives to the United Nations.

> A quarter of national statistical offices worldwide are headed by women

A particularly high-ranking administrative position in a country is that of chief statistician, the person in charge of the government entity responsible for producing official statistics. Worldwide,

[^165]as at 20 March 2015, 47 of 190 national statistical offices ( 25 per cent) had a woman as chief statistician. ${ }^{49}$ Women chief statisticians were more common in Latin America and the Caribbean (39 per cent) and in the developed regions ( 33 per cent). Oceania is the only region with no woman among heads of national statistical offices (figure 5.5).

Figure 5.5
Proportion and list of countries or areas where the national statistical office (NSO) is headed by a woman, by region


Source: United Nations Statistics Division, Contacts database (accessed 20 March 2015). Note: Numbers in parentheses indicate the total number of countries in the region.

Women remain excluded
from central banks decision-making
Central banks, the entities responsible for overseeing a country's monetary system, are dominated by men. Worldwide, as at 3 August 2015, only 14 out of 176 central banks ( 8 per cent) for which data were available had a woman as governor: five in developed regions (Cyprus, Russian Federation, Serbia, Ukraine and the United States); four in sub-Saharan Africa (Botswana, Lesotho, Sao Tome and Principe and Seychelles); and the remaining five in other developing regions (Bahamas, Malaysia, Maldives, Samoa and the State of Palestine). ${ }^{50}$

[^166]Sex disaggregated data on the membership of the boards of central banks in 158 countries with available data show that on average 24 per cent of the members are women. The representation of women ranges widely, from zero per cent (in 50 out of 158 countries) to 75 per cent in Lesotho where there are 6 women out of 8 members. In addition to Lesotho, only 10 more countries have reached or surpassed parity: Swaziland ( 63 per cent), Jamaica (57 per cent), Albania ( 56 per cent), and Fiji, Israel, Namibia, Rwanda, Sao Tome and Principe, Suriname and the former Yugoslav Republic of Macedonia ( 50 per cent each). ${ }^{51}$

Finally, in 2014, women were underrepresented in key institutions of global economic governance. The share of women among the membership of boards of directors for selected intergovernmental and private financial and regulatory
institutions such as the International Monetary Fund (IMF), the World Bank, the Bank for International Settlements, and the International Organization of Securities Commissions ranged from 4 to 20 per cent. ${ }^{52}$

## Women and men do not equally represent their governments at the international level

Male ambassadors outnumber female ambassadors in all countries for which data are available. In most of these countries, the share of female ambassadors is lower than 30 percent. The few exceptions include Finland, Germany, Slovenia and Sweden, where the share of female ambassadors is between 30 and 46 per cent. ${ }^{53}$ Permanent representatives to the United Nations at UN Headquarters are also mainly men. Women held this position in only 40 out of 194 countries as at 11 March

## Box 5.2

Women and men in the United Nations
Women are underrepresented among
senior professionals and managers within
the United Nations system

United Nations staff members are yet another category of civil servants in which women are underrepresented at the higher levels. The Beijing Platform for Action called on the United

Share of women among professional staff in the United Nations System, as of 25 April 2014

Source: Compiled by the United Nations Statistics Division from the United Nations System Chief Executives Board for Coordination (CEB) website, http://unsceb.org/con-tent/hr-statistics-tables (accessed 25 April 2014) and from its reports on personnel statistics from 2001, 2011, 2012 and 2013 (UN documents: CEB/2003/HLCM/22, CEB/2012/ HLCM/HR/16, CEB/2013/HLCM/ HR/12 and CEB/2014/HLCM/HR/21). Note: Senior management refers to grade levels D-2 and above; senior professionals to levels D-1 and P-5; mid-level professionals to levels P -4 and $\mathrm{P}-3$; and junior professionals to levels $\mathrm{P}-2$ and $\mathrm{P}-1$.
a United Nations, 1995a.
b United Nations, 2014b.


- All levels

Nations to implement specific employment policies to achieve overall gender equality at the professional level and above by 2000, which was also the target date set for women to hold 50 per cent of managerial and decision-making positions in the United Nations. ${ }^{\text {a }}$ As shown in the figure, women's participation among the professional staff of the UN system has grown steadily. In 2013, women represented 42 per cent of all UN professional staff (31,244 total staff), compared to 32 per cent in 1997 (15,192 total staff).
Women's representation is high at the junior professional level (57 per cent), but has not reached parity at any of the higher levels. Women's representation decreases as levels of decision-making and responsibility increase. They represent only 34 per cent of senior professionals and 29 per cent of senior managers. At the very top of the hierarchy, no woman has been appointed Secretary-General of the United Nations since its establishment in 1945.
The pattern of underrepresentation of women in senior management positions is observed across UN agencies, with the exception of UN Women, where the majority of staff are women and, regardless of the level, the shares of women among professionals are always higher than 60 per cent. ${ }^{\text {b }}$

European Commission, 2015a; and official websites from central banks (accessed August 2015).
51 Ibid.

52 UN Women, 2015.
53 UNECE, 2015 (database accessed20 March 2015).
2015. ${ }^{54}$ The developed regions have the highest absolute number of countries represented by women at the United Nations ( 11 out of 50 countries), followed by Asia ( 10 out of 45 countries) and Latin America and the Caribbean (9 out of 33 countries). Finally, women rarely hold the position of President of the General Assembly, the main organ of the United Nations where deliberations and multilateral discussions on international issues take place. Out of the 114 Assembly sessions (including special and emergency special sessions) held since 1946, only four were led by a woman as president (in 1953, 1969 and two in 2006, one regular and one emergency special session). ${ }^{55}$

## 3. The judiciary

## National courts

As at April 2015, women's representation in the judiciary varied widely across countries. Among the 76 countries with available data, the share of women among judges and magistrates varied from less than a quarter in Armenia, Azerbaijan, Japan, Nigeria, the Russian Federation, Tajikistan, Togo and the United Kingdom to more than three quarters in Jamaica, Latvia, Saint Kitts and Nevis and Slovenia. Overall, women are outnumbered by men in about half of countries. ${ }^{56}$

However, women's representation declines at higher levels up the judicial hierarchy. The situation is less positive for women judges in the Supreme Court, the apex of judicial power within the national judiciary. Currently, women represent the same or a higher share than men among Supreme Court judges in only a few countries and areas. This is the case, for example, in Bulgaria, Latvia, Luxembourg, Romania, Serbia, Slovakia and the former Yugoslav Republic of Macedonia (out of 34 countries with data in Europe) and in Anguilla, Antigua and Barbuda, Barbados, British Virgin Islands, Dominica, Grenada, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname and Venezuela (out of 36 countries and areas with data in Latin America and the Caribbean). ${ }^{57}$

[^167]Box 5.3
Women in decision-making roles in UN conflict resolution and peace-building

The United Nations Security Council resolution 1325 (2000) on women and peace and security urges Member States to "ensure increased representation of women at all decision-making levels in national, regional and international institutions and mechanisms for the prevention, management, and resolution of conflicts". It also encourages the United Nations SecretaryGeneral to "implement his strategic plan of action (A/49/587) calling for an increase in the participation of women at decision-making levels in conflict resolution and peace processes", ${ }^{\text {a }}$ among others. The Commission on the Status of Women adopted agreed conclusions on the equal participation of women and men in all the decision-making processes at all levels in 1997 and 2006 and on women's equal participation in conflict prevention, management and resolution and in post-conflict peace-building in 1998 and 2004. ${ }^{\text {b }}$ However, these decisions have yet to be fully implemented. A set of 26 indicators to monitor the implementation of resolution 1325 (2000) was designed in 2010 ( $\mathrm{S} / 2010 / 498$ ). ${ }^{\text {. }}$

According to the latest report of the Secretary General on women and peace and security ( $\mathrm{S} / 2014 / 693$ ), women are still underrepresented at decision-making levels in conflict resolution and peace processes. For example, in the 33 countries and territories reviewed in the report, women held on average 31 per cent of leadership positions in 2013, compared to 27 per cent in 2012 across 13 national human rights institutions and one ombudsperson institution. In 2013, in eight of 11 formal mediation processes, at least one negotiating delegate was a woman, compared with six of nine processes in 2012.

The situation is more severe when looking at the heads of field missions. As at 31 December 2013, women headed five out of a total of 27 (19 per cent) active UN field missions, compared with four ( 15 per cent) in 2012 and six ( 21 per cent) in 2011. ${ }^{\text {d }}$ In peacekeeping missions, women's share of senior positions ${ }^{\mathrm{e}}$ has not changed since 2011, remaining at 21 per cent.

As for missions' military experts, the share of women has remained at 4 per cent over the period 2009-2014. Over the same period, the share of women among troops was at a low 3 per cent. In the case of police officers, the number of women police officers involved in peacekeeping missions rose from 9 per cent in 2009 to 16 per cent in 2014 . ${ }^{f}$
a United Nations, 2000b. Resolution 1325. S/RES/1325 (2000).
b UN Women, 2014.
c United Nations, 2010a.
d In Côted'Ivoire, Cyprus, Haiti, Liberia and South Sudanall peacekeeping missions.
e Senior positions refers to levels P-5 to D-2.
f United Nations, 2014e.

In Europe, 37 per cent of all Supreme Court members in the 28 EU countries were women in 2014, twice as high as in 2003, when the share was 19 per cent. In all European countries, there was at least one woman on the Supreme Court. The lowest share of women among judges on the Supreme Court was in the United Kingdom, at only 8 per cent (1 out of 12). Higher up the judicial hierarchy, only 8 out of the 28 EU countries ( 28 per cent) had a female president of the Supreme Court in 2014, ${ }^{58}$ almost 10 percentage points higher than the global figure ( 19 per cent, based on a review of 171 countries with data). ${ }^{59}$ Among other countries in the developed regions, women represented one third of judges in the Supreme Court of the United States (headed by a male president) and almost half in Canada (where a woman also presided).

In Latin America, the share of female judges on the Supreme Court was 26 per cent in 2013. That was three times as high as in 1998, as most countries in the region have shown steady progress. Nevertheless, Panama and Uruguay still reported no female judges in the Supreme Court in $2013 .{ }^{60}$

## International courts and tribunals

Women's representation in international courts remains limited. For instance, women are underrepresented among members of European courts and tribunals. Two courts and one tribunal have been established within the EU: the European Court of Justice, the General Court and the Civil Service Tribunal. In addition, the European Court of Human Rights serves all 47 member States of the Council of Europe. The representation of women in these European judiciary bodies has remained relatively stable, although still far from parity, since 2007, with the highest representation recorded in 2014 ( 38 per cent) in the European Court of Human Rights (table 5.3). Furthermore, no woman has ever presided over any of these regional courts and tribunals. As for other international courts, in 2015, women represented 56 per cent of members of the International Criminal Court, while no woman was among the members of the Caribbean Court of Justice and the Inter-American Court of Human Rights (table 5.3).

Table 5.3
Number and share of women among judges in international and regional courts

Source: 2006 data obtained from the United Nations Development Fund for Women (UNIFEM), Progress of the World's Women 2008/2009 (2009), p. 79; 2015 data obtained from the International Court of Justice website, the International Criminal Court website, the International Tribunal for the Law of the Sea website, the Caribbean Court of Justice website, the Andean Court of Justice website and the Inter-American Court of Human Rights website (all accessed 18 February 2015).

* European Commission, Database on women and men in deci-sion-making. http://ec.europa.eu/ justice/gender-equality/gender-decision-making/database/index_ en.htm (accessed 11 March 2015). Data refer to 2007 and 2014.

|  | 2006/07 |  |  | 2014/15 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Women | Total | Percentage of women (\%) | Number of Women | Total | Percentage of women (\%) |
| International |  |  |  |  |  |  |
| International Court of Justice | 1 | 15 | 7 | 3 | 15 | 20 |
| International Criminal Court | 7 | 18 | 39 | 9 | 16 | 56 |
| International Tribunal for the Law of the Sea | 0 | 21 | 0 | 1 | 21 | 5 |
| Regional |  |  |  |  |  |  |
| Caribbean Court of Justice | 1 | 7 | 14 | 0 | 6 | 0 |
| Andean Court of Justice | 1 | 4 | 25 | 2 | 4 | 50 |
| Inter-American Court of Human Rights | 1 | 7 | 14 | 0 | 7 | 0 |
| European Civil Service Tribunal* | 1 | 7 | 14 | 1 | 7 | 14 |
| European Court of Human Rights* | 14 | 45 | 31 | 18 | 47 | 38 |
| European Court of Justice* | 6 | 35 | 17 | 5 | 28 | 18 |
| European General Court* | 7 | 27 | 26 | 6 | 28 | 21 |

[^168]
## 4. Local government

Women's participation in decision-making positions in local government is a first step in ensuring that their needs, priorities and perspectives are taken into account in local policies and budget allocations. A comparative analysis in 13 countries in Asia and Oceania found that women in local governments focus more on social issues (such as health services, poverty alleviation and community development) and have a different management style (being more inclusive, collaborative and consultative and people oriented). ${ }^{61}$ Furthermore, another study in India found that female panchayat (local governing council) heads tend to prioritize issues surrounding the provision of drinking water while male heads tend to place more emphasis on irrigations systems. ${ }^{62}$

Fewer women than men hold elected positions in local government in all countries with available data (see Box 5.1 in this chapter). Elected positions in local government include mainly mayors and councillors of municipalities or their equivalent, although in some cases all tiers of government at the subnational level are taken into account. ${ }^{63}$ In the 28 EU countries, for example, only 14 per cent of mayors or other leaders of municipal councils were women in 2013. Among all European countries with available data, the lowest share of women among mayors was observed in Cyprus and Liechtenstein, where there were no women elected mayors, and in Greece, Romania and Serbia, where less than 5 per cent of all mayors were women. At the opposite extreme, Iceland and Sweden were the only two European countries with more than a 30 per cent share of women among mayors. ${ }^{64}$

Women also tend to be mayors of smaller municipalities. In Italy, in 2012, for example, there were very few women mayors in municipalities with a population larger than 60,000. As the size of the municipalities declined, the percentage of those with a female mayor increased. The highest percentage of municipalities with a female mayor was observed in those with a population of less than 2,000. ${ }^{65}$ A similar pattern was observed

[^169]in the United States, where, as at January 2015, only 245 (or 18 per cent) of the 1,392 mayors of cities with populations over 30 thousands were women. Among this group of female mayors, one oversees a city of over 2 million and another a city of 1.3 million people. The 243 remaining women are mayors of cities with populations between 30,000 and 750,000. ${ }^{66}$
In European countries, women have a higher representation among municipal councillors than mayors. The share of women among members of municipal councils in the 28 EU countries was 32 per cent on average in 2013. The lowest share was observed in Greece, at 16 per cent. There were 10 European countries in which at least 30 per cent of local councillors were women, with Iceland and Sweden reaching shares of 40 and 43 per cent, respectively. ${ }^{67}$
Women are also outnumbered by men in local governments in Latin America and the Caribbean, despite significant progress in many countries (figure 5.6). Within the region, all countries have less than 30 per cent of elected female mayors, except Nicaragua, which stands out with 40 per cent of women among elected mayors, after a surge of over 30 percentage points between 1998 and 2013. Other countries making strong advances in the share of women mayors include Cuba and Uruguay (figure 5.6). Overall, women's representation among councillors was higher, and improved more than that among mayors. Yet, only Bolivia and Dominica slightly surpassed the 40 per cent share of women among elected city councillors, and six countries surpassed the 30 per cent threshold.

In Asia and Oceania, ${ }^{68}$ women's representation in local government ${ }^{69}$ is below 40 per cent in all countries and areas with available data. India, Niue and Nauru have the highest share of women among elected local government members ( 37 per cent), followed by China ( 32 per cent) and Australia ( 30 per cent). The lowest shares of women (less than 5 per cent) are observed in

[^170]Kiribati, Sri Lanka, the Solomon Islands, Tonga and Tuvalu.

In Western Asia, four out of six countries with data have proportions of women in local councils or municipalities higher than 20 per cent, with Iraq and Jordan at the top of the list with 25 per cent. In Northern Africa, where only data for two countries are available, Morocco stands at 12 per cent, and Egypt at 5 per cent. ${ }^{70}$

Figure 5.6
Share of women among elected mayors, Latin America and the Caribbean, as at 11 August 2014

| Nicaragua $(1998,2013)$ <br> Cuba (2004, 2013) |  |
| ---: | :--- |

Source: UNECLAC, CEPALSTAT: databases and statistical publications, estadisticas.cepal.org/cepalstat/WEB_CEPALSTAT/estadisticasIndicadores.asp?idioma=i (accessed 20 March 2015).
Note: Figures in parentheses indicate the years for which data are plotted. The starting point of the arrow represents the level at the earliest year and the arrow head indicates the level at the latest year.

## B. The media

The media play a key role in shaping public opinions and attitudes. The Beijing Platform for Action recognizes the importance of women's expression and decision-making in and through the media, and of balancing clichéd portrayals of women in the media with non-stereotypical roles. ${ }^{71}$ Still, 20 years after the Platform for Action was endorsed by governments, the media remain a male-dominated industry that reinforces gender stereotypes.

[^171]Gender stereotypes are perpetuated through the media

Gender stereotypes of women continue to be reinforced by the media. For instance, a study of 120 films produced by 11 countries ${ }^{72}$ and released between January 2010 and May 2013 highlighted striking differences in the depiction of women and men. ${ }^{73}$ The proportions of women who were thin, partially or fully naked, and dressed in sexually revealing attire more than doubled those of men portrayed in these ways. Comments about appearance were also directed five times as often to women as to men.

The study also showed a gender bias in the portrayal of women's and men's occupations; 69 per cent of male characters were employed compared to 47 per cent of female characters. Women were less often portrayed than men as working in the fields of science, technology, engineering and mathematics. Out of 121 characters identified with a job in these fields, only 12 per cent were women. Female characters in these films were also less likely to hold executive positions in the corporate world. Out of the 127 political officials, legislators and leaders, only 12 ( 9 per cent) were portrayed by women. Similarly, only 11 per cent (6 out of 53) of the executives, developers and investors were female characters.

The study ${ }^{74}$ found that films directed by women had more girls and women on screen than those without a female director or writer, suggesting that some of the gender bias in selecting and depicting a film's main characters may be partially linked to the continued male dominate of the film industry. In the study mentioned above, men represented an estimated 93 per cent of directors, 80 per cent of filmmakers, 80 per cent of writers and 77 per cent of producers.

Films are not the only media dominated by men. A study of 7,000 opinion articles in 10 media out-

[^172]lets over a 12 -week period between September and December 2011 showed that the vast majority were produced by men. Only 33 per cent of total articles in the Huffington Post and Salon, 20 per cent in the New York Times, Washington Post, Los Angeles Times and the Wall Street Journal, and 38 per cent of college media such as Columbia, Harvard, Princeton and Yale Universities were written by women. Nevertheless, some improvement in women's contributions to op-ed writing was noted between 2005 and 2011. For example, in the Wall Street Journal, the percentage of op-eds written by women increased from 10 to 19 per cent. In spite of the progress, a breakdown of contributions by subject reveals that women continue to author higher proportions of articles on subjects that women have traditionally written about, including gender, food, family, style and health, than men. ${ }^{75}$ The underrepresentation of women among writers and the gender segregation by type of topic were also noted in the production of online material ${ }^{76}$ and in other studies. ${ }^{77}$

The news media in general is dominated by men at all occupational levels. Overall, women represented an estimated 35 per cent of the news workforce in 2008-2010, as shown by a study of women and men in the news media covering 522 organizations (including newspapers, radio and television stations) in 59 countries. ${ }^{78}$ The study found that women represented 36 per cent of junior-level professionals (including junior or assistant writers, producers, sub-editors, and correspondent and production assistants). The share increased to 41 per cent among senior-level professionals (including senior writers, anchors and producers). Still, the representation of women diminished at higher levels of power and decisionmaking. Women held only 27 per cent of the top management jobs and 26 per cent of seats on the boards of news companies. ${ }^{79}$
The findings above are supported by more recent data on 49 publicly-owned broadcasting organizations (television, radio and news agencies operating at the national level) in EU countries. In 2014, women represented 30 per cent of executive directors and 32 per cent of non-executive direc-

[^173]tors. They also represented 31 per cent of board members. At the very top level of power and de-cision-making, women held only nine out of 49 positions ( 18 per cent) as board president and six out of 48 ( 13 per cent) as chief executive officer. ${ }^{80}$

Gender differences are often observed in employment conditions in the news media industry. Higher proportions of men are full-time regular employees, whereas higher proportions of women are part-time regular employees or hold part-time contracts. ${ }^{81}$

## C. The private sector

Women's underrepresentation in top positions in the private sector is increasingly perceived not only as a fairness and equality issue but also as a performance issue, since some studies show that gender diversity within corporate management is associated with improved performance. ${ }^{82}$ Yet, women remain a minority among senior managers in the private sector. Some of the main obstacles to women's representation in managerial positions are linked to less favourable employment conditions, including the exclusion of part-time workers and irregular workers from career advancement, and inequality in sharing domestic and family responsibilities (see Chapter 4 on Work). A study showed that while women and men have similar ambitions to become top managers, women are less likely to perceive that they can succeed in doing so. ${ }^{83}$ This is consistent with persistent gender stereotypes among the general population. The World Values Survey asked people for the 2010-2014 round whether they agreed with the statement that, on the whole, men made better business executives than women. The proportion of the population sharing this opinion ranged widely-from 8 per cent in the Netherlands and Sweden to 80 per cent in Egypt-showing that some countries still lagged behind in terms of attitudes and values towards gender equality. ${ }^{84}$

[^174]
## 1. Managers

As shown in Chapter 4 on Work, women are less likely than men to be employed, and when employed, are less likely than men to hold managerial positions. Figure 5.7 also illustrates this point. The latest data from 59 countries show that the share of women in senior- and middle-level management positions, including both corporate managers and legislators and senior officials, ${ }^{85}$ is not only far below 50 per cent, but also much lower than the overall share of women in employment. Only about half of the 59 countries with data on women in managerial positions have shares of 30 per cent or above. Countries with more than 40 per cent are, in ascending order, the Philippines, Latvia, El Salvador, Aruba, Belarus, the Dominican Republic and Panama. At the other extreme, countries with shares of less than 20 per cent are, in descending order, Cyprus, Liberia, Turkey, State of Palestine, Luxembourg and Cambodia.
The share of women in managerial positions, however, has increased since 1995 in many countries. Among the 25 countries with available trend data, 19 showed an increase in women's share in managerial positions. Five countries recorded an increase of at least 10 percentage points, namely, Denmark, Greece, Slovenia, Spain and Switzer-

Figure 5.7
Share of women in employment and in senior and middle management, 2009-2013 (latest available)


Source: Compiled by the United Nations Statistics Division based on data in Minimum set of gender indicators database, indicator 45 (last accessed February 2015) and International Labour Office, 2014. Key Indicators of the Labour Market, 8th edition, table 2a (accessed October 2014).
Note: Data refer to employment under ISCO-88 categories 11 (legislators and senior officials) and 12 (corporate managers). ISCO88 sub-major group 13-general managers-is not included in the calculation of this indicator since it mainly includes general managers of small enterprises.


85 Data cover senior managers from the public and private sectors. Data refer to employment under ISCO-88 categories 11 (legislators and senior officials) and 12 (corporate managers). ISCO-88 sub-major group 13-general managers-is not included in the calculation of this indicator since it mainly includes general managers of small enterprises.
land. In five out of six countries experiencing a decrease in women's share of managerial positions, the magnitude of the decrease was small ( 3 percentage points or less). The only exception was Hungary, which recorded a decline of 31 percentage points between 1995 and 2013.

## 2. Executive boards

The share of women among corporate board members of large companies remains very low, despite the increasing number of countries passing legislation on the issue. For instance, among the 43 countries with data compiled by Catalyst, ${ }^{86}$ Norway has the highest proportion of seats held by women on executive boards (41 per cent). Two neighbouring countries, Finland and Sweden, follow at some distance (both at 27 per cent). The shares of women on corporate boards in 7 out of 15 countries in Asia, mainly Western Asia, are the lowest (below 2 per cent) among countries with available data. Among them are Qatar, Saudi Arabia and the United Arab Emirates, with 1 per cent or fewer women on corporate boards. ${ }^{87}$ Figures on women's representation among the chairs of corporate boards are even more discouraging. Of 42 countries with data, only eight (Israel, Italy, New Zealand, Poland, South Africa, Sweden, Turkey and the Philippines) have women at the helm of at least 5 per cent of their corporate boards.
Here again, some progress has been noted. Data compiled by Credit Suisse ${ }^{88}$ on a selected set of 2,360 companies in 46 countries around the world showed an increase in the proportion of corporate boards with at least one woman member (from 41 per cent in 2005 to 59 per cent by end 2011). The Credit Suisse report attributes this increase to government intervention. For example, in the five years preceding the report, seven countries passed legislation mandating female board representation and eight set non-mandatory targets. In general, developed countries lead the list of countries with the highest proportions of companies with one or more women on their executive boards. In Finland, Israel and Sweden, for example, all companies included in the Credit Suisse database had at least one woman on their corporate boards in 2011. The share was around

[^175]90 per cent for companies in Australia, Denmark, France, Norway, South Africa and Spain (figure 5.8).

Figure 5.8
Proportion of companies with at least one woman on their executive board in 2005 and 2011, by country


Source: Credit Suisse AG Research Institute, Gender Diversity and Corporate Performance, (2012).
Note: The starting point of the arrow indicates the proportion of companies with at least one woman on the board in 2005, and the arrowhead indicates the level in 2011. Numbers in parentheses indicate the number of companies reflected in the analysis.

The number of women on corporate boards varies by the economic sector in which the company operates (figure 5.9). The highest proportion of companies ( 23 per cent) with three or more women on their boards is observed in the "consumer staples" sector, followed by "utilities" and "telecommuni-
cations services" (each with 18 per cent). "Materials" and "information technology" are the sectors with the highest proportion of companies ( 53 per cent) having no women as board members, followed by "industrials" ( 48 per cent) and "energy" (47 per cent). In general, sectors that are closer to final consumer demand have a higher proportion of women among board members. ${ }^{89}$

Figure 5.9
Distribution of companies by number of women on their corporate board, by economic sector (end-2011)


Some countries have considered adopting regulations regarding women's representation among executive board members in private companies. A number of them in Europe, for example (Austria, Belgium, Denmark, Finland, France, Germany, Luxembourg, the Netherlands, Poland, Spain, Sweden, and the United Kingdom) have adopted self-regulations regarding the gender composition of boards. ${ }^{90}$ In the United Kingdom, "the government has asked FTSE $100^{91}$ companies to aim for a minimum of 25 per cent female board representation by 2015."92 Legislation adopted in July 2011 in Italy, which requires publicly listed and state owned companies to have at least one third of the under-represented gender on both management and supervisory boards by 2015, helped double the proportion of women on the boards of Italian companies between October 2011 and October 2012 (from 6 per cent to 11 per cent). In Iceland, legislation introduced in 2010 set a deadline of September 2013 for companies with more than 50 employ-

89 Ibid.
90 European Commission. Women on boards Factsheets 2 Gender Equality in the Member States.
91 The FTSE 100 is a share index of the 100 largest companies listed on the London Stock Exchange (LSE) . 92 Credit Suisse AG-Research Institute, 2012.
ees to have at least 40 per cent of each gender on their board. By October 2012, the proportion of women on the boards of Iceland's largest companies had reached 36 per cent, an increase of 16 percentage points over the previous year. ${ }^{93}$ Furthermore, the European Commission, with support from the European Parliament and a number of member States, recently proposed a target of 40 per cent of each sex as non-executive directors by 2020. In November 2013, the European Parliament voted to back the proposed directive, which as of January 2015 was under discussion by the EU Council. ${ }^{94}$

Examples of countries considering gender quotas for managerial positions are also found in developing regions. In Malaysia, all public and limited liability companies with over 250 employees are required to have at least 30 per cent women on their boards or in senior management positions by $2016 .{ }^{95}$

## 3. Chief executive officers

## Women chief executives are uncommon

in the private sector
Very few women are able to reach the position of CEO. At the global level, data confirm that the glass ceiling remains most impenetrable in the largest corporations, which are still essentially male domains. In 2014, fewer than 4 per cent of CEOs heading the world's 500 leading corporations were women. ${ }^{96}$ Data for 2014 on women and men in managerial positions in 613 companies within the 28 EU countries illustrate how women's representation in decision-making positions within the private sector diminishes at the highest levels of power and authority. On average, women represented 21 per cent of non-executive directors. Their representation dropped to 13 per cent at the level of executive directors and plunged to 3 per cent of CEOs. ${ }^{97}$
Women remain severely underrepresented in the highest decision-making positions within the private sector in developed regions. The situation is unlikely to be more encouraging in developing regions, although not enough data exist to confirm or refute this. Compared to the underrepresentation of women in top leadership and decision-making positions in the government, judiciary and civil service, the situation in the private sector is even more extreme.

[^176]
## Chapter 6

## Violence against women

## Key findings

- Women across the world, regardless of income, age or education, are subject to physical, sexual, psychological and economic violence.
- Experience of violence can lead to long term physical, mental and emotional health problems; in the most extreme cases, violence against women can lead to death.
- Intimate partner violence accounts for the majority of women's experience of violence.
- Prevalence of sexual violence is lower than that of physical violence, however, in intimate relationships they are often experienced together.
- Attitudes towards violence are starting to change-in almost all countries where information for more than one year is available, the level of both women's and men's acceptance of violence decreased over time.
- In the 29 countries in Africa and the Middle East where the practice is concentrated, more than 125 million girls and women alive today have been subjected to female genital mutilation.
- In the majority of countries, less than half of the women who experienced violence sought help of any sort, and among those who did, most looked to family and friends as opposed to the police and health services.
- At least 119 countries have passed laws on domestic violence, 125 have laws on sexual harassment and 52 have laws on marital rape.
- Availability of data on violence against women has increased significantly in recent years-since 1995 more than 100 countries have conducted at least one survey addressing the issue.


## Introduction

Violence against women is defined as any act of "gender-based violence that results in or is likely to result in physical, sexual or psychological harm or suffering to women, including threats of acts such as coercion or arbitrary deprivation of liberty, whether occurring in public or in private life."1 Its dimensions include physical, sexual, psychological/emotional and economic violence occurring in the family and general community or such violence perpetrated or condoned by the State. Violence against women includes domestic violence, child marriage, forced pregnancy, "honour" crimes, female genital mutilation, femicide, sexual and other violence perpetrated by someone other than an intimate partner (also referred to as non-partner violence), sexual harassment (in the workplace, other institutions and in public spaces), trafficking in women and violence in conflict situations.

[^177]In all societies, to varying degrees, women and girls are subjected to physical, sexual and psychological abuse that cuts across lines of income, class and culture. ${ }^{2}$ Such violence is recognized as a violation of human rights and a form of discrimination against women, reflecting the pervasive imbalance of power between women and men. ${ }^{3}$

The experience of violence can affect women in a myriad of ways that are often difficult to quantify. Injuries and health problems are common as a result of physical and sexual violence, but the psychological and emotional wounds they may also inflict are sometimes deeper and longer lasting. ${ }^{4}$ Violence can lead to a reduced ability of a woman to work, care for her family and contribute to society. Witnessing violence in childhood can also result in a range of behavioural and

[^178]
## Box 6.1

Gaps in gender statistics related to violence against women

The 1993 Declaration on the Elimination of Violence against Women called on States to promote research, collect data and compile statistics relating to the different forms of violence against women, especially domestic violence. It also encouraged research on the causes, nature and consequences of violence against women and on the effectiveness of measures to prevent and redress it.

Apart from a few exceptions, initially, only small-scale ad-hoc studies that were not nationally representative were available. In the early 2000s, the first initiatives to conduct dedicated, internationally comparable surveys to measure prevalence were the World Health Organization's (WHO) Multi-country Study on Women's Health and Domestic Violence against Women ${ }^{\text {a }}$ and the International Violence against Women Survey, coordinated by the European Institute for Crime Prevention and Control. The WHO study focused on a number of specific sites in selected countries. It addressed intimate partner violence and its association with women's physical, mental, sexual and reproductive health, and was instrumental in developing and testing model questionnaires for use in surveys on violence against women. More recently, the United Nations Statistics Division has developed a set of guidelines ${ }^{b}$ to assist national statistics offices in collecting data and compiling indicators on violence against women, which allow for more standardized and comparable analyses of levels and trends in prevalence at both the national and international levels.

In recognition of the need for better data and standardized measurements, the United Nations Statistical Commission established a "Friends of the Chair" group to identify key indicators on physical, sexual, psychological and economic violence against women. ${ }^{\text {c }}$

Number of countries conducting surveys on violence against women, 1995-2014

|  | 1995-2014 |  | 1995-2004 | 2005-2014 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Type of survey | At least one <br> survey | At least two <br> surveys | At least one <br> survey | At least one <br> survey |
| Dedicated survey to measure <br> violence against women | 51 | 7 | 17 | 35 |
| Module of questions on <br> violence against women | 64 | 31 | 25 | 60 |
| Dedicated survey or module on <br> violence against women | 102 | 43 | 44 | 89 |
| Survey with questions on <br> attitudes towards violence | 100 | 62 | 37 | 97 |
| Survey with questions on <br> female genital mutilation | 29 | 25 | 20 | 27 |

In general, surveys dedicated to measuring violence against women are better at collecting information than administrative data since, if well designed, they more accurately reflect the actual experience of violence than what is reported to officials. ${ }^{\text {d }}$ However, implementing a dedicated survey is often costly. If a dedicated survey is not feasible, inserting a module of questions on experiences of violence into an existing survey, such as one on women's health or general victimization, is an alternative option for collecting some information, provided specific ethical and safety guidelines ${ }^{e}$ developed for conducting a dedicated survey on this sensitive topic are taken into consideration.

The availability of data on violence against women has increased significantly in recent years. During the period 1995-2014, 102 countries conducted at least one survey addressing violence against women that produced representative results at the national level,-either as a dedicated survey ( 51 countries) or as a module attached to a wider survey ( 64 countries). Some countries implemented both types of surveys. Forty-four countries undertook a survey in the period 1995-2004 and 89 countries did so in the period 2005-2014, suggesting growing interest in this issue. More than 40 countries conducted at least two surveys in the period 1995-2014. This means that, depending on the comparability of the surveys, changes over time could be analysed. One hundred countries conducted surveys that included questions on attitudes towards violence, and 29 on female genital mutilation. This covers all countries where the practice of female genital mutilation is concentrated.

Despite the increase in the availability and quality of data on violence against women, significant challenges remain. Different survey questionnaires and methodologies are sometimes used in different countries, leading to a lack of comparability at the regional and international levels. Willingness to discuss experiences of violence may also differ according to the cultural context, and this can affect reported prevalence levels.

Police, court, social services and health statistics represent a potential source of information on violence against women that is often underutilized. However, the usefulness of such information can be mixed. Since many women do not report violence to the authorities, statistics based on reported cases significantly underestimate the phenomenon. Administrative records can be used to track victims' use of services and monitor the system's response to the problem, but even when statistics are available, the sex of the victim and relationship to the perpetrator and/or the sex of the perpetrator are often not recorded, limiting the scope of the analysis. Data on specific forms of violence, such as trafficking and harmful practices such as "honour" killings, from any source, are scarce.
emotional problems. ${ }^{5}$ Women who have suffered from intimate partner violence are more likely to give birth to a low-birthweight baby, have an abortion and experience depression. ${ }^{6}$ In some regions, they are also more likely to contract HIV, compared to women who have not experienced violence at the hands of a partner. ${ }^{7}$ In some cases, violence against women can lead to death; about two thirds of the victims of intimate partner/ family-related homicide are women, in contrast to all cases of homicide, of which 20 per cent of the victims are women. ${ }^{8}$ Whereas other forms of homicide have shown significant declines over time, rates of intimate partner/family-related female homicide have remained relatively stable. ${ }^{9}$

Violence against women also incurs significant economic costs, both direct and indirect. Direct costs include those associated with the police, hospital and other health services, legal costs, and costs associated with housing, social and support services. Indirect costs include those related to reduced employment and productivity and the diminished value of a life lived with violence. A number of countries have conducted studies to estimate the economic toll of violence against women. As the methodologies used for conducting such studies vary, the real costs cannot be directly compared across countries. However they do provide an indication of the substantial economic impact of violence against women and how much needs to be spent to address the problem. ${ }^{10}$ Globally, conservative estimates of lost productivity resulting from domestic violence range between 1 and 2 per cent of gross domestic product. ${ }^{11}$
A call to end all forms of violence against women was made in the Declaration on the Elimination of Violence against Women, adopted in $1993{ }^{12}$ and the Beijing Declaration and Platform for Action, adopted in 1995. ${ }^{13}$ Several initiatives have been undertaken to reduce violence against

[^179]women internationally by the United Nations and others, as well as at the national level. The vision of the United Nations Secretary-General's Campaign UNiTE to End Violence against Women is "a world free from violence against women, realized through meaningful actions and ongoing political commitments of national governments, backed by adequate resources." To further draw attention to this often silenced topic, the United Nations designated 25 November as the International Day for the Elimination of Violence against Women. The General Assembly's most recent resolution on the intensification of efforts to eliminate all forms of violence against women (A/RES/69/147), adopted in 2014, calls on States to take measures towards that end in the areas of laws and policies, prevention, support services and responses, as well as data collection and research, with a special focus on women facing multiple forms of discrimination. In the same year, the Council of Europe Convention on Preventing and Combating Violence against Women and Domestic Violence (CETS No. 210, known as the Istanbul Convention) entered into force. The Convention sets out a legal framework and approach to address violence against women, focused on preventing domestic violence, protecting victims and prosecuting offenders.

This chapter presents an overview of the prevalence of women's experience of physical and sexual violence, an examination of intimate partner violence and attitudes towards violence. It is followed by a review of forms of violence in specific settings-female genital mutilation, violence in conflict situations and the trafficking of women. It concludes with a look at help-seeking behaviour and state response to violence. In preparing this issue of The World's Women, the United Nations Statistics Division undertook a compilation of data collected by surveys addressing violence against women. While every effort was made to incorporate as many surveys as possible, some of them could not be included due either to the timing of their release or the lack of available data for some other reason. Precise definitions and exact methodologies used may vary among data sources. The complete list of surveys and key results are presented in the Statistical Annex. ${ }^{14}$

[^180]
## Box 6.2

Measuring violence against women in Canada using complementary data sources

Canada's national statistics office, Statistics Canada, uses two complementary data sources to measure violence against women nationally: police-reported administrative surveys and population-based selfreported victimization surveys. These two sources of information have made important advances over the past 30 years, making it possible to better understand the issue and how it differs from violence against men.
Since 1962, aggregate police statistics have been collected in Canada, although it was not until 1988 that collection began of micro-data on the criminal event (including the weapon used and location of the event), on victims (including their sex, age and relationship to the accused) and the accused (including sex and age). This information, collected along with the Incidentbased Uniform Crime Reporting Survey, has shed light on the nature and extent of police-reported violence against women in Canada. In addition, the mandatory nature of the survey, along with the use of common definitions across the country, has meant that data on violence against women are nationally representative and comparable over time and across regions. The survey has also been critical in providing insight into how gender-based violence is treated within the criminal justice system, since information is also captured on clearance and charge rates.
The main limitation of police-reported surveys is that they only include those incidents that come to the attention of police, which is not always the case for intimate partner and sexual violence. To address this gap, Canada turned to victimization surveys to get a better sense of the extent of victimization and reasons why people may choose to report or not report an incident to the police. Since 1988, the Canadian General Social Survey on Victimization has been conducted every five years on a representative sample of women and men aged 15 years and older. As with police-reported surveys, self-reported surveys have evolved over time to address data gaps on violence against women.
In 1993, Statistics Canada became one of the first national statistics offices to develop and implement a gender-specific survey on violence, providing the first national indicator of spousal violence against women. Statistics Canada built on the success of this one-time dedicated survey to ensure that the measurement of violence against women would be embedded within an existing survey structure. Modelled on the Violence against Women Survey, a special module on spousal violence was developed within the General Social Survey on Victimization. The broader target population (both women and men) expanded the potential for genderbased analysis and has improved the understanding of violence against both women and men. For instance, results from the victimization survey have shown that while rates of spousal violence against women and men are similar, women are more likely than men to experience the most severe forms of such violence and suffer more chronic abuse, injuries and emotional trauma. Such information has helped guide the development of policies and programmes that better address the unique needs of women.

## A. Prevalence of the main forms of violence against women

Violence against women is found in all countries to varying degrees. A number of factors can increase the risk of violence against women and girls. These include: witnessing or experiencing violence in childhood, low levels of education, limited economic opportunities, substance abuse, attitudes that tolerate violence, and limited legislative frameworks for preventing and responding to violence. ${ }^{15}$
A number of initiatives have attempted to assess the scale of the problem at the international, regional and national levels. At the international level, WHO estimates that over a third ( 35 per cent) of women worldwide have experienced physical and/or sexual violence by an intimate partner or sexual violence by a non-partner at some point in their lives. ${ }^{16}$
A recent United Nations Multi-country Study on Men and Violence in Asia and the Pacific ${ }^{17}$ found that nearly half of the more than 8,000 men interviewed reported using physical and/or sexual violence against a female partner, with the proportion of men reporting such violence ranging from 26 to 80 per cent across sites. In all six countries included in the study, the majority (between 65 and 85 per cent) of men who reported using physical or sexual violence against a partner had committed such violence more than once.
As noted earlier, definitions and methodologies used to collect data on violence against women can vary across countries. Therefore, for comparability purposes, in this chapter, data are presented according to data sources-results from Demographic and Health Surveys (DHS) and Reproductive Health Surveys (RHS) appear together, and results from the recent survey conducted by the European Union (EU) Agency for Fundamental Rights (FRA) are presented together. The EU FRA study was conducted across the 28 Member States of the EU in 2012.

It should be noted that although countries are ranked within each region, this is for presentation purposes only. Ranking should not be seen as absolute ranking since, even in the case of similar survey instruments, data may not be fully comparable and the level of underreporting is likely to be different from one country to another due to many factors, including stigma surround-

[^181]ing violence and prevailing social norms in different contexts. Finally, data on violence against women from other sources for selected countries, including those based on victimization surveys, are presented (alphabetically) in dedicated tables.

## 1. Violence against women by all perpetrators

## Physical violence against women

Physical violence consists of acts aimed at physically hurting the victim and include, but are not limited to, pushing, grabbing, twisting the arm, pulling the hair, slapping, kicking, biting or hitting with the fist or object, trying to strangle or suffocate, burning or scalding on purpose, or attacking with some sort of weapon, gun or knife. The proportion of women who experienced physical violence (regardless of the perpetrator) at least once in their lifetime and in the last 12 months is presented in, figure 6.2 and table 6.1.
For countries with available DHS data (figure 6.1), the proportion of women experiencing physical violence in their lifetime ranged from 13 per cent in Azerbaijan (2006) to 64 per cent in the Democratic Republic of the Congo (2007). For physical violence experienced in the 12 months prior to the survey, prevalence ranged from 6 per cent in the Comoros (2012) to 56 percent in Equatorial Guinea (2011).

## Physical violence is high in Africa

Based on available data, reported prevalence of physical violence was highest in Africa, with almost half of countries reporting lifetime prevalence of over 40 per cent. The range of prevalence was widest in Africa, from 14 per cent in Comoros (2012) to 64 per cent in the Democratic Republic of the Congo (2007). The range of lifetime physical violence in Asia was narrower, from 13 per cent in Azerbaijan (2006) to almost 40 per cent in Timor-Leste (2009-10). Data availability is higher in Africa than in other regions.
Among countries for which comparable data are available for multiple years, a number of them showed encouraging declines in the prevalence of physical violence experienced in the past 12 months, including Cameroon (from 45 per cent in 2004 to 27 per cent in 2011) and Uganda (from 34 per cent in 2006 to 27 per cent in 2011). However, results for the majority of countries revealed that the prevalence of violence stayed almost constant, reflecting the persistence of the problem (see Statistical Annex). ${ }^{18}$

[^182]Figure 6.1
Proportion of women aged 15-49 years experiencing physical violence (irrespective of the perpetrator) at least once in their lifetime and in the last 12 months, 1995-2013 (latest available)
Africa
Democratic Republic of the Congo
Equatorial Guinea
Uganda Cameroon

Figure 6.2
Proportion of women aged 18-74 years experiencing physical violence (irrespective of the perpetrator) at least once in their lifetime and in the last 12 months, European countries, 2012


Table 6.1
Proportion of women experiencing physical violence (irrespective of the perpetrator) at least once in their lifetime and in the last 12 months, 2003-2012 (latest available)

Source: Compiled by the United Nations Statistics Division from national surveys on violence against women, correspondence with Na tional Statistical Offices.
Note: Age groups covered differ among countries; methodologies, questionnaire designs and sample sizes used in surveys by statistics offices to produce national data may differ from those used in internationally conducted surveys.

| Country | Year | Lifetime | Last 12 months |
| :--- | :---: | ---: | :---: |
| Australia | 2012 | 34.0 | 4.6 |
| Canada | 2009 | .. | 3.4 |
| China, Hong Kong SAR | 2005 | 12.0 | 2.0 |
| Costa Rica | 2003 | 47.0 | 11.0 |
| Denmark | 2013 | .. | 1.1 |
| Ecuador | 2011 | 38.0 | .. |
| Fiji | $2010 / 11$ | 68.5 | .. |
| Finland | 2013 | .. | 14.5 |
| France | 2007 | .. | 1.8 |
| Iceland | 2008 | 29.8 | 2.1 |
| Italy | 2006 | 18.8 | 2.7 |
| Mexico | 2011 | 15.2 | 6.4 |
| Morocco | $2009 / 10$ | 35.3 | 15.2 |
| Poland | 2004 | 30.0 | 5.1 |
| Singapore | 2009 | 6.8 | 1.0 |
| Sweden | 2012 | .. | 1.3 |
| Switzerland | 2003 | 27.0 | 1.0 |
| Tonga | 2009 | 76.8 | .. |
| Tunisia | 2010 | 31.7 | 7.3 |
| Viet Nam | 2010 | 35.2 | .. |

For countries included in the EU FRA survey (figure 6.2), half of them reported lifetime prevalence of physical violence of at least 30 per cent. The range of lifetime violence ranged from 17 per cent in Austria to 48 per cent in Denmark, however, recent experience (in the past 12 months) was much more similar across the region, ranging between 3 and 10 per cent.

For other countries and areas that conducted national surveys on violence against women (table 6.1), the range of reported levels of lifetime experience of violence was very wide-from 7 per cent in Singapore (2009) to 77 per cent in Tonga (2009). Out of the 15 countries reporting lifetime physical violence, 9 reported prevalence of at least 30 per cent. Experience of violence in the past 12 months was generally much lower than lifetime experience, with prevalence of less than 10 per cent in all but three countries: Costa Rica (2003), Finland (2013) and Morocco (2009/10).

## Sexual violence against women

Sexual violence is defined as any sort of harmful or unwanted sexual behaviour that is imposed on someone. It includes acts of abusive sexual contact, forced engagement in sexual acts, attempted or completed sexual acts with a woman without her consent, sexual harassment, verbal abuse and threats of a sexual nature, exposure, unwanted touching, and incest.
In general, the prevalence of sexual violence when measured in surveys is lower than that of physical violence. However, in the case of intimate partner violence, sexual violence is often experienced along with physical violence. The proportion of women who experienced sexual violence (regardless of the perpetrator) at least once in their lifetime and in the past 12 months is presented in , figure 6.4 and table 6.2.

Figure 6.3
Proportion of women aged 15-49 years experiencing sexual violence (irrespective of the perpetrator) at least once in their lifetime and in the last 12 months, 1995-2013 (latest available)


Source: Compiled by the United Nations Statistics Division from Demographic and Health Surveys (DHS). (ICF International, 2014).
Note: Ranking is for presentation purposes only (see introduction to section $A$ for further details).

Figure 6.4
Proportion of women aged 18-74 years experiencing sexual violence (irrespective of the perpetrator) at least once in their lifetime and in the last 12 months, European countries, 2012


Source: European Union Agency for Fundamental Rights, Violence against Women: An EU-wide Survey, 2014. (European Union Agency for Fundamental Rights, 2014).
Note: Some countries requested that only the results of their national surveys be presented (see table 6.2). Ranking is for presentation purposes only (see introduction to section A for further details).

## Experience of sexual violence is highest in the African region

For African countries with available DHS data (figure 6.3), the proportion of women experiencing sexual violence in their lifetime ranged from 5 per cent in Côte d'Ivoire (2011/12) to 32 per cent in Equatorial Guinea (2011). For sexual violence experienced in the 12 months prior to the survey, prevalence ranged from less than 1 per cent in Comoros (2012) to 16 per cent in Uganda (2011). Reported lifetime prevalence rates were higher across Africa than other re-gions-more than half of the 19 countries across Africa with data reported prevalence of at least 20 per cent. Across all the other regions only one country reported prevalence over 20 per cent (Tuvalu, 2007). The range of lifetime prevalence was lower across the Asian and Latin American and Caribbean regions-from 4 to 13 per cent. Similar to physical violence, data availability for sexual violence is higher in Africa than in other developing regions.

Table 6.2
Proportion of women experiencing sexual violence (irrespective of the perpetrator) at least once in their lifetime and in the last 12 months, 2003-2012 (latest available)

| Country | Year | Lifetime | Last 12 months |
| :--- | :---: | :---: | :---: |
| Australia | 2012 | 19.0 | 1.2 |
| Canada | 2009 | .. | 2.0 |
| China, Hong Kong SAR | 2005 | 14.0 | 3.0 |
| Costa Rica | 2003 | 41.0 | 7.0 |
| Ecuador | 2011 | 25.7 | .. |
| Fiji | $2010 / 11$ | 35.6 | .. |
| Finland | 2013 | .. | 2.3 |
| France | 2007 | .. | 0.7 |
| Iceland | 2008 | 24.2 | 1.6 |
| Italy | 2006 | 23.7 | 3.5 |
| Mexico | 2011 | 38.9 | 20.8 |
| Morocco | $2009 / 10$ | 22.6 | 8.7 |
| Poland | 2004 | 16.5 | 1.6 |
| Republic of Korea | 2013 | 19.5 | 2.7 |
| Singapore | 2009 | 4.2 | 0.3 |
| Sweden | 2012 | .. | 1.4 |
| Switzerland | 2003 | 25.0 | 1.0 |
| Tonga | 2009 | 17.4 | .. |
| Tunisia | 2010 | 15.7 | 7.4 |
| United Kingdom (England and Wales only) | $2012 / 13$ | 19.1 | 2.0 |
| United States of America ${ }^{\text {a }}$ | 2011 | 19.3 | 1.6 |
| Viet Nam | 2010 | 10.8 | .. |
|  |  |  |  |

Source: Compiled by the United Nations Statistics Division from national surveys on violence against women, correspondence with National Statistical Offices.
Note: Age groups covered differ among countries; methodologies, questionnaire designs and sample sizes used in surveys by statistics offices to produce national data may differ from those used in internationally conducted surveys.
a Refers to rape only.

For countries included in the EU FRA survey (figure 6.4), the proportion of women experiencing sexual violence in their lifetime ranged from 5 per cent in Cyprus, Poland and Croatia to 19 per cent in Denmark, with almost half of countries reporting lifetime prevalence of at least 10 per cent. Recent experience (in the past 12 months) was very similar across the regionranging from less than 1 per cent to 3 per cent.

Among other countries and areas that conducted national surveys on violence against women (table 6.2), more than a quarter reported lifetime prevalence of sexual violence of at least 25 per cent. Experience in the past 12 months was less than 10 per cent in all countries with the exception of Mexico (21 per cent, 2011).

## a. Non-partner sexual violence

Sexual violence can be perpetrated by women's intimate partners or non-partners. In general, data availability is higher for sexual violence perpetrated by an intimate partner. However, available data suggest that, at the global level, an estimated 7 per cent of women have experienced sexual violence perpetrated by someone other than an intimate partner in their lifetime. ${ }^{19}$
In countries for which DHS data are available (figure 6.5), lifetime experience of sexual violence perpetrated by someone other than an intimate partner ranged from less than 1 per cent in India (2005-06), Kyrgyzstan (2012), Nepal (2011) and Timor-Leste (2009) to 5 per cent in Cameroon (2011) and Gabon (2012). In countries included in the EU FRA survey (figure 6.6), it ranged from 1 per cent in Greece to 12 per cent in the Netherlands.

Aside from those countries covered in DHS or EU FRA surveys, very few additional countries have data available for non-partner sexual violence. An exception is the Pacific region, where a recent round of surveys based on WHO methodology for measuring violence against women included questions on non-partner sexual violence, revealing lifetime rates as high as 33 per cent in Vanuatu in 2009. ${ }^{20}$

Figure 6.5
Proportion of women aged 15-49 years experiencing sexual violence perpetrated by someone other than an intimate partner at least once in their lifetime, 1995-2013 (latest available)

Source: Compiled by ICF International based on Demographic and Health Surveys (DHS). (ICF International, 2014).
Note: Ranking is for presentation purposes only (see introduction to section A for further details).


9 WHO, 2013a.
20 Vanuatu Women's Centre, 2011.

Figure 6.6
Proportion of women aged 18-74 years experiencing sexual violence perpetrated by someone other than an intimate partner at least once in their lifetime, European countries, 2012


Source: European Union Agency for Fundamental Rights, Violence against Women: An EU-wide Survey, 2014. (European Union Agency for Fundamental Rights, 2014).
Note: Some countries requested that only the results of their national surveys be presented. Ranking is for presentation purposes only (see introduction to section A for further details).

## Violence among vulnerable groups

Violence against women is a widespread and systemic violation of human rights. It affects women and girls at all stages of the lifecycle-from female infanticide and genital mutilation to forced prostitution and trafficking, domestic violence, sexual harassment at work, and abuse and neglect of older women. Violence affects all population groups; however, some groups of women may be more vulnerable than others, such as indigenous women, or face particular types of violence at different stages of their lives, either as children or in later life.

## a. Violence against girls

Violence against children ${ }^{21}$ is a worldwide phenomenon. What makes it especially intractable is the fact that some forms of it, such as corporal punishment of children by their parents, are

[^183]widely accepted. That said, all forms of violence against children are a violation of their human rights. Violence against girls, in particular, can have a ripple effect throughout society, leading to lower school attendance and achievement, which is linked to higher fertility rates as well as reduced health outcomes for both women and their children. ${ }^{22}$
Wide gaps are found in the data on violence against children. No international standards exist for data collection on the issue, which is generally underreported and undocumented. Compounding the problem is the fact that collecting information on violence against children presents numerous methodological and ethical challenges. Children may be unwilling or, depending on their age and level of development, unable to share their experiences of violence. Moreover, accessing children in the first place may be problematic since consent is often required by the parent or caregiver, who, in some cases, may be the perpetrator of the violence. Ethical issues include the potential for children to become emotionally affected by questions about violence, regardless of whether they have been victimized, and victims of violence can be re-traumatized by being questioned about their experiences. Data from administrative sources, when available, may not be accessible due to confidentiality issues, and different social services may use different approaches for tracking cases of abuse that often cannot be combined or compared.
Despite these challenges, efforts are under way to collect data on violence against children. For example, Violence against Children Surveys (VACS) have been conducted in Kenya, Swaziland, the United Republic of Tanzania and Zimbabwe. Based on these surveys, it was found that 66 per cent of women aged 18 to 24 in Kenya (and 73 per cent of men), and 64 per cent of women in Zimbabwe (and 76 per cent of men) reported incidents of physical violence prior to age 18. In the United Republic of Tanzania, 74 per cent of females aged 13 to 24 (and 72 per cent of males) said they experienced physical violence before age 18, perpetrated by a relative, authority figure or intimate partner. The United Nations Children's Fund (UNICEF) reports that for countries with available and comparable data, use of violent discipline (psychological aggression and/or physical

[^184]punishment) in the home ranges from 45 per cent in Panama to almost 95 per cent in Yemen. ${ }^{23}$

For children growing up outside the home, violence can be commonplace. Rates of violence against children living in institutional care in Kazakhstan-which has the highest rate of children in institutional care in the world-can be up to six times higher than those of children living in family-based foster care. ${ }^{24}$
An extreme form of physical violence against girls is female genital mutilation. This is a topic that is covered in a separate section of this chapter since it is a unique form of violence that tends to occur in specific countries and contexts.
In addition to suffering violence at the hands of parents, authority figures and intimate partners, children also experience violence inflicted by their peers-other children. Bullying exists everywhere and can be physical and/or psychological in nature. Research suggests ${ }^{25}$ that boys are more likely to favour physical violence as a bullying tactic, while girls tend to use psychological violence. New forms of bullying are emerging, including through cell phones and the Internet. Cyber-bullying includes the distribution of sexually explicit photos and videos taken of children to embarrass and shame them. The widespread access to these images and the difficulty in removing them permanently from the Internet means that this type of abuse can have long-lasting consequences.

Child marriage (marriage before the age of 18) is also found throughout the world and is acknowledged to be a harmful practice, as well as a manifestation of discrimination against women and girls. More than 700 million women alive today (aged 18 years and older) were married before the age of $18^{26}$ (see Chapter 1 on Population and Families). More than one in three of these women married or entered into union before age 15 . Boys are also married as children, but girls are disproportionately affected and are often married to men significantly older than themselves. In Niger, for example, 77 per cent of women aged 20 to 49 were married before age 18, compared to 5 per cent of men in the same age group. Child marriage is most common in South Asia and sub-Saharan Africa, with India accounting for one third of the global total of

[^185]child brides. Girls in the poorest 20 per cent of the population (poorest quintile) are much more likely to marry at a young age compared to those in the wealthiest quintile, and girls living in rural areas are more likely than those in urban areas to marry young. On a more positive note, the practice of child marriage is declining, especially among girls under age 15 . One in four women alive today was married in childhood compared to one in three in the early 1980s. ${ }^{27}$
In terms of sexual violence, UNICEF reports that around 120 million girls and women under age 20 have been subjected to forced sexual intercourse or other forced sexual acts at some point in their lives. ${ }^{28}$ In a review of the prevalence of child sexual abuse, ${ }^{29}$ drawn from 55 studies from 24 countries, it was found that levels ranged from 8 to 31 per cent among females and from 3 to 17 per cent among males. ${ }^{30}$ Based on results from DHS, the percentage of women whose first sexual intercourse was forced against their will ranged from 1 per cent in Timor-Leste (2009-2010) to 29 per cent in Nepal (2011). ${ }^{31}$ Although most sexual violence takes place in the home, girls are generally more likely than boys to experience sexual violence while travelling to and from school, highlighting the need for adequate measures to enable girls to attend school safely. ${ }^{32}$
Girls continue to be vulnerable to sexual violence as they continue their education and attend college. In the United States, the White House has established a Task Force to Protect Students from Sexual Assault. In its report on the issue published in April 2014, the Task Force asserted that "one in five women is sexually assaulted while in college". ${ }^{33}$ It also found that the perpetrator is usually someone the victim knows and that, very often, the victim does not report the assault. The Task Force is encouraging colleges to investigate and act upon this problem, providing toolkits for colleges to conduct surveys on sexual assault, establishing awareness and prevention programmes, and setting out necessary steps for an effective response.

## b. Violence against older women

Although violence peaks in women's reproductive years, it persists as women age. Neglect, abuse and violence were identified as important issues affecting the well-being of older persons ${ }^{34}$ during the Second World Assembly on Ageing in Madrid in 2002. These issues were reflected in the Madrid International Plan of Action on Ageing, and highlighted the fact that older women "face greater risk of physical and psychological abuse due to discriminatory societal attitudes and the non-realization of the human rights of women." ${ }^{35}$ To draw attention to the global issue of abuse against older people, the United Nations designated 15 June as World Elder Abuse Awareness Day. In addition, to raise awareness of the unique challenges faced by widows, it adopted 23 June as International Widows' Day.
Violence against older women may take the form of physical, sexual or psychological abuse, as well as financial exploitation or neglect perpetrated by intimate partners, family members, or caregivers. Risk factors include residence in an institution or mental/physical impairment. In many countries, institutions established to provide care for older women and men are not managed properly and low standards of care go unchecked. ${ }^{36}$

In many instances, the issue of violence against older women is not given the attention it deserves. Sometimes this bias is reflected even in data collection methods and indicators, leading to significant data gaps for older women. Such gaps are becoming increasingly important as countries deal with their ageing populations. For example, the DHS, which are an important source of information on violence against women, include only women aged 15 to 49 in their sample. Surveys conducted to measure violence against women are typically householdbased, meaning that the experiences of older women living in institutions that care for the older persons are not included.

[^186]
## c. Violence against indigenous women and girls

Research has shown that indigenous girls, adolescents and young women face a higher prevalence of violence, harmful practices, and labour exploitation and harassment than other girls and women. In Bolivia, 62 per cent of the population is indigenous, and the country's departments of Chuquisaca, Cochabamba, La Paz, Potosi and Oruro have the highest concentrations of indigenous people. ${ }^{37}$ DHS data show that ever-married girls and women aged 15 to 49 from Potosi have the highest prevalence of reported physical or sexual violence by a current or former partner ( 29 per cent) compared to the national average ( 24 per cent). In India, the proportion of the population belonging to 'Scheduled Tribes' (an official term used in that country to refer to specific indigenous peoples) is high in all northeastern states except Assam and Tripura. The 2005-2006 DHS in India found that nearly half ( 47 per cent) of ever-married girls and women aged 15 to 49 belonging to 'Scheduled Tribes' reported experiences of emotional, physical or sexual violence committed by their husbands, compared to 40 per cent of the total population. In Canada, according to data from the 2009 General Social Survey, the rate of self-reported violent victimization of Aboriginal women was around 2.5 times higher than that of non-Aboriginal women. ${ }^{38}$ Moreover, Aboriginal women were more likely than non-Aboriginal women to say they feared for their lives as result of spousal violence.
Violence against indigenous girls and women cannot be separated from the wider context of discrimination and exclusion to which indigenous peoples as a whole are often exposed in social, economic, cultural and political life. Challenges-such as land dispossession, conflict insecurity, displacement, low rates of birth registration, limited access to culturally appropriate education and health services (including sexual and reproductive health), the lack of access to justice and other essential services, including social services-create conditions that affect their development, human security and the fulfilment of their human rights. ${ }^{39}$

[^187]Box 6.3
Violence peaks in the reproductive years
The experience of violence peaks when women are in their reproductive years. This is true in both developed and developing countries. Across Europe, women in the youngest age group (18 to 29 years) had the highest prevalence of both partner and non-partner violence in the past 12 months. Prevalence declined with age and was lowest among women aged 60 and over.
Proportion of women who experienced physical and/or sexual violence in the 12 months before the survey, by type of perpetrator, European Union-average, 2012

| Age group | Partner <br> violence (\%) | Non-partner <br> violence (\%) |
| :---: | :---: | :---: |
| $18-29$ | 6 | 9 |
| $30-44$ | 5 | 5 |
| $45-59$ | 4 | 3 |
| $60+$ | 3 | 3 |

Based on data from the Italian Violence Against Women survey conducted in 2006, it can be seen that lifetime experience of violence (partner and non-partner, physical or sexual) was higher among women aged between 25 and 34 years ( 38 per cent) and 35 and 44 years ( 35 per cent) than among women aged 55 to 64 years ( 26 per cent) and 65 to 70 years ( 20 per cent). As lifetime experience is affected by years exposed to violence, looking at experience in the past 12 months reveals that recent experience of violence declines with age also. Prevalence of violence in the past 12 months was 16 per cent for women aged between 16 and 24 years and less than 1 per cent for women aged between 65 and 70 years. ${ }^{\text {a }}$
Many surveys conducted in developing countries do not include older women in their sample. However, results from the few that do show that the experience of violence tends to decline as women age. In Fiji, ${ }^{\text {b }}$ results show that younger women are much more at risk of experiencing intimate partner violence in the previous 12 months than older women. In that country, the prevalence of intimate partner violence of a physical nature in the past 12 months declined from 40 per cent in the 18 - to 24 -year-old age group to 3 per cent in the 55 - to 64 -year-old age group. A similar pattern was observed for intimate partner sexual violence. In Morocco, the experience of intimate partner physical violence in the past 12 months peaked between the ages of 30 and 34 and then declined, with prevalence halving from 6 per cent in the 40- to 49-year-old age group to 3 per cent in the 50 - to 64 -year-old age group. ${ }^{\text {c }}$

[^188]
## 2. Intimate partner violence

## Physical and/or sexual violence

In many cases, intimate partner violence accounts for the majority of women's experiences of violence. This was one conclusion drawn from one of the first multi-country studies on violence against women..$^{40}$ Among women who reported incidents of physical or sexual violence, or both, at some point in their lives, at least 60 per cent had been abused by a partner in almost all sites included in the study. The proportion approached 80 per cent or more in most sites. In contrast, less than one third of women in most sites had been abused only by someone other than an intimate partner.

Intimate partner violence is traumatic and debilitating. Victims often feel they have nowhere to turn, especially in societies where it is difficult for women to leave their husbands or live-in partners and live alone. Addressing intimate partner violence requires a range of approaches, including awareness-raising, education, prevention activities, provision of necessary health, legal and social services, shelters and counselling and improved follow-up on reported cases so that women are free from physical injury and fear. ${ }^{41}$

Half of all countries reported lifetime prevalence of intimate partner physical and/or sexual violence of at least 30 per cent

For countries with available DHS data (figure 6.7 ), the proportion of women experiencing intimate partner physical and/or sexual violence in their lifetime ranged from 6 per cent in the Comoros (2012) to 64 per cent in the Democratic Republic of the Congo (2007). Half of all countries reported lifetime prevalence of at least 30 per cent. Prevalence was generally higher in Africa than in other regions, with one quarter of countries in the region reporting lifetime prevalence of at least 50 per cent. Prevalence was lower across Asia, Latin America and the Caribbean and Oceania, with maximum prevalence levels of around 40 per cent. For intimate partner physical and/or sexual violence experienced in the 12 months prior to the survey, prevalence ranged from 5 per cent in the Comoros (2012) to 44 per cent in Equatorial Guinea (2011) and Rwanda (2010). Across all regions, the prevalence of expe-

[^189]1 WHO, 2013b.
rience of violence in the past 12 months was often similar to lifetime prevalence, a possible indication of how difficult it can be for women to leave violent relationships. For countries where more than one year of data are available, prevalence in the last 12 months showed slight declines in most countries, with Uganda showing an encouraging decline from 45 per cent in 2006 to 35 per cent in 2011. ${ }^{42}$ However, results from Rwanda showed a significant increase-from 26 per cent in 2005 to 44 per cent in 2010. ${ }^{43}$
For countries included in the EU FRA survey (figure 6.8), the proportion of women experiencing intimate partner physical and/or sexual violence in their lifetime ranged from 13 per cent in five countries-Austria, Croatia, Poland, Slovenia and Spain to 32 per cent in Denmark and Latvia. More than half of countries in the region reported lifetime prevalence of at least 20 per cent. Experience in the past 12 months was generally considerably lower than lifetime, ranging between 2 and 6 per cent. ${ }^{44}$
Table 6.3 presents results for countries that conducted national surveys on violence against women. Rates of lifetime intimate partner physical and/or sexual violence were highest in Oceania, with prevalence reaching over 60 per cent in a number of countries in the region. Across all regions, lifetime prevalence was at least 30 per cent in half of the countries. Experience in the past 12 months was typically much lower than lifetime.

[^190]Figure 6.7
Proportion of ever-partnered women aged 15-49 years experiencing intimate partner physical and/or sexual violence at least once in their lifetime and in the last 12 months, 1995-2013 (latest available)


Source: Compiled by the United Nations Statistics Division from Demographic and Health Surveys (DHS) and Reproductive Health Surveys (RHS). (ICF International, 2014 and CDC, 2014).
Note: Ranking is for presentation purposes only (see introduction to section A for further details).

Figure 6.8
Proportion of ever-partnered women aged 18-74 years experiencing intimate partner physical and/or sexual violence at least once in their lifetime and in the last 12 months, European countries, 2012


Table 6.3
Proportion of women experiencing intimate partner physical and/or sexual violence at least once in their lifetime and in the last 12 months, 2000-2013 (latest available)

| Country | Year | Lifetime | Last 12 months |
| :--- | ---: | ---: | ---: |
| Albania | 2013 | 24.6 | .. |
| Armenia | 2008 | 9.5 | .. |
| Australia | 2012 | 16.9 | .. |
| Bangladesh | 2011 | 67.2 | 50.7 |
| Canada | 2009 | .. | 1.3 |
| Ecuador | 2011 | 37.5 | .. |
| Fiji | $2010 / 11$ | 64.0 | 24.0 |
| Finland | 2013 | .. | 5.8 |
| France | 2007 | .. | 1.0 |
| Iceland | 2008 | 22.4 | 1.8 |
| Italy | 2006 | 14.3 | 2.4 |
| Kiribati | 2008 | 67.6 | 36.1 |
| Maldives | 2006 | 19.5 | 6.4 |
| Mexico | 2011 | 14.1 | 6.6 |
| Norway | 2008 | 27.0 | 6.0 |
| Poland | 2004 | 15.6 | 3.3 |
| Republic of Moldova | 2010 | 45.5 | .. |
| Samoa | 2000 | 46.1 | .. |
| Singapore | 2009 | 6.1 | 0.9 |
| Solomon Islands | 2009 | 63.5 | .. |
| Sweden | 2012 | 15.0 | 2.2 |
| Tonga | 2009 | 39.6 | 19.0 |
| Turkey | 2014 | 38.0 | 11.0 |
| Vanuatu | 2010 | 60.0 | 44.0 |
| Viet Nam | 2010 | 34.4 | 9.0 |

Source: Compiled by the United Nations Statistics Division from national surveys on violence against women, correspondence with Na tional Statistical Offices.
Note: Age groups covered differ among countries; methodologies, questionnaire designs and sample sizes used in surveys by statistics offices to produce national data may differ from those used in internationally conducted surveys.

## Psychological and economic violence

Psychological violence includes a range of behaviours that encompass acts of emotional abuse and controlling behaviour. These often coexist with physical and sexual violence by intimate partners and are acts of violence in themselves. Examples of behaviours that fall within the definition of psychological violence include: ${ }^{45}$
Emotional abuse-insulting or making a woman feel bad about herself, belittling or humiliating her in front of others, deliberately scaring or intimidating her, threatening to hurt her or others she cares about.

Controlling behaviour-isolating a woman by preventing her from seeing family or friends, monitoring her whereabouts and social interactions, ignoring her or treating her indifferently, getting angry if she speaks with other men, making unwarranted accusations of infidelity, controlling her access to health care, education or the labour market.

Lifetime experience of psychological violence was highest in Africa and Latin America and the Caribbean

For countries with available data from DHS, ${ }^{46}$ RHS and Multiple Indicator Cluster Surveys (MICS) (figure 6.9), the proportion of women experiencing intimate partner emotional/psychological violence in their lifetime ranged from 7 per cent in Azerbaijan (2006) to 68 per cent in Peru (2013). Lifetime experience was highest in Africa and Latin America and the Caribbean. In Latin America and the Caribbean prevalence is higher than 40 per cent in more than half of countries with data. For intimate partner emotional/psychological violence experienced in the 12 months prior to the survey, prevalence ranged from 6 per cent in Azerbaijan (2006) and the Comoros (2012) to 40 per cent in Equatorial Guinea (2011). Experience in the past 12 months was generally similar to lifetime experience in Africa, Asia and Oceania, however, in Latin America and the Caribbean recent experience was considerably lower than lifetime.
In EU countries, reported psychological violence among women was also very high (figure 6.10). The scope of such violence in the EU FRA survey included controlling and abusive behav-

[^191]iour, economic violence and blackmail with abuse of children. Only lifetime experience was addressed. The proportion of women experiencing intimate partner psychological violence at least once in their lives ranged from 31 per cent in Ireland to 60 per cent in Denmark and Latvia. More than half of the countries reported lifetime prevalence of psychological violence of 40 per cent or higher.

Figure 6.9
Proportion of women aged 15-49 years experiencing intimate partner psychological violence at least once in their lifetime and in the last 12 months, 1995-2013 (latest available)


Source: Compiled by the United Nations Statistics Division from Demographic and Health Surveys (DHS), Reproductive Health Surveys (RHS) and Multiple Indicator Cluster Surveys (MICS).(ICF International, 2014, CDC, 2014 and UNICEF, 2014c).
Note: Ranking is for presentation purposes only (see introduction to section A for further details).

Figure 6.10
Proportion of women aged 18-74 years experiencing intimate partner psychological violence at least once in their lifetime, European countries, 2012


Source: European Union Agency for Fundamental Rights, Violence against Women: An EU-wide Survey, 2014.(European Agency for Fundamental Rights, 2014).
Note: Some countries requested that only the results of their national surveys be presented (see table 6.4). Ranking is for presentation purposes only (see introduction to section A for further details).

Table 6.4 presents data from other national surveys. Lifetime experience of intimate partner psychological violence was higher than 50 per cent in 8 out of the 23 countries with data. Experience in the past 12 months was typically also high, reaching as high as 72 per cent in Bangladesh (2011) and over 50 per cent in 4 out of 20 countries with data.
Economic violence is difficult to define and can vary significantly according to the cultural context and country circumstances. In general terms, economic violence can involve denying access to property, durable goods or the labour market; deliberately not complying with economic responsibilities, thereby exposing a woman to poverty and hardship; or denying participation in economic decision-making. ${ }^{47}$
A number of countries have collected data on women's experience of economic violence. In Mexico, the 2011 survey "Encuesta Nacional sobre la Dinámica de las Relaciones en los Hogares" (ENDIREH) ${ }^{48}$ revealed that one quarter of women who were married or in union had experienced economic violence during their current relationship, with 17 per cent experiencing such violence in the previous 12 months. A 2010 survey in Viet Nam discovered that among ever-married women, 4 per cent had husbands who had taken

[^192]Table 6.4
Proportion of women experiencing intimate partner psychological violence at least once in their lifetime and in the last 12 months, 2000-2013 (latest available)

| Country | Year | Lifetime | Last 12 months |
| :--- | :---: | :---: | :---: |
| Albania | 2013 | 58.2 | 52.8 |
| Armenia | 2008 | 25.0 | .. |
| Australia | 2012 | 24.5 | 4.7 |
| Bangladesh | 2011 | 81.6 | 71.9 |
| Canada | 2009 | 11.4 | .. |
| Ecuador | 2011 | 43.4 | .. |
| Fiji | $2010 / 11$ | 58.3 | 28.8 |
| Italy | 2006 | 43.2 | .. |
| Japan | 2010 | 17.8 | .. |
| Kiribati | 2008 | 47.0 | 30.1 |
| Maldives | 2006 | 28.2 | 12.3 |
| Morocco | $2009 / 10$ | .. | 38.7 |
| Republic of Korea | 2013 | .. | 36.4 |
| Republic of Moldova | 2010 | 59.4 | 25.7 |
| Samoa | 2000 | 19.6 | 12.3 |
| Solomon Islands | 2009 | 56.1 | 42.6 |
| State of Palestine | 2011 | 58.8 | 58.6 |
| Sweden | 2012 | 23.5 | 6.8 |
| Tonga | 2009 | 24.0 | 13.0 |
| Tunisia | 2010 | 24.8 | 17.0 |
| Turkey | 2014 | 44.0 | 26.0 |
| United Kingdom (England and Wales only) | $2012 / 13$ | 17.2 | 2.5 |
| United States of America | 2011 | 47.1 | 14.2 |
| Vanuatu | 2010 | 68.0 | 54.0 |
| Viet Nam | 2010 | 53.6 | 25.4 |
|  |  |  |  |

Source: Compiled by the United Nations Statistics Division from national surveys on violence against women, correspondence with National Statistical Offices.
Note: Age groups covered differ among countries; methodologies, questionnaire designs and sample sizes used in surveys by statistics offices to produce national data may differ from those used in internationally conducted surveys.
their earned or saved money from them, 7 per cent had been refused money by their husbands, and 9 per cent had experienced at least one of these acts. ${ }^{49}$ In the 1998 DHS in South Africa, almost one in five currently married women reported that their partner regularly failed to provide economic support, while having money for other things. ${ }^{50}$ Results from Fiji ${ }^{51}$ revealed that women who experienced physical or sexual violence by their partners are significantly more likely to have husbands who take their savings or earnings and refuse to give them money, compared with women who have not experienced partner violence.

[^193]
## Box 6.4

Violence against men
Gender-based violence is a manifestation of the historic imbalance of power between men and women. Although gender-based violence typically focuses on violence against women, data on violence against men are also collected. The figure below presents statistics on the proportion of women experiencing lifetime intimate partner physical violence (women victims) alongside the proportion of women who report ever committing acts of physical violence against their husband/partner when he was not already beating or physically hurting them (women perpetrators).

## Women are far more likely to be victims than perpetrators

 of intimate partner violenceCaution should be taken when interpreting these results, since they are based on women's self-reports of perpetrating violence against men as opposed to men reporting their experience of violence perpetrated by women. Based on available data, women are far more likely to be victims than perpetrators of intimate partner violence; in one country, women were over 50 times more likely to be victims (India, 2005-2006). The only country for which violence against men was higher than violence against women was the Philippines (2013). There, the prevalence of violence perpetrated by women against men (16 per cent) was only slightly higher than violence perpetrated by men against women (13 per cent).
Some studies also include men's self-reported experiences of violence. Here again, reported rates of physical violence by men against women are higher than those of physical violence by women against men. Even in countries where reported rates of intimate partner physical violence are similar for women and men, women are more likely to suffer from violence more frequently and to experience the more serious types of violence and emotional stress. ${ }^{\text {a }}$
a Ansara, D.L. and M. J. Hindin, 2010.
Proportion of women who report experiencing lifetime intimate partner physical violence, as victims and perpetrators, 2005-2013 (latest available)


## Attitudes towards wife-beating

Wife-beating is a clear expression of male dominance; it is both a cause and consequence of women's serious disadvantage and unequal position vis-à-vis men. ${ }^{52}$ In some countries and cultures, wife-beating is seen as justifiable in a wide range of contexts. This acceptance means it can be difficult for behaviours to change and for women to feel they can discuss their experiences of violence and ask for help. Research indicates that perpetration of and victimization by violence is higher among those who accept or justify such abuse than those who do not. ${ }^{53}$ However, evidence also suggests that attitudes are beginning to change and that both women and men are starting to view violence as less acceptable. shows the proportions of women and men who agree that a husband is justified in beating his wife for at least one of the following reasons: the wife burns the food, argues with her husband, goes out without telling him, neglects the children or refuses to have sex with him.

## Wife-beating is acceptable in many countries across the world

Acceptance of wife-beating was generally higher in Africa, Asia and Oceania, and lower in Latin America and the Caribbean and developed countries. Levels of women's acceptance ranged from 3 per cent in Ukraine (2012) and Serbia (2010) to 92 per cent in Guinea (2012). Levels of men's acceptance ranged from 7 per cent in Serbia (2010) to 81 per cent in Timor-Leste (2009-2010). It should be noted that it is difficult to compare reported levels of acceptance of wife-beating across countries and contexts because the willingness to talk about violence and attitudes towards it vary, which can affect people's response. In almost all of the countries where more than one year of data are available, the level of women's and men's acceptance of wife-beating decreased over time. ${ }^{54}$ Although it may be assumed that wife-beating is more widely justified by men than women, in most countries levels of reported acceptance are actually lower among men than women.

[^194]Figure 6.11
Attitudes towards wife-beating: proportion of women and men aged 15-49 years who agree that a husband is justified in hitting or beating his wife for at least one of five specified reasons, 1995-2014 (latest available)


## B. Forms of violence in specific settings

## 1. Female genital mutilation

The term "female genital mutilation" (FGM, also known as "female genital cutting" and "female genital mutilation/cutting") refers to all procedures involving partial or total removal of the external female genitalia or other injury to the female genital organs for non-medical reasons. This harmful practice constitutes a serious threat to the health of millions of women and girls worldwide and violates their fundamental rights. Immediate complications include bleeding, delayed or incomplete healing, and infections. Long-term consequences are more difficult to determine, but may include damage to adjacent organs, sterility, recurring urinary tract infections, the formation of dermoid cysts and even death. ${ }^{55}$

In 2014, the United Nations General Assembly passed the second resolution on intensifying global efforts for the elimination of female genital mutilations (A/RES/69/150) calling on countries to take steps to increase education and awareness training on the issue, enact and enforce legislation, implement national action plans by involving multiple stakeholders, continue data collection and research, and provide support to victims and women and girls at risk. Despite this resolution and other important advances to eliminate female genital mutilation, the practice continues at unacceptably high levels in countries around the world.

In the 29 countries in Africa and the Middle East where the practice is concentrated, more than 125 million girls and women alive today have been subjected to the practice. ${ }^{56}$ Of these, around one in five live in Egypt, where prevalence has been consistently over 90 per cent since data collection on the practice began. In addition, female genital mutilation is practised by immigrants and minority groups in other countries, meaning that the global total of girls and women subjected to cutting is likely to be even higher than 125 million.

[^195]Female genital mutilation is less prevalent among
younger women
Based on latest available data, the prevalence of female genital mutilation among women aged between 15 and 49 is highest (over 80 per cent) in Djibouti, Egypt, Eritrea, Guinea, Mali, Sierra Leone, Somalia and Sudan. ${ }^{57}$ Among countries studied, prevalence is lowest (less than 10 per cent) in Benin, Cameroon, Ghana, Iraq, Niger, Togo and Uganda. In most countries where the practice is concentrated, prevalence rates have declined over time. Comparing prevalence across age groups can also indicate changes in the practice among younger generations. The proportions of girls and women aged 15 to 19 and 45 to 49 subjected to female genital mutilation are presented in figure 6.12. In all but one country presented here (Niger, which has rates near zero across all age groups), prevalence was lower among the younger cohort, with much lower prevalence rates found among younger women in Burkina Faso, Kenya, Liberia, Nigeria and Sierra Leone (more than 20 percentage points difference). However, in several countries—Djibouti, Guinea, Mali, Somalia and Sudan-prevalence was still very high among the young (more than 80 per cent) and was only slightly lower ( 5 percentage points difference or lower) in the younger age group, indicating that not much progress has been made overall.
Within countries, prevalence rates vary according to ethnicity, religion, urban or rural residence, economic status, age, education and income. In general, reported levels of female genital mutilation are lower in urban areas, among younger women, and in families with higher levels of household income and mothers with higher levels of education. ${ }^{58}$
Some efforts have been made to estimate the numbers of those at risk of female genital mutilation in countries of destination for people emigrating from areas where cutting is practised. Methods used include applying the prevalence rate in the country of origin to the numbers of immigrants from that country. However, this may lead to significant overestimation, since immigrants may not be representative of the population in the country of origin. Moreover, attitudes towards and the practice of female genital mutilation may be affected by moving to a new country where cutting is not widespread.

[^196]Figure 6.12
Girls and women aged 15-19 years and 45-49 years subjected to female genital mutilation, 2002-2013 (latest available)


Source: Compiled by the United Nations Statistics Division from Demographic and Health Survey (DHS) and Multiple Indicator Cluster Survey (MICS) reports (ICF, 2014 and UNICEF, 2014c).
Note: In the 29 countries where FGM is concentrated, almost all girls undergoing FGM are cut before the age of 15 (UNICEF, 2013). Ranking is for presentation purposes only (see introduction to section A for further details).

Attitudes towards female genital mutilation have also shown some change. In a number of countries, the majority of women (and men, where available) believe the practice should be discontinued. It is often assumed that support for female genital mutilation is higher among men than women; however, in many cases, the proportion of women and men who believe the practice should be discontinued is around the same. Support for discontinuation is mainly high in countries where prevalence is relatively low, such as Benin, Cameroon, Côte d'Ivoire, Ghana, Iraq, Kenya, Niger, Nigeria, Togo, Uganda and the United Republic of Tanzania. However, in Burkina Faso, strong support has been found for discontinuation, even in a high-prevalence context. In most countries where data are available for multiple years, support for discontinuation has increased. ${ }^{59}$

[^197]
## 2. Violence in conflict situations

In addition to the trauma of coping with life in the midst of conflict, people in these situations can face heightened levels of interpersonal violence. Sexual violence perpetrated by militia, military personnel or the police during conflict is an important aspect of non-partner sexual violence. However, data in this area tend to be sparse. In an effort to gather specific information on this issue, the Office of the Special Representative to the Secretary-General on Sexual Violence in Conflict has created a website (http:// www.un.org/sexualviolenceinconflict/) that includes information on violence experienced by people living in conflict situations. The conflicts highlighted include those in Bosnia and Herzegovina, the Central African Republic, Colombia, Côte d'Ivoire, the Democratic Republic of the Congo, Guinea, Liberia, Mali, Somalia, South Sudan, Sudan and the Syrian Arab Republic.

In Somalia, for example, high numbers of incidents of sexual violence continue to be reported. Between January and November 2012, United Nations partners and service providers registered over 1,700 rape cases in Mogadishu and the surrounding areas. Acts of sexual violence continue to be committed against internally displaced women and girls in these areas. Somali refugee women and girls were also targeted for sexual violence while attempting to flee to the border. ${ }^{60}$ Data from eastern Democratic Republic of the Congo, which has experienced sustained internecine violence for over a decade, found that almost half ( 48 per cent) of male non-combatants reported using physical violence against women, 12 per cent acknowledged having carried out partner rape, and 34 per cent reported perpetrating some kind of sexual violence. This heightened violence included 9 per cent of adult men who said that they had been victims of sexual violence themselves, and 16 per cent of men and 26 per cent of women who reportedly were forced to watch sexual violence. ${ }^{61}$ In some instances in Afghanistan, survivors of sexual violence said they were raped a second time by security forces while seeking protection. ${ }^{62}$

[^198]In cases where women fleeing conflict reach refugee camps, they often do not participate equally with men in the administration of the camps and in the formation and implementation of assistance programmes, with negative effects on equal access to food or other essential items. Vulnerability to sexual violence remains high in refugee camps, and single women or unaccompanied girls may be at higher risk if they are not accommodated separately from men or if there is not sufficient privacy. Long walk distances out of the camps to collect water and firewood for cooking and heating may also expose women to the threat of rape. In some cases, refugee women engage in survival sex to support their families. ${ }^{63}$

Adopted in 2000, UN Security Council resolution 1325 (2000) on women and peace and security was a milestone in addressing violence against women in situations of armed conflict. Recognizing the need to fully implement laws that protect the rights of women and girls during and after armed conflict, it calls for special measures to protect them from gender-based violence in such situations. The 26 indicators attached to the resolution are designed to monitor implementation and progress not only towards maintaining and promoting the security of women but also towards promoting women's leadership roles for peacekeeping and peacebuilding (see Chapter 5 on Power and Decision Making). Subsequent related Security Council resolutions directly address the issues of sexual violence in conflict as a tactic of war (1820 (2008)) and involving women in post-conflict and reconstruction periods (1889 (2009)).

## 3. Trafficking

Human trafficking in women is a serious issue and has been addressed internationally by the Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, which supplements the United Nations Convention against Transnational Organized Crime. The Protocol, which entered into force in 2003, had been ratified as at December 2014, by 166 parties. According to the protocol, human trafficking involves recruiting, transporting, harbouring or receiving persons under threat or use of force or other types of coercion for pur-

63 United Nations, 2006b.
poses of exploiting individuals for prostitution, other types of sexual exploitation, forced labour or services, slavery or practices similar to slavery, servitude or the removal of organs.

In 2014, the United Nations General Assembly passed a resolution on trafficking in women and girls (A/RES/69/149) calling on countries to sign and ratify relevant treaties and conventions, address the factors that make women and girls vulnerable to trafficking and to take more preventative efforts, including through education, develop comprehensive anti-trafficking strategies, criminalize all forms of trafficking and strengthen national mechanisms to ensure coordinated and comprehensive responses.

Due to its underground nature, accurate data on the scale of human trafficking are difficult to collect. According to a 2014 report on trafficking in persons, ${ }^{64}$ published by the United Nations Office on Drugs and Crime (UNODC), adult women accounted for almost half (49 per cent) of all human trafficking victims detected globally. Women and girls together accounted for about 70 per cent, with girls representing two out of every three child trafficking victims. ${ }^{65}$ Of persons prosecuted for and/or convicted of trafficking in persons over the period 2010-2012, around three quarters were men. ${ }^{66}$ The most common forms of exploitation of known victims of trafficking are sexual exploitation and forced labour. Between 2010 and 2012, victims holding citizenship from 152 different countries were found in 124 countries, ${ }^{67}$ an indication of the global scope of the problem.

[^199]
## C. State accountability: Help-seeking and response to violence against women

## 1. Help-seeking

Only a fraction of women who experience violence seek help. The proportion of women who did seek help from family, friends or institutions such as health services and the police ranged from 18 per cent in Mali (2012-2013) to over 70 per cent in Georgia (2010) (figure 6.13). In the majority of countries, less than 40 per cent of the women who experienced violence sought help of any sort. Among women who did, most looked to family and friends as opposed to the police and health services. For example, among women who sought help in the United Republic of Tanzania (2010), 47 per cent appealed to family, 6 per cent to the police, and 1 per cent to a doctor or other medical personnel. ${ }^{68}$ In Jordan (2012), 84 per cent looked to their family for support and 2 per cent went to the police. ${ }^{69}$

In general, only a small proportion of women who sought help did so by appealing to the police. In almost all countries with available data, the percentage of women who sought help from the police, out of all women seeking help for experience of violence, was less than 10 per cent (figure 6.14). These findings underscore the assumption that, in the vast majority of instances, violence goes unreported and administrative records are not appropriate for assessing the prevalence of violence. One reason women may be reluctant to speak to the police about their experience of violence may be the low representation of women among police personnel. Women make up less than 35 per cent of police personnel in all 86 countries and areas for which data are available, and less than 10 per cent in 26 of these countries. ${ }^{70}$

Yet, even when women do seek help, they often face formidable barriers. These include: lack of awareness of or actual lack of services; lack of accessibility to services due to linguistic, cultural, physical or financial constraints; fear of reprisals by the offender as well as family and community members; reluctance due to shame or embarrassment; the potential impact on women's custody of children; fear of reliving the experience of
violence by testifying before the courts; the feeling that the police could do nothing to help; and wanting to keep the incident private. ${ }^{71}$

In most countries less than 40 per cent of women who experienced violence sought help of any sort

Figure 6.13
Proportion of women aged 15-49 years who experienced violence and sought help, 2000-2013 (latest available)


Source: Compiled by the United Nations Statistics Division from Demographic and Health Surveys (DHS), Reproductive Health Surveys (RHS) and Multiple Indicator Cluster Surveys (MICS). (ICF, 2014, CDC, 2014 and UNICEF, 2014c).
Note: Ranking is for presentation purposes only (see introduction to section A for further details).

[^200][^201]Only a small proportion of women victims of violence who sought help did so from the police

Figure 6.14
Proportion of women aged 15-49 years who experienced violence and sought help from the police, as a proportion of those who sought help from any source, 2005/06-2013 (latest available)


Source: Compiled by the United Nations Statistics Division from Demographic and Health Surveys (DHS) and Reproductive Health Surveys (RHS). (ICF, 2014 and CDC, 2014).
Note: Ranking is for presentation purposes only (see introduction to section A for further details).

## 2. State response to violence against women

In many cases, even when women do seek help from state institutions such as the police, health and social services and the justice system, the response can be inadequate. Not all countries have laws on violence against women, and when they do, they are often more concerned with responding to the violence that has already occurred than with preventing it in the first place. At least 119 countries have passed laws on domestic violence, 125 have laws on sexual harassment and 52
have laws on marital rape. ${ }^{72}$ Even when domestic violence laws exist, this does not always mean they are implemented, or implemented in ways that actually help women. In many cases, victims of domestic violence are economically dependent on their intimate partner and so conviction and imprisonment of the perpetrator, for example, leave the woman bereft of her only source of economic support. Domestic violence laws need to be implemented in tandem with measures for the economic empowerment of women and appropriate social support mechanisms for victims who take the difficult step of seeking legal recourse. ${ }^{73}$ Prevention of and response to violence requires coordinated approaches across government, working with non-governmental organizations and other stakeholders.

To tackle the problem of violence against women, legislation needs to be enforced and implemented in ways that support victims and not discriminate against them. Many reported cases of violence suffer from attrition, or drop out, as they work their way through national legal systems. Attrition is a particular problem in rape cases. ${ }^{74}$ Results of a study in Gauteng Province, South Africa, for example, revealed that 17 per cent of reported rapes reached court and only 4 per cent ended in a conviction- levels of attrition that are common in many other countries. ${ }^{75}$ In European countries, an average of 14 per cent of reported rapes resulted in a conviction. ${ }^{76}$
Policies and programmes to address violence against women need to be sustainable, properly financed and participatory-involving not only women but men. Comprehensive victim support systems are essential, encompassing hotlines, shelters, health services, legal support, counselling and economic empowerment. However, such systems should be implemented along with initiatives to reduce impunity for perpetrators, prevent violence from occurring in the first place, and change social norms around the use of violence. Monitoring and evaluation should be conducted to assess which approaches work best. In addition, continued improvements in and support for data collection are needed to assess changes over time and progress towards a world free from violence against women in all its forms.

[^202]
## Box 6.5

When data on violence against women informs policy: The case of Kiribati

A dedicated study on violence against women and children ${ }^{\text {a }}$ was conducted in Kiribati in 2008, the first such study in that country. It revealed that Kiribati has one of the highest recorded levels of violence against women in the world: 68 per cent of ever-partnered women said they were victims of physical and/or sexual violence by an intimate partner, 47 per cent reported incidents of emotional abuse, and 90 per cent reported experiencing at least one form of controlling behaviour. Women were more likely to be subjected to severe forms of partner physical violence such as punching, kicking or having a weapon used against them, than moderate forms of physical violence. Twenty-three per cent of women who had ever been pregnant reported being beaten during pregnancy, and women who had experienced intimate partner violence were significantly more likely to report miscarriage and a child who died.
The study also investigated why violence against women was so common in Kiribati and concluded that there were a number of contributing factors. They included: a high level of acceptance of violence, the belief that controlling behaviour in intimate partner relationships was "normal", and the frequent use of physical punishment to "discipline" women who were thought to be transgressing their traditional gender roles. The most common reason men interviewees gave for hitting their wives was that they "disobeyed" them.

A number of risk factors were identified as being associated with the experience of intimate partner violence, including: being subjected to controlling behaviour by an intimate partner; alcohol consumption by both women and their partners; having been sexually abused as a child; having a partner who was beaten as a child; having a partner whose father beat the partner's mother; having a partner who fights with other men; and having a partner who has had an affair. These factors were much more significant than most social, economic and demographic variables such as age, education and employment, showing that violence cuts across all sectors of society.
In response, the study proposed a number of actions to address the widespread problem of violence in Kiribati, including establishing a new government body dedicated to gender, developing a national action plan to eliminate violence against women, and strengthening and expanding formal support systems for women living with violence. Since the publication of the survey results, the Government of Kiribati passed the Family Peace Bill, which aims to confront all forms of violence against women. It also approved the Eliminating Sexual and Gender-based Violence Policy and the accompanying National Action Plan 2011-2021, and is partnering with faith-based organizations and civil society to create SafeNet, which provides free services to survivors of sexual and gender-based violence.

[^203]
## Chapter 7

## Environment

## Key findings

- About half of population in developing regions lack access to improved drinking water on the premises; and the burden of water collection falls mostly on women.
- The number of deaths from diarrhoea due to inadequate water, sanitation and hygiene in developing regions was 0.8 million in 2012; the majority of such deaths in some parts of Asia were among women and girls.
- Slow progress in access to modern energy services, including electricity and non-solid fuels for cooking, delays improvements in health and hinders significant reductions in the workload burdens associated with household chores and firewood collection.
- Age, sex and differences in gender roles and norms are significant factors in mortality due to natural disasters, but their contribution varies by country and type of natural hazard.
- In some post-disaster settings, women's access to work and involvement in reconstruction efforts remain more limited than men's.
- More and more people are engaging in environmental protection activities, including recycling and cutting back on driving to reduce pollution; overall, women tend to be more involved than men in these day-to-day activities, linked to the gender division of labour.
- Women remain underrepresented in local and high-level environmental decision-making.


## Introduction

Women and the environment is one of the 12 critical areas of concern for achieving gender equality identified in the Beijing Platform for Action. ${ }^{1}$ The Platform for Action recognizes that environmental conditions have a different impact on the lives of women and men due to existing gender inequality. It also stresses that women's role in sustainable development is hampered by unequal access to economic resources, information and technology, and limited participation in policy formulation and decision-making in natural resources and environment management.
This chapter examines the links between gender and the environment in two parts. The first part looks at three aspects of the environment that have different effects on the lives of women and men: ${ }^{2}$ access to water and sanitation, access to modern energy services, and exposure to natural hazards. It shows that the burden of work resulting from lack of access to clean water and energy falls mostly on the shoulders of women. In ad-

[^204]dition, exposure to inadequate water may result in higher mortality among women than men as a result of diarrhoea in contexts where access to health services remains unequal. Household air pollution resulting from the use of firewood and other solid fuels threatens the lives of women and men in many developing countries, but women are more exposed than men to indoor pollutants due to their role in cooking and caring for children and other family members. Gender roles may also worsen women's vulnerability during disasters and waste their potential as a source of resilience.
The second part of the chapter examines the participation of women and men in preserving the environment through everyday activities and environmental decision-making in local and highlevel forums. Available data show that in everyday life, women tend to recycle and cut back on driving to reduce pollution more than men (linked to the gender division of domestic work), but remain underrepresented in local and national positions of decision-making related to the environment. As we approach global ecological limits that define a "safe operating space" for humanity ${ }^{3}$, it is

[^205]of utmost importance that both women and men step out of their traditional gender roles and par-
ticipate actively to ensure environmental protection and sustainable development.

## Box 7.1

Gaps in gender statistics related to the environment

Environment statistics is a relatively new statistical field ${ }^{\text {a }}$ that describes the biophysical aspects of the environment-the natural environment (air/climate, water, land/soil), the living organisms within these media, and human settlements ${ }^{\text {b }}$ —and those aspects of social and economic systems that directly influence and interact with the environment. ${ }^{\text {C }}$ This field of statistics, considered gender-neutral, was initially developed without much consideration of the dimensions related to individuals. In this context, links between gender and environment have been assessed most often based on qualitative or small-scale quantitative studies. Such assessments are useful in highlighting the socially constructed vulnerabilities and challenges faced by women and men and in providing information on the importance of integrating a gender perspective in policymaking. The extrapolation of their results, however, to the level of a whole society or across countries may lead to misconceptions about the status of women relative to men in different settings.
The links between gender and the environment are increasingly recognized by statisticians, including in the recently revised UN Framework for the Development of Environment Statistics. ${ }^{\text {d }}$ However, in many countries, gender statistics on environment are not yet part of the regular programmes of statistics in national statistical systems-a huge obstacle for gender analysis and policymaking.
For this report, in particular, the choice of issues examined and the structure of the chapter were constrained by the current availability of data. Topics related to housing characteristics or infrastructure, such as access to improved water, use of solid fuels for cooking and access to electricity, are covered more comprehensively because supporting statistics are available for a large number of countries. These statistics have agreed international concepts and definitions and are collected in surveys and censuses on a regular basis. For example, more than 200 countries and areas have available statistics on access to improved water and improved sanitation, for at least two data points between 1990 and 2014; and 180 countries have statistics on the use of solid fuels for cooking for at least two data points. ${ }^{\text {e }}$

However, more statistical information is needed on the links between gender and the environment in several areas. Time-use data are largely missing in countries from developing regions, where poor infrastructure and housing conditions, as well as natural hazards result in increased work burdens. For example, data on time spent for water or firewood collection was available for international compilation for only 14 developing countries, either from stand-alone timeuse surveys or from modules on time use attached to other household surveys. Furthermore, time-use data on national and subnational trends, which are needed
to assess changes in women's and men's work burdens
as a consequence of improvements in infrastructure or deterioration due to droughts, deforestation or desertification, are generally missing.
Environmental health is one of the most complex and difficult areas of data collection and estimation. The burden of disease due to environmental causes is currently estimated by the World Health Organization (WHO) and other institutions based on three types of statistical information: exposure to environmental hazards; the effect of the exposure on morbidity and mortality; and mortality by cause of death in the presence versus the absence of environmental hazards. Complex modelling is used to produce global and regional estimates of morbidity and mortality, often based on partial information on exposure, a few case studies on the relationship between exposure and health effects, and cause of death information confined to a limited number of countries, mostly from developed regions. Gender is not consistently integrated at every step of the statistical modelling (mainly due to limited availability of statistical information disaggregated by sex) and the results obtained are not systematically assessed from a gender perspective.

Sex-disaggregated data on the effects of natural hazards on mortality and morbidity are available for a small number of cases, mostly from research literature, and are even more difficult to obtain on other dimensions, such as education, health, food and economic security.
Adequate monitoring of the impact of the environment and climate change on the lives of women and men may require that some data disaggregated by sex and age are recorded for smaller areas of a country. At most, the traditional system of social statistics has been focused on urban/rural areas and regions. However, the occurrence and impact of environmental phenomena are distributed across space without regard to administrative boundaries, and monitoring may need to take into account small areas that are particularly prone to specific weather conditions and the effects of climate change. Technologies such as Global Positioning Systems (GPS) and remote sensing need to be further explored as sources of geospatial information that can be layered upon the sex-disaggregated information on a population produced by household surveys and censuses to determine the exposure of women and men to various natural hazards or pollution factors.
Finally, statistics to assess the active participation of women and men in environmental protection and de-cision-making at all levels are scarce. For example, data on environmentally friendly behaviour are mostly limited to developed countries. Information on local deci-sion-making on environmental resources and extreme event preparedness and post-disaster reconstruction efforts has remained largely a domain of qualitative and small case studies ${ }^{f}$.
a United Nations Statistics Division, 2013.
b United Nations Environment Programme, 2012.
c United Nations Statistics Division, 2013.
d The revised Framework for the Development of Environment Statistics was endorsed by the United Nations Statistical Commission at its forty-fourth session in 2013.
e United Nations Statistics Division, 2014.
f One notable exception is data collection on local management of forests coordinated by the Poverty and Environment Network (Center for International Forestry Research, http:// www1.cifor.org/pen, accessed March 2015).

## A. The impact of environmental conditions on the lives of women and men

1. Access to improved drinking water and sanitation

The right to safe, clean drinking water and adequate sanitation is a human right, essential to the full enjoyment of life and all other human rights, as recognized by the UN General Assembly in July 2010 (resolution 64/292). Lack of access to clean drinking water and sanitation has a tremendous impact on the burden of disease and the workloads of both women and men in developing countries. However, women are more often charged with collecting water, cleaning and cooking and also with taking care of the sick, drastically limiting their time spent on paid work and leisure and, in the case of girls, reducing the time for educational pursuits.

## Steady progress has been made in access to improved drinking water and sanitation

The proportion of the global population with access to improved drinking water ${ }^{4}$ increased from 76 per cent in 1990 to 91 per cent in $2015 .{ }^{5}$ Currently, 663 million people are without access to improved drinking water. Most of them are poor and located in rural areas of developing regions. Access to improved drinking water is virtually universal in developed regions and increased in all developing regions. Some of the biggest improvements were in Eastern Asia, Southern Asia and South-Eastern Asia. Sub-Saharan Africa also recorded a substantial increase in access, but remains one of the regions with the lowest level of coverage (68 per cent), second only after Oceania (56 per cent). Currently, sub-Saharan Africa has the largest share of the global population without access to improved drinking water, and alone accounts for nearly half of global population living without improved water sources. ${ }^{6}$
Access to improved sanitation ${ }^{7}$ also increased, from 54 per cent of the global population in 1990

4 Improved drinking water sources include piped water on premises; public taps or standpipes; tube wells or boreholes; protected dug wells, protected springs; and rainwater collection.
UNICEF and WHO, 2015.
Ibid.
7 Improved sanitation facilities are facilities likely to ensure hygienic separation of human excreta from human contact. They include: flush/pour flush to piped sewer system, septic tank, and pit latrine; ventilated improved pit latrine; and pit latrine with slab and composting toilet.
to 68 per cent in 2015. Globally, 2.4 billion people live without improved sanitation facilities; among these, nearly 1 billion practise open defecation. Progress in sanitation has been uneven among regions. The biggest improvements were recorded in Eastern Asia, Southern Asia, and South-Eastern Asia. Progress has been slow in sub-Saharan Africa and non-existent in Oceania. The lowest level of improved sanitation use is in sub-Saharan Africa, at 30 per cent of the population. ${ }^{8}$

## The health burden

The lack of adequate drinking water, sanitation and hygiene are important environmental health risk factors with a tremendous impact on morbidity and mortality for both women and men. As noted above, many people do not have access to drinking water sources that are considered improved. In addition, not all sources considered improved provide safe, good quality water. For example, some of the drinking water sources considered "improved" may not be adequately maintained and protected from outside contamination, including from naturally occurring elements such as arsenic, pollution from industry and agriculture and from poor sanitation. ${ }^{9}$ Furthermore, when the source of water is far away, the quantity of safe water that gets collected is less likely to be sufficient for minimum drinking needs or for good hygiene practices. ${ }^{10}$ It has been shown that the quantity of water that gets collected declines drastically if more than half an hour per trip is needed to collect the water. ${ }^{11}$ This is often the case in sub-Saharan Africa where 29 per cent of the population ( 37 per cent in rural areas and 14 per cent in urban areas) are at 30 minutes or more away from an improved source of drinking water. ${ }^{12}$

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The health burden related to water and sanitation remains substantial in developing regions
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In 2012, an estimated 842,000 people died as a result of diarrhoea caused by inadequate drink-

[^206]ing water, ${ }^{13}$ sanitation ${ }^{14}$ and hygiene in low- and middle-income countries. ${ }^{15}$ This death toll represented 1.5 per cent of the total disease burden of that year and 58 per cent of deaths due to diarrhoeal diseases. ${ }^{16}$ The two regions (as defined by WHO) with the highest number of deaths from diarrhoea due to inadequate drinking water, sanitation and hygiene are Africa (44 per cent of the global total) and South-East Asia (43 per cent of the global total).
The distribution of deaths due to inadequate drinking water, sanitation and hygiene by sex was different in each of the two regions. Female deaths represented 49 per cent of the total share in Africa and 59 per cent in South-East Asia (which includes India as the most populous country in that WHO region). ${ }^{17}$ These differences could be explained by specific regional sex and age distributions of all deaths due to diarrhoeal diseases. In Africa, death rates were either similar for females and males or slightly higher for males because of the general higher biological vulnerability and mortality for boys and men (see Chapter 2 on Health). In South-East Asia, however, the female mortality rates were higher than the male rates, both in childhood and at older ages (figure 7.1). Although the mortality rate declined

Figure 7.1
Mortality rates due to diarrhoeal diseases among children and older persons, by sex in South-East Asia (as defined by WHO), 2000 and 2012


Source: WHO, Global health estimates for deaths by cause, age and sex for years 2000 and 2012, www.who.int/healthinfo/global_burden_disease/en/ (accessed November 2014).


13 Estimates of populations with access to adequate drinking water differ from populations with access to improved water sources. People living at a distance greater than a 30 -minute round trip from their water source (whether improved or not) were assumed to have access to inadequate water source. In addition, household water filtering and boiling drinking water were used as a proxy for further improvement beyond currently available improved water sources. Source: Prüss-Ustün and others, 2014.
14 Inadequate sanitation refers to unimproved sanitation as defined by the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation.
15 Prüss-Ustün and others, 2014.
16 Ibid.
17 WHO, 2014c.
in the past decade for both females and males, sex differences persisted and increased even further among older persons (figure 7.1).

The sex differences in mortality due to diarrhoeal diseases observed in South-East Asia are likely related to gender differences in access to health services, which are to the disadvantage of girls and women. Deaths due to diarrhoeal disease are largely preventable if appropriate care is sought early. For children, studies in India, Bangladesh and Indonesia showed that the sex of a child influences care-seeking, including delayed hospitalization and lower rates of hospitalization among girls than boys. ${ }^{18}$ In India, delays in seeking treatment are generally associated with longer travel distances to health facilities, poverty, lower levels of education and lack of a health card by the mother. ${ }^{19}$ Gender bias in health care to the disadvantage of girls has been reported in other regions as well, although mortality rates for girls are not higher than those for boys. For example, in sub-Saharan Africa, in 17 of 23 countries with Demographic and Health Survey (DHS) data, the percentage of children with diarrhoea who did not receive medical advice was higher for girls than for boys, although in some countries only by a small margin. ${ }^{20}$

## The work burden

The lack of improved drinking water on the premises increases the workload of women and men. In 2015, 58 per cent of the global population enjoy the convenience and health benefits of having piped water on the premises, 14 percentage points more than in 1990. Despite steady improvements, the coverage of piped water in developing regions remains much lower than in developed regions-49 per cent compared to 96 per cent in 2015. The regions with the lowest coverage are sub-Saharan Africa, Oceania, Southern Asia and South-Eastern Asia. ${ }^{21}$ Inequality in coverage between urban and rural areas declined only by a small margin and remains substantial. Globally, one third of the rural population has access to piped water on the premises compared to more than three quarters of the urban population.

[^207]
## Women are more often responsible for water collection than men

Women have a higher burden of water collection than men in all regions with available data except Eastern and Southern Europe and Latin America and the Caribbean, where the role of water collection is nearly equally distributed between the
sexes (figure 7.2). The gender disparities are apparent and are particularly higher in rural than in urban areas in sub-Saharan Africa and Asia. For example, in sub-Saharan Africa, the person usually collecting water is a woman in 65 per cent of rural households and a man in 10 per cent of households. In urban areas, the corresponding proportions are 33 and 10 per cent, respectively.

Figure 7.2
Distribution of households by person usually responsible for water collection, by region and by urban and rural areas, 2005-2013 (latest available)


Source: Computed by United Nations Statistics Division based on data prepared by WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation, Data on distribution of households by sex and age group of person responsible for water collection, correspondence in September 2014 (2014b).
Note: Unweighted averages. The number in parentheses indicates the number of countries averaged. Data presented by Millennium Development Goal (MDG) regions.

In developing countries, when water is not available on the premises, the time needed to get to a water source, collect the water, and return home averages 27 minutes in rural areas and 21 minutes in urban areas. ${ }^{22}$ Typically, it takes more than one trip per day to cover the needs of a household. The time burden for water collection is highest in sub-Saharan Africa, where one round trip averages 33 minutes in rural areas and 25 minutes in urban areas. In Asia, it requires 21 minutes and 19 minutes, respectively. However, in many countries in these two regions the time burden is much greater, particularly in rural areas. In the rural areas of Mauritania, Somalia, Tunisia and Yemen, a single trip to collect water takes on average more than one hour. ${ }^{23}$
The data presented above, available for many countries in developing regions, are useful in providing an overview of the role of women and

[^208]men in water collection and the distance to water sources. Still, they offer only a basic measure of women's and men's burden, because they do not take into account multiple trips to the water sources and the involvement of multiple household members in water collection. When available, further information from time use surveys can show the proportion of women and men actually involved in water collection and how much time they spend during a day on this activity. For example, time use data for selected countries in sub-Saharan Africa show that the total burden of water collection in a population is typically much higher for women than men (figure 7.3). For instance, in Malawi, daily water collection takes an average of 54 minutes of a woman's time and only 6 minutes of a man's time. In Guinea and the United Republic of Tanzania, women spend more than 20 minutes per day collecting water, while men spend less than 10 minutes. In Ghana and South Africa, the time spent on this activity is more equitably distributed between women and men.

Figure 7.3
Average time spent on water collection, by sex in selected sub-Saharan African countries

Source: Compiled by the United Nations Statistics Division from Fontana and Natali, Gendered Patterns of Time Use in Tanzania: Public Investment in Infrastructure Can Help (2008); Ghana Statistical Service, How Ghanaian Women and Men Spend their Time. Ghana Time Use Survey 2009 (2012); Statistics South Africa, A Survey on Time Use 2010 (2013); and World Bank, Gender, Time Use and Poverty in Sub-Saharan Africa (2006).
Note: Average time burden in the population is calculated by taking into account, in the denominator, those involved in water collection as well as those not involved. Data may not be comparable across countries since the data collection methods may differ.


Children, especially girls, are heavily involved in water collection

The burden of water collection weighs heavily on children. The statistics on the usual person collecting water in the household, available from Multiple Indicator Cluster Surveys (MICS) and DHS, presented previously, provide only a partial picture. A girl under age 15 is the main person collecting water in 4 per cent of all households in developing regions, and a boy of the same age group is the main water collector in 2 per cent of households. ${ }^{24}$ However, the participation of children in water collection is undoubtedly much higher. Time use data, although available for only a small number of countries, illustrate this point. In Ghana, for example, about 90 per cent of children aged 10 to 17 participate to some degree in water collection. ${ }^{25}$ In

## Figure 7.4

Average time spent on water collection among children and adults, by sex in selected sub-Saharan African countries

Source: Compiled by the United Nations Statistics Division from World Bank, Gender, Time Use and Poverty in Sub-Saharan Africa (2006) and Fontana and Natali, Gendered Patterns of Time Use in Tanzania: Public Investment in Infrastructure Can Help (2008).
Note: Data on children refer to the age group 5-14 years for Malawi and the United Republic of Tanzania and 6-14 years for Guinea. Average time burden in the population is calculated by taking into account, in the denominator, those involved in water collection as well as those not involved. Data may not be comparable across countries since the data collection methods may differ.


[^209]Rwanda, over 70 per cent of children aged 6 to 9 years and over 80 per cent of children aged 10 to 14 years participate in water collection. ${ }^{26}$

The cases of Guinea, Malawi and the United Republic of Tanzania show that the average time spent by children on water collection is lower than the time spent on this activity by adult women but higher than that spent by men (figure 7.4). Girls spend more time than boys on water collection, but the gender gap is narrower among children than among adults.

Women's work associated with water collection, as well as firewood collection discussed in the next section, remains undervalued, both at the level of national economies and within the household. Very few countries include the value of water and firewood collection when computing their gross domestic product. ${ }^{27}$ Within the household, because water and firewood collection is not an income-earning or profit-generating activity, this type of work is rendered invisible. As a result, women's contribution to the economy and to a household's well-being remains largely unrecognized and their economic independence and power of decision-making limited.

## 2. Access to modern energy services

Access to modern energy services, including electricity and clean, modern cooking solutions, is essential to the achievement of sustainable development in developing countries, including to the achievement of a range of social and economic goals relating to poverty, health, education, equality and environmental sustainability. ${ }^{28}$

## Electricity

Electricity affects the quality of life in many ways-for both women and men. Electricity facilitates learning and access to information and technology, and can reduce workload burdens associated with cooking, cleaning, fuelwood collection and the need to make daily food purchases due to the lack of refrigeration. ${ }^{29}$ These time-consuming tasks tend to be performed more often by women than men (see Chapter 4 on Work). Modern appliances powered by elec-

[^210]tricity, such as stoves and microwave ovens, can also reduce the harmful effects of smoke, particularly on women and children, from burning solid fuels (see next section of this chapter).

Access to electricity increased in many developing regions
Between 1990 and 2010, the proportion of the global population with access to electricity increased from 76 to 83 per cent, with an additional 1.7 billion people gaining the benefits of electrification. Currently, the global access deficit stands at 1.2 billion people, with the biggest contributor being India, where 306.2 million people are without electricity. Access to electricity in urban areas globally was already high in 1990, at 94 per cent, and increased slowly to 95 per cent by 2010. By comparison, access in rural areas increased more steeply, from 61 to 70 per cent. Currently, 85 per cent of those without electricity are rural dwellers. ${ }^{30}$
Great improvements were noted in some developing regions (figure 7.5), including Northern Africa, South-Eastern Asia and Southern Asia. In stark contrast, access to electricity in Oceania and sub-Saharan Africa remains very low after two decades of slow progress. In 2010 in Oceania, only 25 per cent of the population had access to electricity ( 14 per cent in rural areas and 65 per cent in urban areas). In sub-Saharan Africa, 32 per cent of the population had electricity that year (14 per cent in rural areas and 63 per cent in urban areas). ${ }^{31}$

## Solid fuels used for cooking

Solid fuels for cooking include coal, lignite, charcoal, wood, straw and dung. The dominant type of fuel used is wood, whether taken from dead trees and branches on the ground or from trees cut for fuelwood. Burning fuelwood causes smoke and solid particulate waste that contaminate the air and can cause respiratory problems if not vented outside the dwelling, such as through a chimney, window or by having the kitchen fire outside of living areas. In addition, the need for fuelwood increases the work burden of women and men and sometimes results in deforestation, thereby causing environmental harm.

[^211]Figure 7.5
Proportion of the population with access to electricity, 1990 and 2010


Solid fuels continue to be used for cooking in many regions and countries

The global proportion of households using mainly solid fuels for cooking decreased from an estimated 53 per cent in 1990 to 41 per cent in 2010. ${ }^{32}$ The number of people using solid fuels remained the same over that period, at around 2.8 billion. All WHO regions with the highest use of solid fuels-Africa, South-East Asia (which includes India as the most populous country in that region) and the Western Pacific (which includes China as the most populous country in that region)-showed declining trends in the proportion of households using such fuels, but mixed trends in the number of people exposed to their harmful effects. In Africa, the proportion of households using solid fuels declined from 82 per cent in 1990 to 77 per cent in 2010. The estimated number of persons using solid fuels in the region increased from 413 million in 1990 to 646 million in 2010 as a result of population growth that outpaced improvements in access to clean energy. South-East Asia showed a substantial decrease in the proportion of the population using solid fuels for cooking (from 83 per cent to 61 per cent), while the overall number of people exposed to their harmful effects remained at around 1.1 billion. The Western Pacific region showed a significant decline in both absolute and relative terms. The proportion of households using solid fuels declined from 66 to 46 per cent and the population exposed to the risk declined from 865 to 739 million.

32 Bonjour and others, 2013.

Within developing regions, the current use of solid fuels for cooking varies widely across countries and by urban and rural areas. Solid fuels are the main type of fuel used in rural areas in all countries with available data in subSaharan Africa, more than half of countries in Asia, and in some countries in Latin America and the Caribbean. By comparison, solid fuels are less used in urban areas. Yet, in sub-Saharan Africa, the majority of urban households in 22 out of 32 countries with data use solid fuels for cooking. In urban areas in other developing regions, solid fuels are seldom used as the main type of fuel. Some exceptions include Haiti (in Latin America and the Caribbean) and TimorLeste (in Asia). ${ }^{33}$

## The health burden

Exposure to household air pollution is a major health risk. ${ }^{34}$ The level of household pollution varies by type of fuel used, from practically none when electricity is available, to medium for natural gas and liquid fuels such as kerosene and liquid petroleum gas, to a high level when solid fuels are used. Among the solid fuels, biomass fuels-such as animal dung, crop residues and wood-produce the highest levels of pollutants, followed by coal and charcoal. The use of solid fuels for cooking, particularly indoors on an open fire or on simple traditional stoves, increases the exposure of household members to substantial amounts of pollutants with healthdamaging potential, including particulate matter, carbon monoxide, nitrogen oxide, sulphur oxide and benzene. ${ }^{35}$ Household use of solid fuels also contributes to ambient (outdoor) air pollution, particularly in regions with high use. ${ }^{36}$

Household air pollution is a major cause of disease

Women and men exposed to smoke from solid fuels have an increased risk of developing acute lower respiratory infections, chronic obstructive pulmonary disease (COPD) and lung cancer. Air pollution has also been linked to increased risk

[^212]for stroke and ischaemic heart disease. Household air pollution from using solid fuels is one of the main causes of disease globally, resulting in an estimated 4.3 million premature deaths ${ }^{37}$ in 2012. ${ }^{38}$ About a third ( 34 per cent) of these deaths were due to strokes, 26 per cent to ischaemic heart disease, 22 per cent to COPD, 12 per cent to acute lower respiratory disease, and 6 per cent to lung cancer. ${ }^{39}$

Women in developing countries are more exposed than men to smoke from solid fuels. Women spend more time than men cooking and thus they are more often exposed to episodes of high-intensity pollution; ${ }^{40}$ women also spend more time than men indoors, ${ }^{41}$ taking care of children and domestic chores (as discussed in Chapter 4 on Work). Consequently, women have a higher relative risk than men of developing adverse health outcomes due to exposure to smoke from solid fuels, including an estimated 21 per cent higher relative risk of COPD and lung cancer. ${ }^{42}$ The relative risks for developing stroke and ischemic heart disease are similar for women and men.

## The work burden

Dependency on firewood for cooking and heating creates a high work burden for women and men. Available time use data show that in some countries women spend more time than men collecting firewood, while in others men spend more time (figure 7.6). In Guinea, Lao People's Democratic Republic and Malawi, for example, women are disproportionately burdened. In Malawi, women spend an average of 19 minutes each day collecting firewood compared to only 3 minutes spent by men. By contrast, in Ghana, men spend 42 minutes per day compared to 25 minutes spent by women.

[^213]Figure 7.6
Average time spent collecting firewood, by sex, selected developing countries


Source: Compiled by the United Nations Statistics Division from Fontana and Natali, Gendered Patterns of Time Use in Tanzania: Public Investment in Infrastructure Can Help (2008); Ghana Statistical Service, How Ghanaian Women and Men Spend their Time. Ghana Time Use Survey 2009 (2012); Government of Pakistan, Federal Bureau of Statistics, Time Use Survey 2007 (2009); National Statistical Centre of Lao People's Democratic Republic, Social and Economic Indicators. Lao Expenditure and Consumption Survey 2002/03 (2004) Statistics South Africa, A Survey on Time Use 2010 (2013); and World Bank, Gender, Time Use and Poverty in Sub-Saharan Africa (2006).
Note: Average time burden in the population is calculated by taking into account, in the denominator, those involved and not involved in firewood collection. Data may not be comparable across countries since data collection methods may vary.

## 3. Extreme climate events and disasters

Disasters caused by weather-, climate- and wa-ter-related hazards are on the rise worldwide. ${ }^{43}$ The Fifth Assessment Report of the Intergovernmental Panel on Climate Change confirmed that rising atmospheric concentrations of greenhouse gases have already changed weather patterns and the global water cycle. Both developed and developing countries are bearing the burden of repeated floods, droughts, temperature extremes and storms, but developing countries and the poor remain most vulnerable. It is predicted that climate change will further impact human lives and well-being as these extreme weather events grow in frequency and intensity. ${ }^{44}$
Natural disasters have different effects on women, men, girls and boys. Limited evidence presented in the next sections suggests that age, sex and differences in gender roles all affect mortality rates due to natural disasters. Gender roles and norms also play an important role in the aftermath of disasters, including in terms of access to livelihoods and participation in recon-

[^214]struction efforts. For example, gender roles and norms may limit the capacities and resources of women and girls to respond with resilience and to be in charge of their own futures, with consequential effects throughout entire families and communities. In addition, the likelihood of violence against women, an expression of the unequal power relationships between women and men, can increase as property and livelihoods are lost and as services and formal and informal protection mechanisms are disrupted. ${ }^{45}$
Yet, the systematic collection and compilation of statistics on gender and natural disasters that would indicate the scope and patterns of these specific impacts are lacking at the international level. Some of the constraints to such data collection include the complexity of post-disaster settings and the absence of standardized definitions and methodological tools for data collection. ${ }^{46}$ Data and adequate gender analyses are also largely absent in research journals and publications of international agencies involved in providing humanitarian aid in crises related to natural disasters. A recent review ${ }^{47}$ of these sources showed that data disaggregated by sex were available for only eight disasters or groups of disasters since 1988 in developing countries that were not members of the Organisation for Economic Co-operation and Development (OECD). The review also revealed a number of accounts of women being disproportionately affected relative to men during disasters, but these were based almost exclusively on qualitative data. Furthermore, some of the few data-based materials used were flawed by gender bias in reporting, methodological errors, and mixing of information based on different definitions and indicators. Thus, in a world that expects an increase in extreme weather events, the lack of adequate gender statistics and analyses continues to undermine efforts to reduce disaster risk and increase the effectiveness of humanitarian responses. ${ }^{48}$

## Mortality

The lives of thousands of women and men are lost worldwide each year as a result of natural disasters. Between 1995 and 2014, an estimated 241,400 deaths occurred as a result of storms

45 United Nations Economic and Social Council, 2013.
46 Tschoegl, Below and Guha-Sapir, 2006; Guha-Sapir and Below, 2002.
47 Eklund and Tellier, 2012.
48 United Nations Economic and Social Council, 2013.
or tropical cyclones, 158,700 due to extreme temperatures, 154,000 to floods, and 22,500 to droughts. In addition, 746,800 lives were lost as a result of earthquakes. ${ }^{49}$

Age, sex and differences in gender roles and norms are significant factors in mortality due to natural disasters

Mortality differences by sex vary from one country to another and by type of hazard. For example, in Myanmar, women and girls represented 61 per cent of the 85,000 deaths and 53,000 people missing after the 2008 cyclone. ${ }^{50}$ In Sri Lanka, women, children and older persons represented the majority of casualties in the 2004 tsunami. Out of the more than 13,000 dead and missing persons estimated by the post-tsunami census conducted in Sri Lanka, 65 per cent were women. ${ }^{51}$ The share of female deaths was highest among those aged 19 to 29, at 79 per cent. Female deaths outnumbered male deaths in other countries hit hard by the 2004 tsunami, including several sites in Indonesia and India. ${ }^{52}$ Another finding that cuts across affected countries is that children and older adults died in greater proportions than adults in their prime age. ${ }^{53}$

The explanations of the differences between female and male mortality during the 2004 tsunami have been formulated mainly in terms of gender. Women's and girls' higher vulnerability was associated with lower access to information, the lack of life skills such as swimming ability, constrained mobility outside their home, and the increased vulnerability of women staying home with children at the time of the sea-level rise. ${ }^{54}$ Gender differences were not the only factor. The physiological attributes of females and males at different ages have a substantial impact on vulnerability during tsunamis. For example, a quantitative assessment of sex and age differences in mortality based on a longitudinal survey before and after the tsunami in Indonesia showed that some of the explanation lies in differences in physical strength, stamina

[^215]and running and swimming ability. ${ }^{55}$ Overall, prime-age males were the most likely to survive the tsunami because they were the strongest. Their presence in the household at the time of tsunami also had a protective effect on the survival of wives and children. ${ }^{56}$

A different sex and age pattern of mortality emerged in the 2011 earthquake and tsunami in Japan. In 2011, when the Great East Japan Earthquake and subsequent tsunami hit the northeast coast of Japan, 8,363 female deaths and 7,360 male deaths were recorded in the prefectures hardest hit. ${ }^{57}$ The most affected were older persons (figure 7.7). The numbers of female and male casualties were similar among children and young adults. At age 70 and above, nearly 1,000 more women than men died. This was higher than expected based on the sex distribution in the older population. ${ }^{58}$

Figure 7.7
Deaths due to the 2011 East Japan Earthquake and tsunami by age and sex, Japan


Source: Government of Japan, Disaster prevention and reconstruction from a gender equal society perspective. Lessons from the Great East Japan Earthquake (2012).
Note: Data refer to the worst-affected prefectures, including Iwate, Miyagi and Fukushima.

[^216]In the United States of America, however, more men than women have died as a result of natural hazards, suggesting that men are more inclined to risk-taking or more involved in activities that put them at risk. During 2004-2013, 3,777 males and 2,211 females died as a result of natural hazards.
The leading natural hazards in terms of fatality were heatwaves, tornados, hurricanes and floods. ${ }^{59}$ Male deaths outnumbered female deaths in all major categories of natural hazards and at almost all age categories. The exceptions were persons over 80 years (figure 7.8).

Men also accounted for the majority of deaths due to meteorological disasters (storms, cold weather, floods, typhoons and lightning) in the Republic of Korea between 1990 and 2008. For men, most deaths occurred outdoors, whereas most women died in residential areas. Men accounted for more than half of deaths due to drowning in a river ( 61 per cent), sea ( 66 per cent) and in a sunken vessel ( 97 per cent). Women accounted for more than half of deaths due to structural collapse ( 52 per cent) and drowning in a submerged house ( 56 per cent). ${ }^{60}$ Another example of where more adult men than adult women died as a result of natural disasters was the 1999 floods in Hunan province, China. ${ }^{61}$

## Older persons, especially women in some settings, are most vulnerable to heatwaves

Older persons are among those most vulnerable to heatwaves, ${ }^{62}$ an increasingly relevant issue since all countries show a rise in the proportion of older persons in the population (see Chapter 1 on Population and families). A review of research studies ${ }^{63}$ showed that deaths due to cardiovascular and respiratory conditions were consistently reported as having increased, along with respiratory admissions to hospitals among older persons during hot days and heatwaves. ${ }^{64}$ Both biological and social factors explain this susceptibility to high temperatures. Biologically, the body's responses to the environment deteriorate with ageing. In addition, both thermoregulation and risk perception can be altered by the use

[^217]Figure 7.8
Total number of deaths due to natural hazards, by sex and age group, United States of America, 2004-2013


Source: USA National Weather Service, Natural hazards statistics. National Oceanic and Atmospheric Administration (NOAA), http://www.nws.noaa.gov/om/hazstats.shtml (accessed March 2015).
of medications or by dementia. Socially, living alone (as many older women in developed countries do) may also contribute to the susceptibility of older persons to heat, especially when confined to bed or not taking steps to avoid the heat and to increase cooling and hydration. ${ }^{65}$
Older women were significantly worse off during heatwaves in various sites, including during the 2003 summer heatwave in Europe, heatwaves that occurred between 1995 and 2006 in Australia and in 2003 in the city of Shanghai, in China. ${ }^{66}$ For example, the excess mortality due to the 2003 summer heatwave in Europe was higher for older persons and women. In Rome and Milan, almost all excess mortality was among persons aged 75 and over. ${ }^{67}$ Nearly three quarters of excess deaths were female, largely reflecting the higher share of women among the older population. In France, the mortality observed during the heatwave was 70 per cent higher than expected for women and 40 per cent for men. ${ }^{68}$ Similarly, in India, a higher increase in the mortality of women than men was noted during the 2010 heatwave in Ahmedabad (in the western state of Gujarat). The average number of deaths per day the year before and after the heatwave was 63 for men and 42 for women. During the heatwave from 19 to 25 May, the mortality increased by an additional 53 male and 61 female deaths per day. ${ }^{69}$

65 Ibid.
66 Ibid.
67 Michelozzi and others, 2005.
68 Pirard and others, 2005.
69 Azhar and others, 2014.

## Livelihoods and participation in reconstruction efforts

Relative to men, women's capacity to recover after natural disasters in some countries may be more limited due to their lower education levels. Women may also have specific skills that confine them to certain occupations that may put them at greater risk of unemployment during natural disasters or that are less in demand during post-disaster reconstruction efforts. For example, a study of urban flooding in 2011 in Lagos, Nigeria, ${ }^{70}$ showed that women with low social and economic status, but not women in general, were most vulnerable. Another study, in Sumatra, Indonesia, showed that after the 2004 tsunami, better educated women and men were able to adjust to changes much faster than those with little education, perhaps reflecting not only differences in skills, but also a greater accumulation of economic and social resources. ${ }^{71}$

## Women's access to work in post-disaster settings may be more difficult than men's

Women may face higher barriers than men in accessing work in post-disaster settings. These include the increased burden of caring for children and family members when public services are interrupted. Women may also experience more difficulties finding employment when job losses occur in those economic sectors and occupations where women dominate, and when newly created jobs are concentrated in sectors and occupations dominated by men. ${ }^{72}$ For example, in the Canterbury region of New Zealand, women's employment fell by 10 per cent compared to 7 per cent for men after the 2010 and 2011 earthquakes and tsunami. The difference was mostly due to larger falls in employment in female-dominated industries, including retail, hotels and accommodation, health care and social assistance. In Chile, in regions suffering greater net job losses as a result of the 2010 earthquake and tsunami, around 46 per cent of jobs lost were held by women, but only 15 per cent of the jobs created went to them. ${ }^{73}$

In some instances, gender stereotypes were perpetuated in post-disaster temporary employment programmes. In Japan, after the 2011 earthquake

[^218]and tsunami, men were given the role of clearing rubble while women prepared meals at evacuation sites, and while daily allowances were often provided for clearing rubble, no such compensation was provided for food preparation. ${ }^{74}$ In Mexico, 70 per cent of the temporary jobs offered by federal and local governments after disasters in 2004-2005 were assigned to men because the work required involved tasks traditionally considered masculine, such as clearing rubble from roads and bridges and constructing houses. ${ }^{75}$
Nevertheless, issues of gender inequality in participation in reconstruction efforts are increasingly recognized. United Nations entities and donor and aid-receiving countries are committed to mainstreaming gender into humanitarian actions, including in post-disaster settings. ${ }^{76}$ For example, nearly three quarters of the 2012 humanitarian funding from Germany and Sweden went to projects designed to advance gender equality. ${ }^{77}$ These types of projects also received nearly three quarters of all aid supporting the Typhoon Haiyan Strategic Response Plan in the Philippines from November 2013 to October 2014. ${ }^{78}$

## Participation in decision-making in post-disaster settings

Women are less involved than men in decision-making related to recovery efforts and risk reduction strategies in some settings

Women may participate less than men in bodies involved in post-disaster reconstruction efforts. After the 2011 earthquake and tsunami in Japan, very few women were involved in running communities, including in local aspects of temporary housing. Women represented only 11 per cent of the members of local committees working on recovery and reconstruction plans in 38 municipalities. A total of nine municipal committees had no female members. Women were also less involved than men in higher-level decision-mak-

[^219]ing. For example, only 9 per cent of the members of the Regional Disaster Management Council were women. There was only 1 woman among the 15 expert members of the Reconstruction Design Council; 2 women among the 19 members of the Study Group of the Council; and 4 among the 15 members of the Reconstruction Promotion Committee. Women were severely underrepresented in the Central Disaster Management Council itself, which had only 2 women among its 27 members. ${ }^{79}$
Pre-disaster gender inequalities were also mirrored in some of the post-2004 tsunami recovery processes in Indonesia and Sri Lanka. In relief camps in Aceh, Indonesia, women and girls were in charge of organizing meals and taking care of children and older family members, but were not involved in the governance of the camps and were not represented in the negotiation processes with aid organizations and government institutions that provided supplies. In Sri Lanka, women's participation in recovery planning and management reached up to 40 per cent in some districts in the South, but was less than 10 per cent in districts in the East where sociocultural traditions are more conservative. ${ }^{80}$

Gender mainstreaming in national disaster risk reduction policies and strategies is ongoing in only a few countries. For example, in Latin America and the Caribbean, only 20 per cent of countries reported advances in incorporating gender into their disaster risk reduction policies and strategies; 23 per cent reported having adopted measures to incorporate a gender approach in recovery efforts; and 15 per cent had vulnerability and capacity evaluations broken down by sex. In terms of normative frameworks, only eight countries mentioned integrating gender as a cross-cutting dimension in their national policies on disaster risk management, including Bolivia, Costa Rica, Honduras, Mexico, Nicaragua, Panama, Paraguay and Peru. Women were severely underrepresented among decision-makers in top positions. In the entire region, only three women had leadership positions in entities in charge of risk management. ${ }^{81}$

## B. Involvement of women and men in the management of the environment

Loss of natural resources and environmental degradation are a growing concern worldwide. According to The Millennium Development Goals Report 2015, the stress on renewable water resources is severe in some regions, particularly Northern Africa and the Arabian Peninsula in Western Asia. In 2014, only 15.2 per cent of terrestrial and inland water areas and 8.4 per cent of coastal marine areas (up to 200 nautical miles from shore) were protected. The annual net loss of forests declined from 8.3 million hectares worldwide in 1991-2000 to 5.2 million hectares in 2001-2010. ${ }^{82}$ Nevertheless, the loss of these forests continues to threaten biodiversity, increase soil erosion and contribute to the high level of emissions of carbon into the atmosphere. ${ }^{83}$
Emissions of greenhouse gases due to human activity, of which carbon dioxide and methane are the most significant, are causing climate change. ${ }^{84}$ The world has almost eliminated the use of ozone-depleting substances, but global emissions of carbon dioxide (CO2) have shown an overall upward trend in the past decades and are now more than 50 per cent higher than their 1990 level. ${ }^{85}$
Environmental protection, and consequently sustainable development, require that both women and men are actively involved, including through daily activities aimed at preserving natural resources and through participation in local and high-level environmental decisionmaking. Moreover, as emphasized in the 1995 Beijing Platform for Action, the involvement of women in environmental decision-making at all levels is a key step to ensuring that women's issues and gender perspectives on the environment are included in policymaking from the local to national and global levels. ${ }^{86}$

[^220][^221]1. Individual participation in environmental protection activities

Differences in women's and men's participation in environmental protection are rooted in gender roles and responsibilities

Women's and men's involvement in environmental protection varies widely across countries and by type of activity. ${ }^{87}$ Recycling is one of the most widespread activity. Taking active steps to separate recyclables, such as paper, metal and glass from refuse is an easy and effective way to make a positive environmental contribution. More people are recycling than in the past. For example, in 19 developed countries with trend data, the average proportion of women recycling increased from 61 per cent in 2000 to 78 per cent in 2010, ${ }^{88}$ while the proportion of men recycling rose from 58 to 74 per cent. Overall, women are slightly more involved than men, which is somewhat linked to the gender division of domestic labour (see Chapter 4 on Work). A few examples of countries in which women are more involved than men in recycling include Argentina, Austria, Croatia, the Czech Republic, Latvia, Mexico, the Republic of Korea, Sweden and the United Kingdom. ${ }^{89}$

Cutting back on driving to reduce pollution from automobile exhaust is another common contribution to environmental protection. Individual use of mass transit, consolidating errands into fewer trips, carpooling, and/or substituting biking or walking for driving can all be effective means for reducing pollution. In 19 developed countries with available trend data, the proportion of women driving less for the purpose of protecting the environment increased from 14 per cent in 2000 to 24 per cent in 2010 . For men, the increase was from 14 to 20 per cent. In about half the countries with available data for 2010, the proportion of women cutting back on driving was higher than the proportion of men by 5 percentage points or more. Japan was the one notable exception; there, men cut back on driving more than women by 6 percentage points. ${ }^{90}$

[^222]By comparison, contributing financially to environmental causes is adopted in similar proportions by women and men in most countries. A notable exception is Finland, where 31 per cent of women and 21 per cent of men have contributed in the past 5 years to an environmental organization. ${ }^{91}$
Differences between women and men in attitudes towards paying higher taxes and paying higher prices in order to protect the environment vary dramatically from one country to another. For example, in Argentina, Germany, Israel, the Republic of Korea, the Russian Federation and the United Kingdom, the proportion of men willing to pay higher prices is higher than the proportion of women by 5 percentage points or more. However, in Denmark, Finland, New Zealand and Norway, the proportion of men is lower than the proportion of women by 5 percentage points or more. Willingness to pay higher taxes for environmental gains is more often reported by men than women in a number of countries (as in Argentina, Israel, France, Germany, the Republic of Korea, Spain, Turkey and the United Kingdom), perhaps mirroring men's greater access to income (see Chapter 8 on Poverty). In many other countries, women and men have similar attitudes, while Denmark and Norway are breaking the pattern; in those two countries, women's propensity to pay higher taxes in order to protect the environment is higher than men's by 4 and 7 percentage points, respectively. ${ }^{92}$

## 2. Local decision-making on natural resources

Women are often excluded from local decisionmaking with regard to natural resources. Low participation rates among women in the management of local natural resources may be linked to gender inequality in roles, responsibilities and power, including women's time constraints, unequal domestic work burdens, lack of information, lack of support from men, and threats of hostility or punishment. ${ }^{93}$ Other factors may also play a role. For example, where membership in local management groups is restricted to one household member, male heads of household may become the default representative. ${ }^{94}$ Moreover, even if women

[^223]are members of local management groups, their opinions may not be given the same weight as those of men, or may be discouraged altogether. ${ }^{95}$
In some cases, women in local management of natural resources are able to bring positive changes; in others, however, they continue to face challenges. For example, some case studies in India and Nepal showed that greater participation by women in forest governance can foster more equitable distribution practices for forest access and goods, greater influence over funding allocations for women, stronger efforts to overcome fuel shortages, and improved conservation practices and resource regeneration. ${ }^{96}$ However, other studies, in Bolivia, Kenya, Mexico and Uganda showed that forest user groups with higher participation of women tended to be less effective due to women's lower access to technology, labour constraints and limited authority. ${ }^{97}$

Women are underrepresented in local management of forests
Women participate far less than men in formal forest user groups. Their low participation in forest management, illustrated previously in research literature analysing results from qualitative and small quantitative case studies in developing countries, has been confirmed by a comparative multi-country study ${ }^{98}$ conducted in 2005-2008 in 24 developing countries covering the major tropical forest regions of Africa, Asia, and Latin America and the Caribbean. ${ }^{99}$ Gender parity in local forest governance is far from being achieved in each of the three regions covered (figure 7.9). The study also showed that in about half the sites covered by the study, women were not involved at all in forest user groups.
While low participation of women is often considered in the context of developing countries, this is also an issue in developed countries such as Canada, where women have been shown to be underrepresented in forest governance. For example, a 2006 national survey of public advisory committees revealed that only 17 per cent of committee members were women. ${ }^{100}$

[^224]Figure 7.9
Distribution of households by sex of the household member participating in forest user groups, by region, 2005-2008


Source: Adapted from Sunderland and others. Challenging perceptions about men, women, and forest product use: a global comparative study, World Development (2014).

Note: Data based on 24 developing countries covering the major tropical forest regions in Africa, Asia, and Latin America and the Caribbean. Only households with at least one member in a forest user groups were taken into account.

## 3. High-level environmental decision-making

Women hold fewer positions of power and decisionmaking related to the environment than men

As shown in Chapter 5 on Power and decisionmaking, women still hold a minority of decisionmaking positions in most public and private institutions. This is also the case when it comes to environment-related institutions. Women are underrepresented in the workforce and management of environment-related institutions, as illustrated by a 2013 global survey ${ }^{101}$ of National Meteorological and Hydrological Services (NMHS) of member countries of the World Meteorological Organization (WMO). Globally in 2013, women represented 33 per cent of the global workforce and 19 per cent of the senior management in NMHS. Gender parity was far from being achieved even among new staff. Women represented 39 per cent of the NMHS staff recruited in 2012. ${ }^{102}$ This was the result of a small pool of women interested and educated in meteorological and hydrological services, as well as policies and practices in staff recruitment that perpetuate gender imbalances in the workforce and management. As at 2013, only 41 per cent of WMO members had implemented an action plan for gender mainstreaming in the NMHS, and 48 per cent had human resources policies that promoted gender equality and the empowerment of women.
Moreover, women hold only a few political and non-political decision-making positions in gov-

[^225]ernment ministries related to the environment. In Europe, for example, women are underrepresented among ministers of environment, climate change, transport and energy in ministries or departments of national governments. ${ }^{103}$ As at December 2014, the average share of women was 28 per cent among senior ministers ${ }^{104}$ and 27 per cent among junior ministers related to the environment. ${ }^{105}$ Women were also underrepresented among senior non-political administrative positions within environment-related ministries; 30 per cent among level-1 administrators and 38 per cent among level-2 administrators.

Finally, less women than men represent their governments at the international level. For instance, the current composition by sex of delegations to meetings of parties to the United Nations

[^226]Framework Convention on Climate Change (UNFCCC) ${ }^{106}$ and its Kyoto Protocol, and of UNFCCC boards and bodies remains inequitable overall. In 2013, women represented 36 per cent of delegates to the nineteenth session of the Conference of the Parties, the highest political deci-sion-making body of the Convention. The Bureau of the Conference included three women among its 11 members. ${ }^{107}$ Women were also underrepresented (27 per cent) among the officers elected to the bodies established under the Convention and its Kyoto Protocol to provide scientific and technological advice and support to the Conference. In only three out of 12 bodies was women's representation higher than 40 per cent. ${ }^{108}$

[^227]
## Chapter 8

## Poverty

## Key findings

- Non-partnered women with children in developed and developing regions and older women in one-person households in developed regions have higher poverty rates than men with the same characteristics.
- Women's access to their own cash labour income remains low in developing regions, particularly in subSaharan Africa; and the gap between women and men in this regard is large in both urban and rural areas.
- Many women are excluded from economic decision-making within their own households. On average 1 in 3 married women in developing countries have no say about major household purchases, and 1 in 10 are not consulted on how their own cash earnings are spent.
- The use of formal financial services is lower for women than men in all regions of the world; globally, 47 per cent of women have an individual or joint account at a formal financial institution compared to 55 per cent of men, with wider gaps in some countries in the Middle East and North Africa and in Southern Asia.
- The number of countries with unequal property and inheritance rights for women and men overall declined; however, in nearly a third of developing countries, laws do not guarantee the same inheritance rights for women and men, and in an additional half of countries discriminatory customary practices against women persist.


## Introduction

A life free from poverty and hunger is a fundamental human right. As stated in the Universal Declaration of Human Rights, adopted by the United Nations General Assembly in 1948, everyone has the right to a standard of living adequate for health and well-being, including food, clothing, housing and medical care and necessary social services. However, the eradication of poverty - an essential requirement for sustainable development ${ }^{1}$ and the central focus of the 2030 Agenda for Sustainable Development - remains one of the greatest challenges facing the world today.

This chapter analyses the economic dimensions of poverty from a gender and life-cycle perspective. The first part takes into account householdlevel data on poverty. It shows that in both developed and developing countries working-age women are more likely than men to be poor when they have dependent children and no partner to contribute to the household income.

At older ages, women in developed countries are more likely than men to be poor, particularly when living in one-person households. The difference in poverty rates between women and men, including among lone parents with dependent children and among older persons, is narrowing slightly in some countries while persisting in others. In the second part of the chapter, the focus of the analysis shifts to women's economic dependency on men as reflected by individual-level indicators of access to economic resources. It shows that, in developing regions, women's access to own cash labour income and financial services is systematically low. Existing statutory and customary laws continue to restrict women's access to land and other assets, and women's control over household economic resources remains limited.

[^228]
## Box 8.1

Gaps in gender statistics on poverty

Poverty remains one of the most problematic areas of statistics in general, and for gender statistics in particular. Household-level data on poverty, measured traditionally based on either household income or consumption, are absent for more than a third of developing countries. ${ }^{\text {a }}$ This is without taking into account any disaggregation of data from a gender perspective. In addition, the comparability of statistics across countries and over time, continues to be hampered by a lack of harmonization in measurement, including in terms of poverty lines, the calculation of income or consumption aggregates, the equivalent scales to adjust for differences in age and sex composition of households and prices to adjust for differences in the cost of living. ${ }^{\text {b }}$

## Household-level poverty data are underutilized from a gender perspective

Poverty data disaggregated from a gender perspective are not produced regularly by countries around the world and are not systematically compiled at the global level. However, some progress has been made in the availability of statistics on gender and poverty, driven by a few initiatives at the regional level. Data on poverty and gender are estimated or compiled systematically by regional agencies in Europe and in Latin America and the Caribbean. For the other regions, additional data are provided in national poverty reports by a small number of countries, available for ad hoc compilation, as was done for this report. The total number of countries with any poverty statistics disaggregated by sex between 2000 and 2014 and available for use in this report is 78. Among these, 34 are European and other developed countries. Among developing countries with available data, 23 are in Africa, 16 in Latin America and the Caribbean, and 5 in Asia.

Data disaggregated only by the sex of household members or head of household have limited value in capturing the gender dimensions of poverty. ${ }^{\text {c }}$ As shown in this chapter, more detailed disaggregations are needed, including by the sex, age, and other demographic and social characteristics of all household members, and by types of households (or living arrangements), taking into account the composition of those households. However, such expanded disaggregated data remain largely unavailable in sub-Saharan Africa (where poverty is increasingly concentrated), Asia and Oceania.

## Generating adequate poverty counts for women and men remains challenging due to unaccounted intra-household inequality

One major limitation of using household-level poverty data from a gender perspective is the lack of information on inequality in the consumption of goods and services among various household members.

The household-level approach assumes that all individual incomes are pooled together, the resources are shared equitably, and all household members enjoy the same level of well-being. Existing data on intrahousehold sharing of resources suggest that income is most often pooled together within the household, but not always, ${ }^{\text {d }}$ and the allocation of expenditures may reflect a gender dimension. Systematic national statistics are missing on this topic, and some of the statistical evidence on discrimination against women and girls is inconclusive ${ }^{e}$ and dependent on the statistical methods used. ${ }^{\text {f }}$ Research has shown, however, that in some specific settings, particularly in the context of limited economic resources, inequality in the distribution of resources among girls and boys is evident, especially when it comes to private education, time devoted to child care, and access to health services. ${ }^{9}$

Standard household-level measures of poverty do not take into account inequality within the household because it is difficult to know how household income/ expenditure is distributed to each household member, particularly when it comes to common goods such as food, housing, water supply or sanitation. In addition, when different patterns of consumption are observed, it is not always clear if they are related to different levels of individual biological need, to different preferences or to the unequal distribution of resources.

Based on household-level measures, if in the same household women consume or spend less than is needed to function properly physically and socially, while men consume what is needed or more, both are still considered to have the same poverty status, either poor or non-poor, depending on the average consumption estimated at the household level. In countries where women have a lower status than men and unequal access to resources within the household, the simple disaggregation of poverty counts by sex will lead to underestimated gender gaps in poverty, because additional poor women might be found in some non-poor households.

Currently, there is no single straightforward measure of poverty from a gender perspective, and no single internationally agreed-upon indicator that can give more meaningful poverty counts for women and men. That would require taking into account intra-household inequality, including through the use of some individuallevel indicators on selected dimensions of poverty (see box 8.2 on multidimensional poverty). Nevertheless, recent methodological developments suggest a shift in thinking on poverty and gender from a perspective focused on the household as an economic unit, to women and men with individual agency (capacity for individualized choice or action) and specific constraints, needs and preferences. This would include the measurement, at the individual level, of asset ownership (see box 8.5); individual experience of food insecurity (see box 8.4); and individual access to formal financial services (section B.2).

## A. Household-level income/ consumption poverty

Globally, the number of people in extreme poverty living on less than $\$ 1.25$ a day $^{2}$ fell from 1.9 billion in 1990 to 1 billion in $2011 .^{3}$ The proportion of the global population living in extreme poverty (which is referred to as the rate of extreme poverty) fell during the same period from 36 to 15 per cent at the global level and from 47 to 18 per cent in developing regions. A further reduction in poverty is projected by 2015, including a drop in the number of people in extreme poverty by another 175 million. This would place the extreme poverty rate in 2015 at 12 per cent globally, and at 14 per cent in developing regions. ${ }^{4}$
Progress in poverty reduction has been uneven. The largest reductions were observed in Eastern and South-Eastern Asia. Progress was more modest in other regions of the developing world. The poverty rate in sub-Saharan Africa, in particular, declined slowly over the period, from 57 per cent in 1990 to 47 per cent in 2011. However, the number of extremely poor in that region increased 1.4 times as a result of a population growth rate that exceeded the rate of poverty reduction. Indeed, sub-Saharan Africa has become the largest contributor to the global number of extremely poor (41 per cent in 2011), recently surpassing Southern Asia. ${ }^{5}$
While estimates of poverty rates ${ }^{6}$ and the number of poor people are available for the majority of countries, based either on international or national poverty lines, gender differences in poverty are not as easily captured through statistics. As discussed in box 8.1, poverty is traditionally measured on the basis of income and expenditure aggregated at the household level. Household-level data on poverty can be attributed to all members of a household at the analysis stage, thus enabling the calculation of poverty rates and counts disaggregated by sex and other characteristics of the household members. While

[^229]such data do not take into account the inequality between women and men within households, they can show whether there are gaps in poverty rates between women and men due to differences in living arrangements. That is, they take into account inequality between households.
Differences in poverty rates between women and men are more evident when focusing on population subgroups by selected age groups or other demographic characteristics associated with specific living arrangements, such as marital status, as will be shown in the next sub-section. However, when all ages or other characteristics are combined (averaged) and poverty data are disaggregated only by the sex of household members, very little of the gender dimension of poverty is revealed. Female and male poverty rates are similar in most countries with data available, while slightly higher for women than men in a few countries, mainly from developed regions. ${ }^{7}$

## 1. Poverty across age groups

A focus on stages of life cycle and living arrangements, as captured by data disaggregated by age and marital status of adult ${ }^{8}$ household members, reveals more meaningful gender differences in poverty. These differences in poverty rates between women and men may vary across countries depending on gender differences in living arrangements and specific country contexts. Such contexts include different access for women and men to labour market income and the various components of the welfare/social protection systems. ${ }^{9}$
In European countries, for example, large differences in poverty rates between women and men are found among the older age groups and to a lesser extent in young adulthood (figure 8.1), when women and men more often live without a partner as widowed, divorced/separated or never married persons. At age 65 and over, women are at a higher risk of poverty than men in most European countries. Between ages 18 to 24, the gender difference in poverty rates, most often to the disadvantage of women, is noticeable only in a smaller number of countries.

[^230]Figure 8.1
Poverty rate by sex and age group of household members, European countries, 2012


Source: EUROSTAT, 2014a. Income and Living Conditions database online (accessed May 2014).
Note: Data presented for 31 countries. A relative poverty line of 60 per cent of the national median equivalized income is used in each of the countries (equivalized income is household income adjusted for differences in age and sex composition of households).

Figure 8.2
Poverty rate by sex of household members in two age groups, Latin America and the Caribbean, 2006-2012 (latest available)


[^231]Differences in poverty rates between women and men in certain age groups during adulthood are also noted in some developing countries with available data. The pattern across age groups is different than in developed regions. In Latin America and the Caribbean, for example, the largest differences between female and male poverty rates are found among young adults aged 25 to $34,{ }^{10}$ consistent with the higher proportion of households of lone mothers with children in this region compared to others. ${ }^{11}$ As age increases, sex differences in poverty rates fade away. At age 65 and older, female and male poverty rates are similar in most countries in this region (figure 8.2). Two factors may explain the relatively small or non-existent sex differences in poverty rates among older persons in Latin America and the Caribbean: a smaller proportion of older women living in one-person households ${ }^{12}$ and the relative good coverage of older persons by social protection systems in the region, including through public pension schemes and health care. ${ }^{13}$

## The poverty of working-age women and men

Working-age women ( 20 to 54) are more likely than working-age men to live in poor households when they have children and no partners

Sex disparities in poverty rates for working-age adults aged 20 to 54 are closely linked to marital and parenthood status, as illustrated in figure 8.3. Partnered women and men in this age group experience similar poverty rates, as shown by data for 30 developed and developing countries. The case of persons with no partner and no children is mixed; in some countries, female poverty rates for this group are higher, while in others, male poverty rates are higher. However, for the limited number of countries with comparable data for non-partnered persons with children, ${ }^{14}$ lone mothers with children tend to have higher poverty rates than lone fathers with children.
In fact, one of the contributing factors to increasing poverty for working-age women in some countries is the growth in the proportion

[^232]of non-partnered women with children. ${ }^{15}$ The trend of increasing proportions of lone mothers with children among working-age women has been observed in many countries, and is linked to a significant increase in divorces and childbearing outside of marriage (see Chapter 1 on Population and families). However, these marked changes have not been met with corresponding significant changes in women's labour force participation and social protection programmes. In all countries, women's labour force participation rates and wages continue to be considerably lower than those of men, with little progress being observed in many but not all regions (see Chapter 4 on Work). On the other hand, social protection programmes do not fully account for the gendered division of paid and unpaid work and are yet to adapt to the increasing incidence of single parenthood. ${ }^{16}$ Some of their components, including maternal benefits, child benefits, tax relief and unemployment benefits, are often linked to participation in employment, while limited access to social services, including care services among others, restrict women's employment opportunities. ${ }^{17}$
Women's economic vulnerability in one-parent families has implications for child poverty and well-being. Poverty during childhood has longterm consequences, including for the life-long process of building human capital, leading a productive life, and creating an economically secure retirement. ${ }^{18}$ Child poverty in one-parent families is becoming more problematic with the increase in the share of children in such families among all children in many countries. ${ }^{19}$ As noted in Chapter 1 on Population and families, three quarters of one-parent families are lone mothers with children and, as noted above, in most countries with data available, families of lonemothers with children are more likely to be poor than families of lone-fathers with children. ${ }^{20}$ The difference in child poverty rates between children living in lone-mother families and those living in two-parent families is striking (figure 8.4), particularly in developed countries. In 17 out of 27 developed countries with available data, poverty rates are more than three times higher for children in lone-mother families than in two-

[^233]parent families. Large differences are observed in some developing countries as well, although the small number of countries with data availability restricts the possibility of generalizing the results. The much higher child poverty rates in lone-mother households are linked to the smaller number of income earners in the household, as well as the relatively lower individual income for women than men. ${ }^{21}$ In addition, the monetary cost of raising children is higher because child care services have to be purchased when the one and only adult in the household has to be involved in paid work in order to provide an income. This is particularly relevant in countries where public policies do not provide for child care services free or at low cost.

Figure 8.3
Poverty rate for women and men aged 20 to 54 by partner status and presence of children in the household, 2004


Source: Luxembourg Income Study, 2014. Employment key figures dataset (accessed May 2014).
Note: Data based on 30 countries ( 23 developed countries and 7 developing countries) in all panels, with the exception of the fourth panel on non-partnered women and men with children under age 18, where data are available for 11 countries ( 6 developed countries and 5 developing countries). A smaller number of countries are presented in the fourth panel, as the poverty rate could not be calculated for some surveys where the number of cases of men with no partners and children under 18 was small. In some surveys, information on partners was available only for the household head or reference person. Children may refer to children living in the household and not only to a woman's or man's own children.

21 OECD, 2014.

## Box 8.2

Measuring multidimensional poverty from a gender perspective

The notion that poverty is multidimensional is widely accepted at the global level. The Copenhagen Programme of Action of the World Summit for Social Development ${ }^{\text {a }}$ and the Beijing Platform for Action ${ }^{\text {b }}$ recognized that "poverty has various manifestations, including lack of income and productive resources sufficient to ensure a sustainable livelihood; hunger and malnutrition; ill health; limited or lack of access to education and other basic services; increasing morbidity and mortality from illness; homelessness and inadequate housing; unsafe environment; and social discrimination and exclusion. It is also characterized by a lack of participation in decision-making and in civil, social and cultural life."

There is a large consensus on the multidimensionality of poverty, but not necessarily on how to measure it. ' On the one hand, a "dash-board approach" is frequently used. Through this methodology, each dimension of poverty has a distinct measure that can be used to guide policymaking in respective areas. A widely accepted example of this approach is the Millennium Development Goals (MDGs), whereby key dimensions of development and poverty are monitored through distinct indicators. To some extent, various chapters of this report have also clearly presented dimensions of well-being in which women are more often deprived than men.

On the other hand, there is a certain appeal to using one single "measure" that can summarize the overall level of poverty and assess trends over time. Such a measure may be an indicator based on traditional monetary measures of poverty (such as those used in the past decades by the World Bank and most countries in the world); or aggregate or composite indicators such as the Multidimensional Poverty Index (MPI) recently developed by the Oxford Poverty and Human Development Initiative. However, as shown below, a gender perspective is yet to be integrated in either type of measure in order to obtain meaningful poverty counts for women and men.

## Monetary poverty

Traditional monetary poverty, the most commonly used approach for measuring poverty so far, is based on the household-level measurement of consumption or income. It may be considered by some to be multidimensional, in the sense that consumption (and income) covers many components, such as food, clothing, hous-
ing and education that are all aggregated based on market prices. ${ }^{\text {d }}$ The components or "dimensions" covered and the "weights" given to each dimension within the income- or consumptionbased poverty measures are based on individual household choices in the patterns of consumption of goods and services and the money spent for, or prices associated with those goods and services consumed.
However, there are limitations in using monetary measures of poverty as measures of deprivation on multiple dimensions. As argued in a 2009 United Nations report, Rethinking Poverty: Report of the World Situation 2010, patterns of consumption should not be treated as mere consumer preferences. Deprivations relating to key dimensions such as education and health, for example, may not be the result of choice, but of budget constraints or lack of supply of education and health services at affordable prices. Furthermore, some of the information on prices as weights may be inadequate or missing; as a result, important dimensions may be underrepresented in the income or consumption aggregate. This is the case when some social services are provided "free" to households-such as education or health services-and are therefore missed in the measurement of poverty. Certain important aspects of well-being or its opposite may have no corresponding "sensible estimates of relative prices."e This is the case, for example, of political participation, empowerment and the experience of violence. These dimensions of deprivation are not gender neutral; as shown throughout this report, women tend to experience deprivations on all these "under-measured" dimensions more often than men.
Last, but not least, one important caveat of the monetary approach is the lack of information on the distribution of expenditures and consumption at the individual level. As mentioned in the beginning of the chapter, this is a key element in a gender perspective on poverty. When poverty is measured at the household level, additional information at the individual level-including on dimensions of deprivations most relevant from a gender and poverty perspective, as illustrated above-is required to obtain meaningful poverty counts that take into account intrahousehold inequality. Methods for determining the dimensions of deprivation, how to measure deprivation at the individual level, and how to integrate the information obtained with the household-level information on the monetary dimension are yet to be developed.

## Box 8.2 (continued)

## Multidimensional indices of poverty

Recent years have witnessed a growing interest in multidimensional indices of poverty. The most well-known is the Multidimensional Poverty Index (MPI) developed by the Oxford Poverty and Human Development Initiative for the 2010 Human Development Report. ${ }^{f}$ It is based on the multidimensional poverty measurement framework proposed by Alkire and Foster, which identifies the poor as persons simultaneously experiencing multiple deprivations on a set of dimensions. ${ }^{9}$ The MPI is based on 10 indicators that are used to identify deprivations on three dimensions: health, education and living standards.
Assessing poverty based on multidimensional indices is challenging at best. A key limitation of the MPI is that it requires the use of relative weights for each dimension, which are chosen somewhat arbitrarily by the analyst. The choice of dimensions, indicators for the dimensions, weights and cut-offs may also vary among countries, making the comparisons difficult at the international level.
Because the poor is defined as a person simultaneously experiencing multiple deprivations, all data used in the assessment have to come from the same source (sample survey or census). While this is theoretically sound, in practice, it may limit the options of dimensions and indicators to be used. For instance, data on some of the dimensions of deprivation, important from a gender and poverty perspective, may not be routinely collected in household surveys used to measure the MPI. This type of constraint may explain why, in the MPI, indicators on living standards are limited to aspects of housing conditions, household assets and consumer durables, without considerations of current levels of income or consumption. Other "missing" dimensions of poverty data that appear important to deprived people but are overlooked in large-scale surveys may refer to quality of work, empowerment, physical safety, social connectedness and psychological well-being, as identified by the proponents of MPI. ${ }^{\text {h }}$
From a gender perspective, better indicators and, in particular, individual-level indicators of key dimensions of capability are required. However, most of the more than 20 countries ${ }^{i}$ that have so far implemented an MPI approach in their latest poverty assessments use only household-level data to identify deprivation. For example, in the MPI, a household and all members of that household are considered deprived
on the health dimension if: (1) there is at least one household member who is malnourished, or (2) if one or more children in the household died in the past 12 months. These indicators mirror some well-established indicators used to monitor the health dimension of development and poverty at national and subnational levels, such as the proportion of children underweight and the child mortality rate. However, their translation at the level of the household or the individual does not work, particularly from a gender perspective. An indicator such as "a child has died in the household in the last 12 months" does not say anything about the differences in health status between women and men and between boys and girls.
Different approaches and definitions of poverty can reveal not only different levels of poverty and different profiles of the poor (which has significant policy implications), but also different gender gaps in poverty. For example, in South Africa, an analysis of the 2008-2009 Living Conditions Survey showed larger gender disparities in poverty in the monetary approach than in the multidimensional approach. Use of different dimensions, indicators and weights within the MPI approach may also lead to different profiles of the poor and gender gap in poverty. Therefore a thorough testing of all of these components, from a gender perspective, is needed.
f United Nations Development Programme (UNDP), 2010.

Alkire and Foster, 2011.
h For more details see Oxford Poverty and Human Development Initiative, Missing Dimensions of Poverty. http://www.ophi.org.uk/ research/missing-dimensions/ (accessed May 2014).
i Mexico's country official poverty measure is one of the exceptions. There, deprivations on three key social dimensions used to identify deprivation-education, health and social securityare identified based on indi-vidual-level data (CONEVAL, 2010).
j Statistics South Africa and the United Nations Children's Fund (UNICEF), 2013.

Figure 8.4
Child poverty rates by type of family arrangement, 2005-2013 (latest available)


Source: Luxembourg Income Study, 2015. Inequality and Poverty Key figures dataset (accessed March 2015).
Working-age men have higher poverty rates than working-age women when unemployed and, in selected countries, when living in one-person households

Higher poverty rates for working-age women than men are associated with single motherhood and low income from labour or social benefits. By comparison, in the European context, the higher poverty rates for men are associated with unemployment. Unemployed men are more likely to be poor than unemployed women (figure 8.5) because they still play the role of family breadwinner and are often the primary or only income earner in the family. Women, on the other hand, are often secondary earners in their household. Being unemployed may not place women's households below the poverty line when spouses, who are the main income providers, continue to support their families.

Figure 8.5
Poverty rates by sex for unemployed persons aged 18 to 64 years, European countries, 2012

Source: EUROSTAT, 2014a. Income and Living Conditions database online (accessed May 2014).
Note: Data presented for 31 European countries. Unemployed refers to the most frequent work status in the previous year.


In some European countries, working-age men also have higher poverty rates than women when living in one-person households. Although women tend to have lower income than men, living in one-person households is not necessarily associated with higher poverty rates for women below age $65 .{ }^{22}$ For the 18 to 64 age group, poverty rates for male one-person households are higher than for female one-person households in about a third of European countries, including six countries where the disparity is more than 10 percentage points. The number of countries where working-age women living in one-person households have higher poverty rates than men is the same; however, the gender gap is much smaller.

Public income transfers have a key role in reducing poverty and poverty disparities by gender during working years, as well as the poverty of children in lone-mother families. ${ }^{23}$ However, systematic data on the levels of the components of benefits, including on child and family allowances, tax relief, and unemployment benefits and the analysis of how each component may affect the poverty of women and men, are generally missing.

## The poverty of older women and men

## Older women are more likely to be poor than older men, particularly when living in one-person households

At older ages, women's income and poverty status are highly dependent on their work history, the number of children they had, their marital status and the pensions system in their country. Low hours of paid work during working ages are associated with more time spent in poverty at older ages. ${ }^{24}$ Women are also less likely than men to have a retirement plan based on their own contribution, and when they do, they receive significantly smaller pensions. ${ }^{25}$ In other words, many women face a double penalty. Compared to men, they have lower or no personal earnings during the working ages (due to their reproductive roles and inequality in the sharing of the domestic work burden), which translate into lower or no income after retirement and during older

[^234]ages. Nevertheless, in some countries, modern pension systems have recognized the differences in the patterns of women's and men's paid and unpaid work by accounting for periods of childcare in the calculation of state pensions. ${ }^{26}$ For example, in Latin American countries, pension systems reforms after 2005 included measures to improve gender equality, ${ }^{27}$ some of which take into account differences in life expectancy at the age of retirement between women and men; provisions on survivorship of spouses; non-contributory benefits; subsidized bonuses to mothers for every child born or adopted; and economic compensation in the case of divorce or annulment of marriage, including transference of retirement funds.

Poverty rates among older persons (age 65+) are higher for women than for men (figure 8.6) in most European countries. On average, 16 per cent of older women and 12 per cent of older men were poor in that region in 2012. Living in one-person households, in particular, increases the risk of poverty for both older women and men, and in two thirds of countries it is more so for women than for men. Furthermore, in a third of countries with data available the gender gap is higher in one-person households compared to all households, reflecting women's higher vulnerability when living by themselves relative to their vulnerability when living with another person. The average poverty rate for older persons living in one-person households in European countries in 2012 was 23 per cent for women and 17 per cent for men.
The higher poverty rates of older women in developed countries compared to men, combined with the higher share of women among the overall older population, result in a high share of women among the older poor (figure 8.7). For instance, in European countries, the average share of women among the older poor is 64 per cent, higher than their share in the total older population ( 56 per cent of the poor and non-poor combined). This is not the case for younger age groups. The share of women among the poor under age 65 is similar to the share of women among the overall population under age 65 (figure 8.7). Also, when all ages are taken into account, women represent half or slightly more than half of the poor population. In European countries, women represent 53 per

[^235]cent of all poor people and 54 per cent of the poor over age 18. ${ }^{28}$ In developing regions, women and girls represent half of all poor people living on less than $\$ 1.25$ a day. ${ }^{29}$ By another wealth measure, a slight overrepresentation of women aged 15 to 49 in the poorest 20 per cent of households is noted in most sub-Saharan African countries with available data. ${ }^{30}$

Figure 8.6
Poverty rate for older persons (age 65 and over) by sex, in all households and in one-person households, European countries, 2012


Source: EUROSTAT, 2014a. Income and Living Conditions database online (accessed April 2014).

[^236]Figure 8.7
Share of women in the population and in the total poor among persons under and over 65 years old, Europe, 2012


Source: EUROSTAT, 2014a. Income and Living Conditions database online (accessed April 2014).
In summary, women are more likely to be poor than men during the working age when they have dependent children and no partners to contribute to the household income or when their own income is non-existent or too low to support the entire family. The differences between workingage women and men disappear, or are inconsistent across countries, when there are no dependent children, including when living alone in oneperson households. At older ages, women in oneperson households in developed countries are consistently more likely to be poor than men. The data presented in this section are limited to a relatively small number of countries, with limited coverage of developing regions. However, they confirm that policy measures oriented towards reducing the gender gap in poverty need to consider, among others, providing child care services that would
free up the time of mothers, facilitate their integration into the labour force during childrearing years, and reduce their chances of becoming poor during the older ages. Social protection measures designed to account for the specific challenges and vulnerabilities of women during different stages of life, particularly their reproductive roles and higher involvement in care work, are also important.

The higher risk of poverty for lone mothers and older women living alone is also illustrated by data analysed at the household level, by comparing the poverty rates of certain types of femaleheaded households with those of male-headed households. It has to be noted that the analysis of poverty data disaggregated by types of households and the sex of the household head is more often found in developing countries. By contrast, in developed countries, the gender dimension of monetary poverty is more often captured through data disaggregated by the characteristics of all household members, which allows the comparison of poverty rates across population sub-groups, as done in the previous part of this chapter. The results of poverty analysis from a gender perspective based on the two approaches (all household members versus female/maleheaded household) are consistent, nevertheless. For instance, in Latin America, households headed by women without a spouse/partner are more likely to be poor than households headed by men in similar living arrangements (figure 8.8). Also, in some of the countries in the region, households with women living alone have higher poverty rates than households with men living alone. The higher level of poverty for all female-headed households by comparison to male-headed households cannot be generalized, however, as shown in the first panel of figure 8.8 and explained in box 8.3.

Figure 8.8
Poverty rate by type of household and sex of the household head, Latin America, 2006-2012 (latest available)

Source: CEDLAS and the World Bank, 2014. Socio-Economic Database for Latin America and the Caribbean (SEDLAC) (accessed July 2014).

Note: Data presented for 17 countries. Poverty rates are based on the $\$ 2.5$ a day poverty line.




## Box 8.3

The poverty of female- and male-headed households

The gender dimension of poverty is often captured in developing countries through an analysis of female- and male-headed households. However, an analysis based on the overall simple distinction of those two categories, without further data disaggregation by specific types of households, yields puzzling results. Higher poverty rates may be associated with female- or male-headed households depending on the country-specific context, as shown by data compiled for the purpose of this report and previous comparative assessments. ${ }^{\text {a }}$ This is illustrated, for example, by the case of Latin American countries in figure 8.8. Furthermore, in sub-Saharan Africa, it is more often the case that male-headed households have higher poverty rates than female-headed households among the 23 countries with poverty data available. For example, male-headed households have higher poverty rates than female-headed households by more than 5 percentage points in Cameroon, Niger and Togo, and by more than 10 percentage points in Benin, Gambia, Ghana and Senegal. Nevertheless, in some countries, femaleheaded households have considerably higher poverty rates than male-headed households, varying from 6 percentage points in Namibia to 18 percentage points in South Africa. ${ }^{\text {b }}$
The difficulty in generalizing about poverty disparities between female- and male-headed households is related not only to the contextual differences in women's and men's status but also the specific combination of various types of households-by size, composition and the definition of headship used-that may be included under these labels. Female-headed households cover a broad range of situations, from one-person households, households of lone mothers with children and households of couples with or without children where the woman rather than the man is reported as the household head. Although the view is held that households are headed by women only when men are not around to provide economic support for families, that is not necessarily the case. Male-headed households are also diverse. Many households identified as male-headed are households in which the male head has a female
partner (with or without children). However, other male-headed households may include one-person households or households of lone fathers with children.

Furthermore, the criteria used in identifying the head of the household for the purposes of statistical data collection and analysis vary across countries and are not always clear. ${ }^{\text {c }}$ This has implications for the assessment of poverty. It has been shown that the use of different criteria in defining household headship leads to the identification of different sets of households that overlap only by a small margin, with different poverty rates and profiles of the poor. ${ }^{\text {d }}$
Therefore a simple analysis of poverty data by comparing female- with male-headed households has limited value in capturing the gender dimension of poverty. Instead, a detailed disaggregation of poverty data by household size and composition is needed. While these detailed data are generally missing in sub-Saharan Africa, a few cases illustrate the point. For example, in Benin, overall poverty rates are higher in households headed by males than those headed by females. A similar result is also observed for married heads of household. For widowed and divorced/ separated heads, on the other hand, poverty is higher among female-headed households. ${ }^{\text {e }}$ In Madagascar, female-headed households have overall poverty levels similar to those of maleheaded households. However, this conceals the fact that smaller households have consistently higher poverty rates when they are femaleheaded households rather than male-headed households, while larger households have similar poverty rates whether headed by women or men. ${ }^{f}$ In the Gambia and Niger, the lower poverty rate for female-headed households is attributed to the smaller household size and the receipt of cash remittances. ${ }^{9}$ On the other hand, in South Africa, where poverty rates are higher for femaleheaded households, these households are larger, less likely to include single persons and nuclear families, and more likely to be "skipped generations" households or extended households with three or more generations. ${ }^{\text {h }}$
a Data shown in Statistical Annex available at http://unstats.un.org/unsd/gender/ worldswomen.html. Also, see United Nations, 2010, and Lampietti and Stalker, 2000.
b Data compiled by the United Nations Statistics Division from national statistical offices (as at April 2014). Data shown in Statistical Annex available at http://unstats. un.org/unsd/gender/ worldswomen.html.
c For example, an analysis of census metadata in 131 countries conducting a census in the 2010 round showed that the headship concept is largely used in developing countries (88 per cent of countries) but not in developed countries (29 per cent). The definition of the head also varies across countries: in half the countries with available metadata, the criteria used for the identification refer to income, authority and decision-making power, with some variations from one country to another. In the other half, the head is defined vaguely as self-declared or recognized as such by other family members.
d Fuwa, 2000.
e Republic of Benin, 2013.
f Republic of Madagascar, National Institute of Statistics, 2011.
g Gambia Bureau of Statistics, 2011; National Institute of Statistics of Niger and the World Bank, 2013.
h Statistics South Africa, 2014.

## 2. Gender differences in poverty over time

Important demographic and social changes have taken place in the past two decades that may have influenced trends in poverty for women and men. As shown in the previous section, lone mothers with children and older women living alone have higher poverty rates compared to men with similar characteristics. In some countries, the diversification of families has played a role in making the economic vulnerability of women more visible, in the sense that the contribution of lone mothers and older women living alone to overall poverty has become significant enough to increase the share of women among the total poor and alter the sex differences in poverty rates among certain groups of the working-age population and among the older age population. If the feminization of poverty is understood as the current higher share of women than men among the poor and/or the increase in the share of women among the poor over time, then the feminization of poverty, driven by changes in living arrangements for the adult population and the sex ratio at older ages, has taken place in the past decades in developed countries.

The feminization of poverty may also be understood as an increase of women's poverty rates relative to men's, as presented in this report. While demographic changes may have contributed to a relative increase in the gap between the overall adult female and male poverty rates, to the disadvantage of women, recent improvements in education, labour force participation and employment conditions, on the other hand, may have had the opposite effect. Changes in the poverty rates of women in selected age groups or types of households headed by non-partnered women, relative to men, is the focus of the analysis presented is this section.

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Gender gap in poverty, to the disadvantage of women,
    is narrowing slightly in some countries
        while persisting in others
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Available trend data show that some countries recorded a decline in the gender gap in poverty rates by various measures, while in others the gender gap remained the same or fluctuated slightly over the years. Available trend data for countries in Latin America and the Caribbean ${ }^{31}$

[^237]show that differences between the overall female and male poverty rates (measured as a proportion of the female and male populations living below the $\$ 2.5$ a day poverty line) remained at similarly low levels ${ }^{32}$ in all countries in the region. ${ }^{33}$ When looking at specific types of households, differences in poverty rates between female and male one-person households declined overall, although in some countries they fluctuated between survey years. This is illustrated in figure 8.9 by a selection of countries with trends for a longer period of time. Among households with more than two members, the difference in poverty rates between non-partnered femaleand non-partnered male-headed households fluctuated over time or remained at the same level for most countries. Nevertheless, the overall trend of decline in poverty rates and the related gender gap was observed in some countries such as Brazil and Chile.

Recent trends (between 2006 and 2012) observed in 18 European countries show that women have had, on average, higher poverty rates than men, by a small margin for the working-age population and by a larger margin in the old age population (figure 8.10). A slight decline in the gender gap was observed among the older population, from 5 percentage points in 2006 to 3 percentage points in 2012. The poverty rate of older women declined slightly faster than men's up to 2009, and afterwards the gender gap remained stable, while the poverty rate increased for both women and men. For poverty rates in the working-age population, sex differences remained rather constant over time and at a low level.

Data on poverty covering longer periods of time since 1995 are available for some other developed countries, as illustrated by the cases of the United States of America and Canada. Data for the United States show a high risk of poverty for one-parent households; increasing levels of poverty for male and female one-parent households relative to other types of households since 2000; and no progress in reducing the gap between the poverty of female one-parent households and male one-parent households (figure 8.11).

[^238]Figure 8.9
Poverty rates by selected types of households, Latin America and the Caribbean, 1995-2012




Costa Rica


Venezuela


- Non-partnered female householder with others
- Non-partnered male householder with others
-     - Female one-person household
-     - Male one-person household

Source: CEDLAS and the World Bank, 2014. Socio-Economic Database for Latin America and the Caribbean (SEDLAC) (accessed July 2014).

Note: Poverty rates are based on the $\$ 2.5$ a day poverty line. Interruptions in the trend line for some countries show changes in survey design.

Figure 8.10
Poverty rates by sex and age group of household members, 18 European countries, 2006 to 2012

| Women - | All age groups | Age 18-64 | Age 65+ |
| :---: | :---: | :---: | :---: |
| Men - | $25$ | $25$ | $25$ |
|  | 20 - . . . . . . . . . . . - | 20 . . . . . . . . . . . . | $20 \ldots \ldots$ |
| Source: EUROSTAT, 2014a. Income and Living Conditions database online (accessed July 2014). |  |  | $15 \ldots$ |
| Note: Poverty rates are anchored at a fixed moment in time (2005). Average rates based on data for 18 | 5 - . . . . . . . . - - | 5 . . . . . . . . . . - | 5 - . . . . . . . . - - |
| European countries. | 0 - | 0 [ | 0 |
|  | 2006200720082009201020112012 | 2006200720082009201020112012 | 2006200720082009201020112012 |

Figure 8.11
Poverty rates by type of household, USA, 1995 to 2012

| Female one-parent households |
| :---: |
| with children under 18 |


| Male one-parent households |
| :---: |
| with children under 18 |


| Married-couple families |
| :---: |
| with children under 18 |

Figure 8.12
Poverty rate in selected types of households, Canada, 1995 to 2011


Data for Canada on the other hand, show that poverty rates for women are still higher than those of men but that the gap is diminishing, including among the older age population. ${ }^{34}$ The analysis of the poverty level in selected types of households also indicates a decline in the gender gap among one-parent families (figure 8.12).

## B. Economic autonomy of women

Women's well-being relative to men's, including in certain types of living arrangements such as one-parent families and one-person households of older persons, is one important link between gender and poverty. However, women in any kind of living arrangement should have the empowerment, including economic empowerment, to do what they want as active economic agents and to influence their own well-being and that of their families. This second part of the chapter looks at gender equality in terms of access to three types of economic resources: cash labour income, financial services and property.

[^239]Box 8.4
Measuring food insecurity from a gender perspective ${ }^{\text {a }}$

Measurement and monitoring of food insecurity are crucial to the efforts of ending hunger and fulfilling the basic human right of access to sufficient, safe and nutritious food declared at the World Food Summit in Rome in 1996. ${ }^{\text {b }}$ Yet, assessing food insecurity is a serious challenge. As expressed by members of the Committee on World Food Security's High Level Panel of Experts, "at the global level, there are no direct estimates of the number of food insecure people."c Aggregate, national-level estimates on undernourishment are indirect estimates based on macro data that "give no sense of the severity of hunger."d ${ }^{\text {d }}$ They also fail to show the distribution of food insecurity across populations, including by sex, requiring countries to rely on survey data. However, collecting data on food consumption and expenditure through large-scale national household surveys requires significant financial, human, and time resources, and the efforts necessary to implement and sustain such surveys are often prohibitive. ${ }^{\text {e }}$
Even when large-scale national household surveys are available to provide data on food consumption and expenditures, they are collected at the household level. From a gender perspective, this restricts the analysis to comparisons of female- and male-headed households, which may be inconclusive or limited to certain types of households. For instance, a Food and Agriculture Organization of the United Nations (FAO) analysis ${ }^{\text {f }}$ of household-level dietary energy consumption in 21 countries showed that in some of those countries, female-headed households have a statistically significant lower per capita food consumption, while in other countries male-headed households show a lower food consumption. Nevertheless, further disaggregation of data shows that large female-headed households and single women consistently have lower food consumption than male-headed households with similar characteristics. ${ }^{9}$
Similar to monetary poverty, the analysis of food security based on household-level data on food consumption cannot reveal intra-household inequalities, or lead to adequate counts of women and men who are food insecure. Furthermore,
data collection on food consumption at the individual level is at best a difficult enterprise that can result in considerable estimation errors. Thus, individual-level data on access to food, a key dimension of food security, remain currently unavailable. ${ }^{\text {h }}$
Voices of the Hungry ( VoH ), an initiative launched by FAO and its partners, ${ }^{\text {i }}$ aims to fill the gap in global monitoring of access to food and the severity of food insecurity, including at the individual level, by using an experiencebased food insecurity scale. The scale developed for this purpose-the Food Insecurity Experience Scale (FIES)-consists of a set of eight questionsj on self-reported food-related behaviours and experiences associated with increasing difficulties in obtaining food due to resource constraints. The questions reflect a continuum of food insecurity from worrying about food to compromising on quality and variety and further to reducing quantities, skipping meals and experiencing hunger. Following pilot surveys in four sub-Saharan African countries in 2013, the FIES was included, starting in 2014, in the Gallup World Poll ${ }^{\circledR}$ conducted annually in over 150 countries.
Using the FIES at the individual level can capture disparities in food security between women and men, including those due to intra-household differences in resource allocation and feeding priorities. Preliminary results from 117 countries ${ }^{k}$ show that women are more likely to be food insecure than men in 26 per cent of countries, and men in 12 per cent of countries. In the remaining countries, women are as likely as men to be food insecure. The association between food insecurity and gender is more prevalent in developing countries. The proportion of developing countries where women are more likely than men to be food insecure increases to 39 per cent, while for men, it remains at about the same level, at 13 per cent. However, at the completion of data collection exercises in the countries implementing the scale, further analysis is needed to confirm the validity of a global experience-based insecurity scale and ensure cross-country comparability of results, including from a gender perspective.
a A first draft of this box was prepared by the FAO Statistics Division.
b FAO, 1996.
c HLPE (High Level Panel of Experts on Food Security and Nutrition), 2012. Pages 21-22.
d lbid.
e Jones and others, 2013; de Weerdt and others, 2014.
f Data and analysis prepared by FAO, 2014. Data shown in Statistical Annex available at http://unstats.un.org/unsd/ gender/worldswomen.html. g lbid.
h By comparison, individuallevel data on malnutrition of children and pregnant women, capturing the dimension of food utilization, are often available from demographic and health surveys.
i For more details on the project see FAO, Voices of the Hungry (http://www.fao. org/economic/ess/ess-fs/ voices/en/) (accessed June 2015).
j The respondents are asked directly whether in the last 12 months there was a time when, because of lack of money or other resources they: (1) were worried that they would run out of food; (2) were unable to eat healthy and nutritious food; (3) ate only a few kinds of foods; (4) had to skip a meal; (5) ate less than they thought they should; (6) their household run out of food; (7) were hungry but did not eat; (8) went without eating for a whole day.
k FAO, 2015.

## 1. Access to income

Women's access to cash labour income is systematically low in developing regions

As shown in Chapter 4 on Work, women are less likely to be employed than men and, when they are employed, they are more likely to be in vulnerable jobs, such as contributing family workers. Compared to other jobs, these types of jobs are more often associated with irregular low income or no income at all, resulting in lower proportions of women having cash labour income. For instance, in sub-Saharan Africa, only 34 per cent of married women aged 15 to 49 were employed in the past 12 months and paid in cash, and an additional 12 per cent were paid in cash and in-kind; the corresponding proportions for married men were 57 and 18 per cent, respectively (figure 8.13). Across the 44 developing countries with available data, the proportion of married women who earned any cash labour income in the past 12 months varied greatly, from 8 per cent in Timor-Leste to 79 per cent in Ghana. For men, the proportion varied from 33 per cent in Timor-Leste to 97 per cent in the Maldives. The gender gap ranged from 7 percentage points in Ghana to 74 percentage points in Pakistan. ${ }^{35}$

Figure 8.13
Distribution of married women and men aged 15 to 49 by type of earnings from labour in the last 12 months, sub-Saharan Africa, 2005-2012 (latest available)


Source: Calculated by United Nations Statistics Division based on data from ICF International, 2014. Demographic and Health Survey (DHS) Programme database (correspondence in June 2014).
Note: Unweighted averages based on data from 30 countries.

Access to cash labour income is most limited for rural women, but the gender gap is highest in urban areas

Women in rural areas are most disadvantaged in terms of access to cash labour income (figure 8.14). They lag behind men in all countries with data, and, in most countries, they have lower access to cash income than women in urban ar-

35 ICF International, 2014. Data shown in the Statistical Annex, http://unstats.un.org/unsd/gender/worldswomen. html.
eas. On average, in rural areas in sub-Saharan Africa, 43 per cent of married women aged 15 to 49 and 68 per cent of men had any cash labour income in the past 12 months. The corresponding figures in urban areas were 56 per cent and 90 per cent, respectively. Still, the gender gap was higher in urban than in rural areas, with very few country exceptions, showing that women are not able to access the more extensive employment opportunities offered in cities. At the same time, it shows that cash income opportunities in rural areas remain limited for both women and men.

Data on women's lack of cash labour income, such as those provided by ICF International based on Demographic and Health Surveys (DHS), clearly illustrate the economic dependency of women on men, as a consequence of the gender division of labour in the domestic and market arenas (see Chapter 4 on Work). However, further statistical information is needed, including on the level of personal income from labour and other sources (such as government transfers) individually accessed. This would allow for a better understanding of women's economic vulnerability and of the co-shared responsibility of care work between women, men and the state.

## A significant proportion of married women in developing

 regions have no say in how their cash earnings are spentIn developing countries, having a job and cash income does not necessarily translate into control over the economic resources acquired. On average 1 in 10 married women in developing countries with data are not consulted on how their own cash earnings are spent. ${ }^{36}$ The proportion of married women in developing countries with no say in how their own cash earnings are spent ranges widely from 2 per cent in Cambodia, Colombia and Honduras to over 20 per cent in the Democratic Republic of the Congo, Liberia, Sierra Leone and Zambia and 42 per cent in Malawi. The proportion of women experiencing lack of control over their own income is higher in the poorest quintiles and lower in the wealthiest quintiles. ${ }^{37}$

[^240]Figure 8.14
Married women and men aged 15 to 49 who earned any cash labour income in the last 12 months, by urban and rural areas, 2005-2012 (latest available)


Furthermore, although women do contribute to the welfare of their household, either through paid or unpaid work, they often lack decisionmaking power over the economic resources of the household. For instance, only 2 in 3 married women aged 15 to 49 participate in decision-making on major household purchases in developing countries. ${ }^{38}$ This is often the case in sub-Saharan Africa and Asia (figure 8.15). In sub-Saharan Africa, for example, about half of married women only (54 per cent) have a say on major household purchases. The proportion of women with power
of decision-making is lower in the poorest households, at 49 per cent, compared to 62 per cent in the wealthiest households. ${ }^{39}$

By comparison, in European countries, the deci-sion-making model among couples is generally egalitarian with respect to important expenses for children, purchases of durable consumer goods, borrowing money and the use of savings. However, women are more often involved than men in decision-making related to daily shopping and to expenses related to children and children's needs. ${ }^{40}$

Figure 8.15
Proportion of married women aged 15 to 49 participating in household decision-making on major purchases, poorest and wealthiest quintiles, 2005-2012 (latest available)

[^241][^242]> Wealthiest quintile
> Poorest quintile
> National level

Source: ICF International, 2014. Demographic and Health Survey (DHS) Programme database (correspondence in June 2014).

## 2. Use of formal financial services

## Women use formal financial services less often than men in all regions of the world

Women have less access to formal financial systems than men. Globally in 2011, 47 per cent of women had an individual or joint account at a formal financial institution (a bank, credit union, cooperative, post office or microfinance institution), compared to 55 per cent of men. In developing countries, 37 per cent of women and 46 per cent of men had a formal account. ${ }^{41}$

The proportion of women with an account at a formal financial institution was lower than the proportion of men in all regions of the world (figure 8.16). The gender gap was highest in the Middle East and North Africa and in South Asia (regions as defined by the World Bank). In South Asia, 25 per cent of women compared to 41 per cent of men had an account (a difference of 16 percentage points). In the Middle East and North Africa, 13 per cent of women and 23 per cent of men had an account (a difference of 10 percentage points). Among countries in those regions, the gender gap was as high as 57 percentage points in Saudi Arabia and 49 percentage points in Turkey. A large gender gap was observed in other countries as well, at 20 percentage points or higher in Lebanon, Morocco and Oman and 17 percentage points in India.

Figure 8.16
Proportion of adults with an account at a formal financial institution, by sex, 2011


Source: World Bank, 2014. Global Financial Inclusion database (accessed March 2014).
Note: Weighted averages by World Bank regions, calculated by the World Bank. Regional and world aggregates omitted countries with samples that excluded more than 20 per cent of the population or used methodologies inconsistent with those used for other countries. Averages for the geographical regions shown (that is, all categories except "World" and "High-income countries") are based on data for developing countries only.

In developing regions, women are less likely to have a formal bank account than men across all income quintiles. ${ }^{42}$ More in-depth research also shows that global and regional gender gaps in having an account remain statistically significant (except for East Asia and the Pacific) after controlling for education, age, income and countrylevel characteristics. ${ }^{43}$

The largest gender gaps are found in the use of a bank account for receiving wages and other business purposes

Globally, bank accounts held by individuals are most often used for receiving wages, government payments and other business purposes, and less often for sending or receiving remittances. The gender gap was most substantial in the use of such accounts for receiving wages and other business purposes (figure 8.17), consistent with the fact that women are less likely than men to be employed (see Chapter 4 on Work).
Among the most frequently self-reported reasons for not having a formal bank account were: lack of enough money to use one; banks or accounts are too expensive; and the fact that another family member already had one. Women were more likely than men to mention the last reason (26 per cent for women and 20 per cent for men globally). There was no difference between women and men in relation to the other reasons reported, such as banks being too far away, lack of necessary documentation, lack of trust in banks and religious reasons. ${ }^{44}$

Figure 8.17
Use of own bank account, by purpose and by sex, world, 2011


Source: World Bank, 2014. Global Financial Inclusion database (accessed March 2014).

[^243]A smaller but significant gender gap was also observed for the activities related to saving and borrowing from a formal financial institution in the past year. This was the case in high-income countries and developing countries in Latin America and the Caribbean, the Middle East and North Africa, South Asia and sub-Saharan Africa. ${ }^{45}$ The proportion of women who saved at a formal financial institution was 21 per cent compared to 24 per cent for men worldwide. In developing economies, the proportion was 16 per cent compared to 19 per cent, respectively. Saving clubs (pooling the deposits of their members and disbursing the entire amount to a different member each week or at another interval) are common alternatives to saving at a formal financial institution in developing countries, especially in sub-Saharan Africa, and are used equally by both women and men.
Globally, the proportion of people who borrowed from a financial institution in the past year was 8 per cent for women and 10 per cent for men. The gender gap was more pronounced in highincome countries- 12 per cent of women versus 16 per cent of men. In developing regions, the proportion borrowing was 7 per cent for women and 9 per cent for men. While it is often assumed that women use informal borrowing and saving more often than men, the data showed no significant difference between them.

## 3. Property rights and asset ownership and control

## Women are disadvantaged with respect to inheritance

 and property rightsThe overall legal rights of women remain unequal compared to the rights of men in many countries. As many as 90 per cent of the 143 economies reviewed by the World Banks's Women, Business and the Law 2014 have at least one legal difference restricting women's economic opportunities and their ability to be economically independent. ${ }^{46}$ That said, many restrictions have been removed over the past four decades. Research shows that international conventions such as the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and women's political representation at the national level played a role in closing legal gaps in women's economic rights, while conflict situations and weak rule of law perpetuated discrimination. ${ }^{47}$ Countries in Latin America have made tremendous progress and have caught up with developed countries in terms of women's legal rights. ${ }^{48}$

Figure 8.18
Number of developing countries with equal legal rights for women and men on selected issues, 1995 to 2010


[^244][^245]45 Demirguc-Kunt and Klapper, 2012.

More recently, between 1995 and 2010, a number of developing countries, most of them located in sub-Saharan Africa and East Asia, also underwent positive changes in women's legal rights related to their economic independence (figure 8.18). Yet, many restrictions remain, particularly with regard to inheritance rights for daughters and wives, and women's legal rights to become the head of household and get a job without a husband's permission. The countries showing the largest number of legal differences between women and men are concentrated in Northern Africa, sub-Saharan Africa and West Asia. ${ }^{49}$

In an additional number of countries, although laws provide for gender equality in inheritance for the overall population, discrimination is still found in practice among some groups of population (figure 8.19). This is the case for about half of the 116 developing countries with available information. Discriminatory informal laws, customs and practices also restrict women's access to land and other property in a large proportion of developing countries, including in more than three quarters with regard to land and nearly two thirds with regard to other property.

While data on legal and customary practices of discrimination against women in access to property are available for a majority of countries, individual-level data on ownership of land and other assets are currently lacking (see box 8.5). However, the limited number of existing case studies points to gender inequality. For instance, in Ecuador, Ghana and India, women own land, dwellings, livestock and agricultural equipment less often than men. ${ }^{50}$

Figure 8.19
Proportion of developing countries with gender inequality with regard to inheritance rights, entitlements to ownership of land and other property, 2014

In summary, women have considerably lower access than men to cash labour income, and persistent discriminatory statutory and customary laws restrict women's access to land and other assets in many countries. Many women do not have decision-power over their own cash labour income and household resources, particularly in the poorest households. This lower access to economic resources increases women's economic dependency on men and, in certain types of family arrangements, results in higher poverty rates for women. Gender disparities in poverty are becoming more visible with the diversification of family arrangements, including an increase in one-person households and one-parent families. Working-age women in developed and developing countries are more likely to be poor than men when they have dependent children and no partners to contribute to the household income or when their own income is non-existent or too low to support the entire family. At older ages, women in developed countries are more likely than men to be poor, particularly when living in one-person households. The emerging diversification of family arrangements, including the increase in single parenthood and independent living in one-person households during older ages has a gender dimension that is yet to be adequately accounted for by social protection programmes. More data are needed to provide a comprehensive view of the links between gender, poverty, living arrangements and the impact of various components of social protection programmes and to support and monitor policymaking. The measurement of poverty itself needs to integrate a gender perspective and account for intrahousehold inequality on a series of dimensions of deprivations that limit women's choices and opportunities.

[^246]
## Box 8.5

Measuring individual-level asset ownership and control from a gender perspective

Traditional poverty studies define poverty as a lack of income or consumption, but this approach often fails to capture the wide range of vulnerabilities experienced by individuals. Asset-based studies provide important insights into people's well-being because they focus on the accumulation of assets over the life cycle. Assets serve multiple functions. In their productive capacity, they generate income and facilitate access to capital and credit. They also strengthen a household's capacity to cope with and respond to shocks by enhancing its ability to diversify income and ease liquidity constraints. Moreover, assets comprise a store of wealth that can be sold to generate income. Finally, they may provide status and security.

Most assets are owned and controlled by individuals within households, either solely or jointly with another person. Prior research suggests a strong association between who in the household owns assets and important development outcomes, including in terms of nutrition, health and education. In Ghana, for example, women's landholdings are positively correlated with household food expenditure. ${ }^{\text {a }}$ In Bangladesh, Ethiopia and South Africa, the greater a woman's asset holdings at marriage, the larger the share the household spends on children's education. ${ }^{\text {b }}$ In Bangladesh, a higher share of assets in women's hands is also associated with better health outcomes for girls. ${ }^{\text {c }}$ Indicators of women's asset ownership are also correlated with egalitarian decision-making in Ecuador and Ghana, ${ }^{\text {d }}$ and several studies indicate that asset ownership can protect against spousal violence. ${ }^{\text {e }}$

By measuring asset ownership and control at the individual level, policymakers are thus better equipped to understand women's empowerment and well-being, including their economic vulnerability and decision-making, and to address other related policy issues, such as those referring to livelihoods, including agricultural productivity and entrepreneurship, and reductions in poverty and vulnerability. Yet, despite these important policy implications, relatively little data exist on individual ownership and control of assets, particularly data derived from nationally representative surveys. ${ }^{\dagger}$ Instead, when
asset data are collected, it is usually done at the household level by asking questions about whether anyone in the household owns land, housing or other key assets.
To integrate data collection on individual-level asset ownership and control into the regular production of official statistics, the Evidence and Data for Gender Equality (EDGE) project, ${ }^{9}$ a joint initiative of the United Nations Statistics Division and UN-Women, is developing methodological guidance for national statistical offices on measuring individual-level ownership and control of financial and physical assets, including agricultural land, dwellings, other real estate, livestock, agricultural equipment, valuables, enterprise assets, financial assets and liabilities.
The EDGE methodology conceptualizes asset ownership as a bundle of rights, including the right to sell and bequeath and manage an asset and to use the benefits accruing from it. It should be noted that these rights may not all accrue to the same individual, and ownership may be supported by legal documents or simply recognized within the community. In this regard, four approaches in collecting data on asset ownership and control are proposed by the EDGE initiative. The first is to collect information on reported ownership by asking respondents to identify who owns the asset, either individually or jointly. The second approach is to collect information on documented ownership, by asking respondents whether formal ownership documents exist for an asset and whose names are listed as an owner on the documents. The third approach is to collect information on economic ownership by asking respondents which person(s) would control the proceeds from the sale of the asset. The fourth approach is to ask about particular rights over an asset, including the rights to sell and bequeath an asset. This proposed EDGE methodology is currently piloted in select countries. The findings of these pilots will inform international guidelines in measuring individual-level asset ownership and control from a gender perspective that would equip countries to collect data in a comparable manner, monitor gendered patterns of asset ownership, and create or enhance policies to improve the well-being of women and their households.
a Doss, 2005 .
b Quisumbing and Maluccio, 2003.
c Hallman, 2000.
d Deere and Twyman, 2012.
e Bhattacharyya, Bedi and Chhachhi, 2011; Grabe, 2010; Panda and Agarwal, 2005.
f Initiatives that include some individual-level asset data include the World Bank's Living Standard Measurement Study-Integrated Surveys on Agriculture (LSMS-ISA), the Agricultural Censuses supported by FAO, the Gender Asset Gap Project's (GAGP) work in Ecuador, Ghana and India, the Women's Empowerment in Agriculture Index (WEAI) and the Demographic and Health Surveys (DHS).
g For additional information see United Nations Statistics Division, Evidence and Data for Gender Equality, at http://unstats.un.org/unsd/ gender/EDGE/about.html.

## List of countries, areas and geographical groupings

| Africa |
| :---: |
| Northern Africa |
| Algeria ${ }^{\text {a }}$ |
| Egypt ${ }^{\text {a }}$ |
| Libya ${ }^{\text {a }}$ |
| Morocco ${ }^{\text {a }}$ |
| Tunisia ${ }^{\text {a }}$ |
| Sub-Saharan Africa |
| Angola ${ }^{\text {b }}$ |
| Benin ${ }^{\text {c }}$ |
| Botswana ${ }^{\text {b }}$ |
| Burkina Faso ${ }^{\text {c }}$ |
| Burundi ${ }^{\text {d }}$ |
| Cabo Verde ${ }^{\text {c }}$ |
| Cameroon ${ }^{\text {e }}$ |
| Central African Republic ${ }^{\text {e }}$ |
| Chad ${ }^{\text {e }}$ |
| Comoros ${ }^{\text {d }}$ |
| Congo ${ }^{\text {e }}$ |
| Cote d'Ivoire ${ }^{\text {c }}$ |
| Democratic Republic of the Congo ${ }^{\text {d }}$ |
| Djibouti ${ }^{\text {d }}$ |
| Equatorial Guinea ${ }^{\text {e }}$ |
| Eritrea ${ }^{\text {d }}$ |
| Ethiopia ${ }^{\text {d }}$ |
| Gabon ${ }^{\text {e }}$ |
| Gambia ${ }^{\text {c }}$ |
| Ghana ${ }^{\text {c }}$ |
| Guinea ${ }^{\text {c }}$ |
| Guinea-Bissau ${ }^{\text {c }}$ |
| Kenya ${ }^{\text {d }}$ |
| Lesotho ${ }^{\text {b }}$ |
| Liberia ${ }^{\text {c }}$ |
| Madagascar ${ }^{\text {d }}$ |
| Malawi ${ }^{\text {b }}$ |
| Mali ${ }^{\text {c }}$ |
| Mauritania ${ }^{\text {a }}$ |
| Mauritius ${ }^{\text {b }}$ |
| Mozambique ${ }^{\text {b }}$ |


| Sub-Saharan Africa (continued) | South-Eastern Asia |
| :---: | :---: |
| Namibia ${ }^{\text {b }}$ | Brunei Darussalam |
| Niger ${ }^{\text {c }}$ | Cambodia |
| Nigeria ${ }^{\text {c }}$ | Indonesia |
| Réunion | Lao People's Democratic Republic |
| Rwanda ${ }^{\text {d }}$ | Malaysia |
| Sao Tome and Principe ${ }^{\text {e }}$ | Myanmar |
| Senegal ${ }^{\text {c }}$ | Philippines |
| Seychelles ${ }^{\text {d, }} \mathrm{f}$ | Singapore |
| Sierra Leone ${ }^{\text {c }}$ | Thailand |
| Somalia ${ }^{\text {d }}$ | Timor-Leste |
| South Africa ${ }^{\text {b }}$ | Viet Nam |
| South Sudan ${ }^{\text {d }}$ | Southern Asia |
| Sudan ${ }^{\text {a }}$ |  |
| Swaziland ${ }^{\text {b }}$ | Bangladesh |
| Togo ${ }^{\text {c }}$ |  |
| Uganda ${ }^{\text {d }}$ | Bhutan |
| United Republic of Tanzania ${ }^{\text {d }}$ | India |
| $\text { Zambia }^{\text {b }}$ | Iran (Islamic Republic of) |
| Zimbabwe ${ }^{\text {b }}$ | Maldives |
| Asia | Nepal |
| Caucasus and Central Asia | Pakistan |
| Armenia | Sri Lanka |
| Azerbaijan | Western Asia |
| Georgia | Bahrain |
| Kazakhstan | Iraq |
| Kyrgyzstan | Jordan |
| Tajikistan | Kuwait |
| Turkmenistan | Lebanon |
| Uzbekistan | Oman |
| Eastern Asia | Qatar |
| China | Saudi Arabia |
| China, Hong Kong Special Administrative Region | State of Palestine |
| China, Macao Special Administrative Region | Syrian Arab Republic |
| Democratic People's Republic of Korea | Turkey |
| Mongolia | United Arab Emirates |
| Republic of Korea | Yemen |



| Latin America (continued) | Northern Europe (continued) |
| :---: | :---: |
| Paraguay | Ireland |
| Peru | Latvia |
| Suriname | Lithuania |
| Uruguay | Norway |
| Venezuela (Bolivarian Republic of) | Sweden |
| Oceania | United Kingdom of Great Britain and Northern Ireland |
| American Samoa ${ }^{\text {f }}$ | Southern Europe |
| Cook Islands ${ }^{\text {f }}$ | Albania |
| Fiji | Andorra ${ }^{\text {f }}$ |
| Kiribati | Bosnia and Herzegovina |
| Marshall Islands ${ }^{\text {f }}$ | Croatia |
| Micronesia (Federated States of) | Greece |
| Nauruf | Italy |
| New Caledonia | Malta |
| Niue ${ }^{\text {f }}$ | Montenegro |
| Palau ${ }^{\text {f }}$ | Portugal |
|  | San Marino ${ }^{\text {f }}$ |
| Papua New Guinea | Serbia |
| Samoa | Slovenia |
| Solomon Islands |  |
| Tonga | Spain |
| Tuvalu ${ }^{\text {f }}$ | The former Yugoslav Republic of Macedonia |
|  | Western Europe |
| Vanuatu | ria |
| Developed regions | Belgium |
| Eastern Europe | France |
| Belarus | Germany |
| Bulgaria | Liechtenstein ${ }^{\text {f }}$ |
| Czech Republic | Luxembourg |
| Hungary | Monacof ${ }^{\text {f }}$ |
| Poland | Netherlands |
| Republic of Moldova | Switzerland |
| Romania | Other developed regions |
| Russian Federation | Australia |
| Slovakia | Bermuda ${ }^{\text {f }}$ |
| Ukraine | Canada |
| Northern Europe | Cyprus |
| Denmark | Israel |
| Estonia | Japan |
| Finland | New Zealand |
| Iceland | United States of America |

## Notes

${ }^{\text {a }}$ Included in North Africa as per sub-regional groupings of UNECA used in MDGs reports.
b Included in Southern Africa as per sub-regional groupings of UNECA used in MDGs reports.
${ }^{\text {c }}$ Included in West Africa as per sub-regional groupings of UNECA used in MDGs reports.
${ }^{d}$ Included in Eastern Africa as per sub-regional groupings of UNECA used in MDGs reports.
${ }^{e}$ Included in Central Africa as per sub-regional groupings of the United Nations Economic Commission for Africa (UNECA) used in MDGs reports.
${ }^{f}$ Countries or areas with a population of less than 100,000 as of 1 July 2015.

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## Chapter 1. Population and families

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[^0]:    1 Since there is no established convention for the designation of "developed" and "developing" countries or areas in the United Nations system, this distinction is made for the purposes of statistical analysis only.
    2 United Nations Statistics Division, 2015. Millennium Development Indicators: World and regional groupings. mdgs.un.org/ unsd/mdg/Host.aspx?Content=Data/RegionalGroupings.htm (accessed 10 April 2015)

[^1]:    1 United Nations, 2013a.
    2 Ibid.

[^2]:    5 Pool, Wong and Vilquin (eds.), 2006; Vallin, 2005.

[^3]:    6 United Nations, 20131.

[^4]:    7 In a growing number of countries, a third gender has been officially acknowledged and included in official categories. Few countries have granted legal rights to persons of a third gender who choose not to be identified as either a woman or man.
    8 United Nations, 2013a.
    9 Ibid.

[^5]:    Armenia
    Azerbaijan
    China
    Georgia
    India
    Pakistan
    Viet Nam

    Source : United Nations, World Population Prospects: The 2012 Revision (United Nations, 2013a).

    11 Attané and Guilmoto, eds., 2007; Bongaarts, 2013; Frost and others, 2013; Guilmoto, 2009; Jha and others, 2011.
    12 United Nations, 2013a.
    13 Australia and New Zealand are not included in this region, but in developed regions.

[^6]:    14 Almond, Edlund and Milligan, 2013; Dubuc and Coleman, 2007; UNFPA, 2012.
    15 Arnold, Kishor and Roy, 2002, p. 780; Guilmoto and Duthé, 2013; Meslé, Vallin and Badurashvili, 2007; UNFPA, 2010, p. 17; World Vision and UNFPA, 2012, p. 82.

[^7]:    16 Chung and Das Gupta, 2007.
    17 Jha and others, 2011.

[^8]:    18 Sen, 1992.
    19 See, for example, Anderson and Ray, 2010; World Bank, 2011; Milazzo, 2014.

[^9]:    20 Available at able at http://unstats.un.org/unsd/gender/ worldswomen.html.

[^10]:    21 United Nations, 2006.
    22 Ibid.

[^11]:    33 Ibid.
    34 United Nations, 2013k.

[^12]:    35 Birks, Seccombe and Sinclair, 1988; Fargues, 2011; Fargues and Brouwer, 2012; Kapiszewski, 2006; United Nations, 2013m.

[^13]:    36 OECD, 2014; United Nations, 2006; Widmaier and Dumont, 2011.
    37 OECD, 2014.

[^14]:    38 Widmaier and Dumont, 2011.
    United Nations, 2013j.
    Ibid.
    41 Recent internal migration is measured based on census information on residence five years ago.

[^15]:    42 Temin and others, 2013.
    43 Ibid.
    44 UNHCR, 2014.
    45 UNHCR, 2013.
    46 Ibid.

[^16]:    47 United Nations, 2006; UNFPA, 2006; UNHCR, 2011;
    UNHCR, 2012.

[^17]:    48 Global and regional averages are unweighted (that is, the averages do not take into account the size of national populations) and are based only on available data for a region.
    49 OECD, 2011.

[^18]:    50 UNICEF, 2014a.
    51 Unweighted averages calculated by UNSD based on United Nations, 2013d and United Nations, 2014b.
    52 Minimum Set of Gender Indicators, 2015.

[^19]:    53 UNICEF, 2014a.
    54 Ibid.
    55 Ibid.
    56 Data based on UNICEF, 2014b.

[^20]:    57 Eurostat, 2010.

[^21]:    58 Barbieri and Hertrich, 2005; Antoine, 2006.
    59 Barbieri and Hertrich, 2005.
    60 Amey, 2002; Omariba and Boyle, 2007; Smith-Greenaway and Trinitapoli, 2014.
    61 DHS, 2014.
    62 Ibid.

[^22]:    63 See, for example, Härkönen, 2014; Bernardi and Radl, 2014.

[^23]:    64 Dommaraju and Jones, 2011.

[^24]:    65 Trends in prevalence of widowhood among women aged 60 to 64 are presented in the Statistical Annex at http:// unstats.un.org/unsd/gender/worldswomen.html.

[^25]:    66 Grigoriev, 2012; Meslé, 2004; Shkolnikov and others, 2004.

    67 Becker and Urzhumova, 2005; Duthé and others, 2014; Guillot, Gavrilova and Pudrovska, 2011; Guillot and others, 2013; Sharygin and Guillot, 2013.

[^26]:    68 Ní Bhrolcháin and Beaujouan, 2012.
    69 United Nations, 2013h.
    70 Bongaarts and Sobotka, 2012.
    71 United Nations, 2013h.
    72 United Nations, 2013f.
    73 United Nations, 2013d.

[^27]:    74 Moreland and Smith, 2012.

[^28]:    75 United Nations, 2013g.

[^29]:    76 United Nations, 2013i.
    Ibid.
    OECD, 2011.
    Bongaarts and Potter, 1983.

[^30]:    80 Eurostat, 2010.

[^31]:    81 Based on data from IPUMS-International, 2014.
    82 Averages computed by UNSD on the basis of United Nations 2013i. Data series for 105 countries.
    83 United Nations, 2014b.

[^32]:    84 United Nations, 2014d.
    85 OECD, 2011.

[^33]:    86 Fostering refer to sending children to live with relatives or other persons that are not biological parents while at least one of their parents is alive.
    87 Unweighted averages for 30 countries based on the latest available DHS data over the period 2015-2013 (accessed January 2015).
    88 United Nations, 20131.
    89 Ibid.

[^34]:    90 Ibid.

[^35]:    1 WHO, 1946.

[^36]:    WHO and World Bank, 2014.
    Boerma and others, 2014.
    4 United Nations, 2014a.

[^37]:    5 See relevant sections in this chapter.

[^38]:    6 Life expectancy at birth is an indicator of the overall health status of a population. It is derived from age-specific mortality rates and denotes the average number of years a newborn child can expect to live given the current levels of mortality.
    7 United Nations, 2013a.

[^39]:    8 UNAIDS, 2013.
    9 United Nations, 2013b.
    10 WHO, UNICEF, UNFPA, World Bank and the United Nations Population Division, 2014.

[^40]:    11 Based on 182 countries or areas with an estimated population of at least 100,000 in 2015 and that are part of the Millennium Development Goals country list.

[^41]:    12 Leon, 2011.

[^42]:    13 United Nations, 2013a.
    14 Communicable (or infectious) diseases are caused by mi-cro-organisms, such as bacteria, viruses or parasites and can spread from person to person or animal to person. Lower respiratory infections, HIV/AIDS and diarrhoeal diseases are three of the most prominent communicable diseases. Leading risk factors for such diseases include unsafe water and sanitation, poor hygiene, unsafe sex, and inadequate health services (WHO, 2014a).
    15 Maternal, neonatal and nutritional conditions are health conditions related to pregnancy and childbirth, the neonatal period or to nutritional deficiencies, respectively (WHO, 2014a).

[^43]:    16 Non-communicable diseases are diseases that are nontransmissible and often-but not always-of long duration and generally slow progression. The four main types of non-communicable diseases are cardiovascular diseases (such as heart attacks and stroke), cancer, chronic respiratory diseases (mostly chronic obstructed pulmonary disease and asthma) and diabetes. Most noncommunicable diseases are strongly influenced by common and preventable risk factors such as tobacco use, physical inactivity, unhealthy diets and excessive use of alcohol. The third major category of causes of death is injuries. It includes unintentional injuries, such as those resulting from road accidents, falls, drowning and poisoning, along with intentional injuries, such as self-harm (suicide), interpersonal violence and collective violence (WHO, 2014a).

[^44]:    17 WHO, 2014b.
    18 Ahmeda, 2004.

[^45]:    9 WHO, 2011a.
    WHO, 2010a.
    IARC and others, 2012; Eriksen and others, 2012.
    Reynolds, 2013; Gaudet and others, 2013.
    WHO, 2014c.
    WHO, 2013a.

[^46]:    25 WHO, 2010b.

[^47]:    26 Ibid.
    27 Rehm and others, 2010; WHO, 2014d.
    8 WHO, 2014d.
    29 Disability-adjusted life years (DALYs) measure the burden of disease, injury and death in a population. DALYs are calculated as the sum of years of life lost (YLL) due to premature death and the years lost due to disability (YLD) resulting from disease or injury. One DALY can be thought of as one lost year of healthy life. The sum of DALYs across the population, or the burden of disease, can be thought of as a measurement of the gap between current health status and an ideal health situation where the entire population lives to an advanced age, free of disease and disability. (See: WHO, 2015. www.who.int/ healthinfo/global_burden_disease/metrics_daly/en/ (accessed January 2015).

[^48]:    30 WHO, 2014d.
    31 This section is based on the WHO's Global Status Report on Alcohol and Health, 2014d, unless otherwise noted. Current drinkers are defined as people who consumed an alcoholic drink in the past 12 months.
    32 Throughout the section on alcohol consumption, country groupings are based on WHO regions (see: www.who. int/about/regions/en/).
    33 WHO regions.

[^49]:    34 Finucane and others, 2011; WHO, 2011a; WHO, 2009a.
    35 Finucane and others, 2011.

[^50]:    36 Stevens and others, 2012.
    37 Ibid.

[^51]:    38 NCD Alliance, 2011.
    39 IDF, 2013.

[^52]:    40 Ibid.
    41 WHO, 2009a; WHO, 2011a.
    42 Defined by WHO as having a fasting blood glucose level of at least 7.0 millimoles per liter or being on diabetes medication.
    43 IDF, 2013.
    44 Ibid.

[^53]:    45 WHO, 2014b.

[^54]:    46 United Nations, 2015c.
    47 UNICEF, 2014a.
    48 UNICEF, 2014b.
    49 Ibid.
    50 WHO, 2014b.

[^55]:    51 Ibid.
    52 Calculated by UNSD based on data from UNICEF, 2014a.
    53 UNICEF, 2013a.

[^56]:    54 Austad, 2006.
    55 Preston, 2007; Drevenstedt, 2008; Sawyer, 2012.

[^57]:    56 Alkema and others, 2014.
    57 The line is the result of an analysis based on all available country data on child mortality since 1950, regardless of whether those countries were characterized by discriminatory gender practices or not. In that regard, the line helps in identifying outliers from aggregated averages for a given level of under-5 mortality.
    58 See, for example: Pande, 2003; Oster, 2009.

[^58]:    59 Alkema and others, 2014; UNICEF, 2014a.
    60 UNICEF, 2013b.
    61 WHO, 2014b.

[^59]:    62 UNICEF, 2014b; Black and others, 2013.
    63 UNICEF, 2013b; Spears, 2012.
    64 A child is considered underweight if her or his weight for age is below minus two standard deviations from the median of the WHO Child Growth Standards.
    65 UNICEF, 2014c.
    66 A range between 85 and 115 in the sex ratio of underweight prevalence was treated as a window of 'gender parity' for sub-Saharan African countries. UNICEF, 2013b.
    67 United Nations, 1998.
    68 A child under 5 years old is considered stunted when her or his height-to-age ratio is below minus two standard deviations from the median WHO Child Growth Standards.
    69 UNICEF, 2014c.

[^60]:    70 A range between 85 and 115 in the sex ratio of underweight prevalence was treated as a window of 'gender parity' for sub-Saharan African countries. UNICEF, 2013b.
    71 UNICEF, 2013 b .
    72 WHO, 2014e.
    73 Based on a review of immunization coverage (all vaccinations) for 62 countries with data for the period 2003 to 2012. Demographic and Health Surveys (DHS), 2014. 74 Resnick and others, 2012.

[^61]:    75 Shah and Åhman, 2012.

[^62]:    76 WHO, 2014b.
    77 UNAIDS, 2013.
    78 Ibid.

[^63]:    79 WHO, 2014b.
    80 UNAIDS, 2013.
    81 Based on available data for sub-Saharan African countries, there was a 19 percentage point gap in condom use between young women and young men in 2014. United Nations, 2015c.
    82 United Nations, 2015c.
    83 Ibid.
    84 Blum and others, 2012; Patton and others, 2012; WHO, 2014f; Viner and others, 2012.

[^64]:    85 WHO, 2014b.
    86 Deaths due to collective violence refers to deaths occurring in the context of instrumental use of violence by people who identify themselves as members of a group against another group or set of individuals, in order to

[^65]:    achieve political, economic or social objectives. Various forms of collective violence have been recognized, including: (a) wars, terrorism and other violent political conflicts that occur within or between States; (b) stateperpetrated violence such as genocide, repression, disappearances, torture and other abuses of human rights; (c) organized violent crime such as banditry and gang warfare. Deaths due to legal intervention include deaths due to injuries inflicted by the police or other law-enforcing agents, including military on duty, in the course of arresting or attempting to arrest lawbreakers, suppressing disturbances, maintaining order or other legal action (WHO, 2002).

[^66]:    87 Patel and others, 2007.
    88 For definition of DALYs, refer to section on alcohol consumption.
    89 WHO, 2014g.
    90 WHO, 2014b.

[^67]:    91 WHO, 2014d, WHO regions.
    92 In most countries data refer to those 13 to 15 years old.
    WHO, 2013 c .
    WHO, 2014h.
    WHO, 2014i.

[^68]:    96 WHO, 2011a.

[^69]:    98 Singh and others, 2014.
    99 United Nations, 2015c, Statistical Annex.

[^70]:    100 Sedgh and others, 2012.
    101 WHO, UNICEF, UNFPA, World Bank and the United Nations Population Division, 2014.

[^71]:    102 The WHO defines an unsafe abortion as a procedure for terminating an unintended pregnancy carried out either by persons lacking the necessary skills or in an environment that does not conform to minimal standards, or both.
    103 WHO, 2011b; Sedgh and others, 2012.
    104 WHO, 2014k.

[^72]:    105 United Nations, 2014c.

[^73]:    106 Algeria, Belize, Congo, Dominican Republic, Iraq, Japan, Nicaragua, Papua New Guinea.
    107 United Nations, 2014d.
    108 WHO, 2012a and United Nations, 2014d.
    109 United Nations, 2014d, data refer to 2013.

[^74]:    110 United Nations, 2015c.

[^75]:    111 Hoque, 2011.
    112 WHO, UNICEF, UNFPA, World Bank and the United Nations Population Division, 2014.
    113 See Statistical Annex available at http://unstats.un.org/ unsd/gender/worldswomen.html.

[^76]:    114 WHO, 20141; UNFPA, 2014.
    115 UNFPA, 2014.

[^77]:    116 WHO, 2014b.
    117 UNAIDS, 2013.
    118 UNAIDS, 2014a.

[^78]:    119 UNAIDS, 2013.
    120 Ibid.
    121 Ibid.
    122 Ibid.
    123 UNAIDS, 2014a.

[^79]:    124 United Nations, 2015c.
    125 Eligible as defined in the 2010 WHO HIV treatment guidelines.
    126 UNAIDS, 2013.
    127 Ibid.
    128 UNAIDS, 2014b.
    129 Ibid.
    130 Oksuzyan and others, 2008; Collerton and others, 2009.

[^80]:    131 Oksuzyan and others, 2009; Christensen, 2008.
    132 WHO, 2014b.
    133 Ibid.

[^81]:    134 Varkey, 2004.
    135 WHO, 2013b.
    136 Smith and others, 2014.
    137 Salvi and Barnes, 2012.

[^82]:    138 WHO, 2014b.
    139 WHO, 2014m.
    140 IARC, 2014.
    141 Global Task Force on Expanded Access to Cancer Care and Control in Developing Countries, 2011.

[^83]:    142 Ferlay and others, 2013.
    143 McPherson and others, 2000.

[^84]:    144 IARC, 2014.

[^85]:    145 Center and others, 2012.

[^86]:    146 Barnes and others, 2011; Alzheimer's Association, 2014.
    147 Vieira and others, 2013.
    148 Alzheimer's Disease International, 2009; Prince and others, 2013.
    149 Alzheimer's Disease International, 2009.
    150 Alzheimer's Disease International, 2013a.

[^87]:    151 Ibid.
    152 United Nations, 2013a.
    153 Duthey, 2013.
    154 Alzheimer's Disease International, 2010.
    155 Alzheimer's Association, 2014.
    156 Alzheimer's Disease International, 2013b; Alzheimer's Association, 2014.

[^88]:    157 United Nations, 2013c.
    158 United Nations, 2013a.
    159 WHO and World Bank, 2011.
    160 WHO, 2014b.
    161 Ibid.
    162 Colombo, 2011.

[^89]:    1 United Nations General Assembly, Universal Declaration of Human Rights, 10 December 1948.
    2 United Nations, 1994.
    3 UNESCO, 2014.

[^90]:    4 UNESCO, 2010.

[^91]:    5 The gross enrolment ratio in pre-primary education is the total number of children enrolled at pre-primary level expressed as a percentage of population at the official age for pre-primary education. A high gross enrolment ratio generally indicates a high degree of participation, whether the pupils belong to the official age group or not. GER can exceed 100 per cent due to the inclusion of over-aged and under-aged students because of early or late entrants. A GER value approaching or exceeding 100 per cent indicates that a country is, in principle, able to accommodate all of its school-age population. However, this is a meaningful interpretation only if one can expect the underaged and over-aged enrolment to decline in the future to free places for pupils from the expected age group. The achievement of a GER of 100 per cent is therefore a necessary but not sufficient condition for assessing the attainment of universal access for the official age group.

[^92]:    6 Data based on UNESCO Institute for Statistics, 2014. Data shown in Statistical Annex. http://unstats.un.org/unsd/ gender/worldswomen.html.

[^93]:    7 The adjusted net enrolment rate is the percentage of children of official primary school age who are enrolled in either primary or secondary education. The indicator is commonly used to assess the level of achievement of the universal primary education goal and to measure the school participation of the official primary-school-age population.

[^94]:    8 See box 3.3.
    9 The gross enrolment ratio in primary education is the total number of children enrolled in primary education, expressed as a percentage of the official school-age population in a given year. The GPI of the GER in primary education is expressed as the ratio of the GER for girls to that for boys.
    10 Data based on UNESCO Institute for Statistics, 2014. Data shown in the Statistical Annex. http://unstats. un.org/unsd/gender/worldswomen.html.
    11 Ibid.

[^95]:    15 UNESCO, 2014a.

[^96]:    16 Data based on UNESCO Institute for Statistics, 2014. Data shown in the Statistical Annex. http://unstats. un.org/unsd/gender/worldswomen.html.

[^97]:    18 UNESCO Institute for Statistics, 2012.

[^98]:    19 Data based on UNESCO Institute for Statistics, 2014. Data shown in the Statistical Annex. http://unstats. un.org/unsd/gender/worldswomen.html.
    20 UNESCO and UNICEF, 2012.

[^99]:    21 Data based on UNESCO Institute for Statistics, 2014. Data shown in the Statistical Annex. http://unstats. un.org/unsd/gender/worldswomen.html.

[^100]:    22 The indicator is referenced to the earlier year as it is a percentage of the previous year's cohort but the transition actually takes place in the later year.

[^101]:    23 Data based on UNESCO Institute for Statistics, 2014. Data shown in the Statistical Annex. http://unstats. un.org/unsd/gender/worldswomen.html.
    24 Secondary education comprises lower secondary (ISCED 2), upper secondary (ISCED 3) or postsecondary nontertiary (ISCED 4).
    25 This is so partly because in some countries primary education is compulsory and freely provided by the State, while secondary education is not, especially in developing countries.

[^102]:    26 UNESCO Institute for Statistics, 2005.
    27 Data based on UNESCO Institute for Statistics, 2014. Data shown in the Statistical Annex. http://unstats. un.org/unsd/gender/worldswomen.html.

[^103]:    28 Usually between 12 and 15 years old.
    29 Typically, young adolescents are not enrolled in lower secondary school either because they have not completed primary school or could not make the transition to lower secondary school.
    30 Data based on UNESCO Institute for Statistics, 2014. Data shown in the Statistical Annex. http://unstats. un.org/unsd/gender/worldswomen.html.
    31 UNESCO, 2010.
    32 Data based on UNESCO Institute for Statistics, 2014. Data shown in the Statistical Annex. http://unstats. un.org/unsd/gender/worldswomen.html.

[^104]:    33 Ibid.
    34 The gross graduation ratio for lower secondary education is the number of graduates of lower secondary education, regardless of age, expressed as a percentage of the population at the theoretical graduation age for this level. The ratio can exceed 100 per cent because the number of graduates in the calculation includes children who are over-aged and under-aged relative to the theoretical graduation age.

[^105]:    35 Data based on UNESCO Institute for Statistics, 2014. Data shown in the Statistical Annex. http://unstats. un.org/unsd/gender/worldswomen.html.

[^106]:    38 The gross enrolment ratio in tertiary education is computed as the total enrolment in tertiary education, regardless of age, expressed as a percentage of a target population group consisting of the five-year age group following secondary school leaving. There are limitations when comparing the actual population coverage across countries due to the diversity in the duration of tertiary programmes, the enrolment of large numbers of women and men outside the target age group, and the high levels of drop outs and frequent re-enrolments.

[^107]:    39 Data based on UNESCO Institute for Statistics, 2014. Data shown in the Statistical Annex. http://unstats. un.org/unsd/gender/worldswomen.html.
    40 Ibid.
    41 Ibid.

[^108]:    43 UNESCO Institute for Statistics, 2014a.
    44 European Commission, 2013.
    45 Data based on UNESCO Institute for Statistics, 2014b. Data shown in the Statistical Annex. http://unstats. un.org/unsd/gender/worldswomen.html.

[^109]:    47 Data based on UNESCO Institute for Statistics, 2014b. Data shown in the Statistical Annex. http://unstats. un.org/unsd/gender/worldswomen.html.
    48 UNESCO Institute for Statistics, 2010.

[^110]:    49 Data based on UNESCO Institute for Statistics, 2014. Data shown in the Statistical Annex. http://unstats. un.org/unsd/gender/worldswomen.html.
    50 Ibid.

[^111]:    52 UNESCO defines literacy as the ability to read, write and understand a simple statement related to one's daily life. It involves a continuum of reading and writing skills, and often includes basic arithmetic skills or numeracy.

[^112]:    53 The adult literacy rate is the percentage of the population aged 15 and over who are literate.

[^113]:    54 Data based on UNESCO Institute for Statistics, 2014. Data shown in the Statistical Annex. http://unstats. un.org/unsd/gender/worldswomen.html.

[^114]:    55 Ibid.

[^115]:    57 Lopez-Carlos and Zahidi, 2005.
    58 OECD, 2013.

[^116]:    59 UNESCO Institute for Statistics, 2014a.
    60 Adult education may encompass formal and non-formal education and training, including: continuing education; recurrent education; equivalency or second chance education; professional development; literacy and postliteracy programmes; adult basic education; ICT training; religious, cultural and political education; technical, vocational and entrepreneurship education and training; income-generation programmes; and other programmes focusing on life skills, livelihoods and community development.

[^117]:    61 Because of the large variation in adult learning programmes and the lack of a common understanding about which categories of learning activities should be included, this section is limited to statistics on participation in adult education only for those countries that take part in the annual European Union Labour Force Survey and those that participated in UNESCO's Regional Project for Education in Latin America and the Caribbean (PRELAC).
    62 The European Union Labour Force Survey (LFS) provides annual results for the indicator "lifelong learning" (defined as the participation of people aged 25 to 64 in education and training) used for regular EU policy monitoring. The reference period for participation in education and training is the four weeks prior to the interview.

[^118]:    63 Data based on UNESCO Institute for Statistics, 2014c. Data shown in the Statistical Annex. http://unstats. un.org/unsd/gender/worldswomen.html.
    64 Gender parity is defined here as a share of between 45 and 55 per cent (inclusive) for each sex.
    65 Data based on UNESCO Institute for Statistics, 2014c. Data shown in the Statistical Annex. http://unstats. un.org/unsd/gender/worldswomen.html.

[^119]:    1 United Nations, 1995.

[^120]:    2 Labour force participation rate is calculated as the proportion of persons in the labour force-employed and unem-ployed-among working age population.
    3 ILO, Estimates and Projections of the Economically Active Population (EAPEP), 2013 edition (April 2014 update). Data for 2014 and 2015 for the global level are projections.

[^121]:    4 International Labour Office, 2014b, table 1a (accessed December 2014). The regional aggregates for labour force participation rates are averages weighted by the population in individual countries.

[^122]:    5 International Labour Office, 2008a.
    6 Chioda, Garcia-Verdú and Muñoz Boudet, 2011.

[^123]:    7 Cipollone, Patacchini and Vallanti, 2013.
    Kapsos, Silberman and Bourmpoula, 2014.
    China Ministry of Education, 2014; Du and Dong, 2013.
    Giles, Park and Cai, 2006.

[^124]:    11 International Labour Office, 2001; Council of Europe, 2012; OECD, 2013a.
    12 The effective age of retirement is defined as the average age of exit from the labour force during a five-year period. A more in-depth explanation can be found in OECD, 2013a.
    13 OECD, 2013a.
    14 Council of Europe, 2012.
    15 International Labour Office, 2014b, table 1a (accessed January 2015).
    16 Selwaness, 2009. The programme became fully functional in 1996.

[^125]:    17 Percentage of people in the labour force who are unemployed.

[^126]:    18 Analysis conducted by the United Nations Statistics Division based on the ILO, Estimates and Projections of the Economically Active Population (EAPEP), 2013 edition (April 2014 update).

[^127]:    19 International Labour Office, 2008a; International Labour Office, 2013a.
    20 International Labour Office, 2008a.
    21 Analysis conducted by the United Nations Statistics Division based on the ILO, Estimates and Projections of the Economically Active Population (EAPEP), 2013 edition (April 2014 update).
    22 A recent study has shown that the unemployment of both adult and youth has been affected by the economic and financial crisis, and youth in many countries have been affected disproportionally (O’Higgins, 2010).

[^128]:    - Adult female
    - Adult male
    - Youth female
    - Youth male

[^129]:    23 ILO, Estimates and Projections of the Economically Active Population (EAPEP), 2013 edition (April 2014 update).
    24 The 24 countries are in Eastern Asia (2), Latin America and the Caribbean (4), Northern Africa (2), Oceania (2), South-Eastern Asia (6), sub-Saharan Africa (2), the Caucasus and Central Asia (2) and Western Asia (4).

[^130]:    25 Globally in 2010, 83 per cent of domestic workers were women. ILO, 2013c.
    26 Country level data obtained from the International Labour Office, 2014b, table 2a (accessed August 2015).

[^131]:    Source: International Labour Office, 2014b. Key Indicators of the Labour Market, 8th edition, table 2a (accessed May 2014). Data limited to countries that have adopted the ISIC-4 classification.
    Note: The numbers in brackets indicate the number of countries with available data. The 24 developing countries are: in Caucasus and Central Asia (2), Eastern Asia (2), Latin America and the Caribbean (4), Northern Africa (2), Oceania (2), South-Eastern Asia (6), sub-Saharan Africa (2) and Western Asia (4).

    27 International Labour Office, 2010.
    28 United Nations, 2008.
    29 International Labour Office, 2013c.

[^132]:    32 ISCO-08 (and ISCO-88) major groups, ILO, 2008b and 1988.

    33 Regional aggregates compiled by the United Nations Statistics Division based on data from the International Labour Office, 2014b, tables 5a and 5b (accessed June 2014). Unweighted averages are used; only data based on ISCO08 and ISCO-88 classification are included. Countries that have data based only on ISCO-68 are not included in the analysis due to large differences between ISCO-68 and later classifications (ISCO-88 and ISCO-08). They include Bahrain, Chile, Colombia, Cuba and Japan.

[^133]:    35 Anker, 2005.

[^134]:    37 European Commission, 2009.
    38 International Labour Office, 2003; see also International Labour Office, 1993.
    39 United Nations, 2012.

[^135]:    40 ILO, Estimates and Projections of the Economically Active Population (EAPEP), 2013 edition (April 2014 update).

[^136]:    Source: ILO, Estimates and Projections of the Economically Active Population (EAPEP), 2013 edition (April 2014 update).
    Note: Other developed regions include countries in Northern and Western Europe, as well as Australia, Canada, Japan, New Zealand, and the United States. 2015 figures are projections.

[^137]:    41 Informal employment comprises the total number of informal jobs whether carried out in formal sector enterprises, informal sector enterprises or households. Categories of informal employment are defined jointly by the type of production unit, status in employment, and access to social protection (Hussmanns, 2004).
    42 Chant and Pedwell, 2008; Vanek and others, 2014.
    43 International Labour Office, 2014b, Manuscript for Table 8; International Labour Office, 2013d.

[^138]:    44 International Labour Office, 2013c.
    45 Hussmanns, 2004.

[^139]:    46 Vanek and others, 2014.
    47 Compiled by the United Nations Statistics Division based on data from the Republic of Moldova, National Bureau of Statistics, 2009 (accessed May 2014).
    48 Raveendran, 2015.
    49 There is no official ILO definition of full-time work in terms of the demarcation point between full-time and part-time. Data from OECD are harmonised based on common definition of part time employment, which is based on a common 30 -usual-hour cut-off in the main job. Hakim, 2004, chapter 3; Thévenon, O., 2013.
    51 International Labour Office, 2014b. Manuscript for Table 6.

[^140]:    52 OECD, 2010.
    53 Vanek and others, 2014. The other main categories of non-standard work include (a) own account self-employment, and (b) temporary or fixed-term work.
    54 Available at http://unstats.un.org/unsd/gender/worldswomen.html.
    55 Ibid.

[^141]:    56 Trends in part-time employment are compiled based from data from the OECD, 2014a, Labour market statistics: full-time part-time employment - common definition: incidence. OECD Employment and Labour Market Statistics (database). Data are harmonized based on a common definition of part-time employment, which is based on a common 30 -usual-hour per week cut-off in the main job.
    57 These are cases where the proportions employed and working part-time increased by more than 10 percentage points between 1995 and 2012 (between 1996 and 2012 in the case of Chile).

[^142]:    58 Three criteria are used to define time-related underemployment. The term refers to employed individuals who, in a short reference period, wanted to work additional hours, worked less than a certain hourly threshold set at the national level, and who were available to work additional hours in a subsequent reference period. International Labour Office, 1998; International Labour Office, 2013b.

[^143]:    59 Blau and Kahn, 2007; European Commission, 2014; Goldin, 2014.
    60 These figures do not cover women and men working in the public sector-that is, national and local government agencies. Including workers in the public sector will change the magnitude of the gender pay gap for some countries. An earlier study based on the 2006 Structure of Earning Survey data showed that pay gaps are smaller among all countries for people working in the public sector than those working in the private sector. The only exception is Bulgaria, where the gender pay gap is slightly smaller for those in the private sector. Source: European Union, 2010.

[^144]:    61 Compiled by United Nations Statistics Division based on data from OECD, 2014b, Median income of women and men, full-time workers only. www.oecd.org/els/emp/onlineoecdemploymentdatabase.htm\#earndisp (accessed December 2014).

[^145]:    62 When controlling for a number of personal characteristics such as years of employment, marital status, household structure, place of residence and cognitive skills, the return of education in earnings could be higher for women than for men (Dougherty, 2005).
    63 Large differences in earnings by field of study have been observed and there was some tendency for the highestpaying fields of study to be associated with programmes that had high proportions of male graduates and for the lower-paying fields of study to be associated with programmes that had high proportions of women in countries with available data (OECD, 2013b).
    64 A study, which surveyed graduates from the University of Michigan Law School classes of 1972-1975, found a small difference in earnings between female and male graduates at the outset of their careers, but a 40 per cent difference in favour of men 15 years after graduation. The difference remained after controlling for the number of hours worked for both women and men. The same result was reached by a more recent study in 1982-1991. Another study on Master's of Business Administration (MBA) graduates from the University of Chicago Booth School from 1990-2006 produced similar results (Goldin, 2014).

[^146]:    65 European Union, 2010, personal and job characteristics explain only 50 per cent of the total gender pay gap; Nopo, Daza and Ramos, 2011, personal and job characteristics explain partially the total gender pay gap, based on studies of 35 countries, from developing and developed regions.

[^147]:    66 An analysis of 2006-2008 data for the United States on earnings for women and men in the 87 highest-paid occupations showed that the gender pay gap is the highest for occupations such as physicians and surgeons, dentists, personal financial managers, and lawyers and judges. Lower gender pay gaps were found in health-care occupations such as pharmacists, optometrist and veterinarians (Goldin and Katz, 2011).
    67 The System of National Accounts production boundary includes (1) the production of goods and services destined for the market, whether for sale or barter, (2) all goods and services provided free to individual households or collectively to the community by government units or nonprofit institutions serving households, and (3) the production of goods for own use. All production of services for own final consumption within households-that is, domestic and personal services produced and consumed by members of the same household, are excluded.

[^148]:    68 Based on analysis of 10 developing countries and 25 developed countries where data for different categories of unpaid work are available. Developing countries include Algeria, Armenia, Iraq, Kazakhstan, Lao People's Democratic Republic, Pakistan, Republic of Korea, South Africa, Turkey and Uruguay. Developed countries include Albania, Australia, Austria, Belgium, Bulgaria, Canada, Denmark, Estonia, Finland, France, Greece, Hungary, Italy, Netherlands, New Zealand, Norway, Republic of Moldova, Romania, Serbia, Spain, Sweden, Switzerland, the former Yugoslav Republic of Macedonia, the United Kingdom and the United States. Compiled by the United Nations Statistics Division based on country-level data from EUROSTAT (2011), OECD (2014c), UNECE (2014), UNECLAC (2014), and national statistics offices (as of June 2015).

[^149]:    69 Data compiled based on Egge-Hoveid and Sandnes, 2013.

    70 Hamermesh, 2005; Kimberly and others, 2007.
    71 Bianchi, Wight and Raley, 2005.
    72 Gauthier, Smeedeng and Furstenberg, 2004.
    73 Miranda, 2011.

[^150]:    74 Gálvez-Muñoz, Rodríguez-Modroño and DomínguezSerrano, 2011; Kan, Sullivan and Gershuny, 2011.

[^151]:    75 International Labour Office, 2000.

[^152]:    77 Huerta and others, 2013.

[^153]:    78 Calculated by United Nations Statistics Division based on data from International Labour Office, 2014c.

[^154]:    1 United Nations, 1946.
    2 This right was reiterated in the Article 25 of the International Covenant on Civil and Political Rights adopted by General Assembly resolution 2200 (XXI) of 16 December 1966. United Nations, 1966.

    3 IPU, 2008.
    4 In Saudi Arabia, while women and men have the right to vote, women are yet to vote in an election. In Brunei Darussalam, women and men have limited voting rights. In the United Arab Emirates (UAE) there is limited suffrage as the Parliament is indirectly elected. UN Women, 2015.
    5 Out of 191 countries with parliaments, 115 have unicameral parliaments and 76 countries have bicameral parliaments (which include a lower chamber and an upper house or senate). As at 1 January 2015, there was no parliament in Brunei Darussalam, the Central African Republic and Egypt. IPU and UN Women, 2015.

[^155]:    6 As at January of corresponding year. United Nations, 2015c.
    7 IPU, 2011a.
    8 United Nations, 1990.
    9 United Nations, 1995a.

[^156]:    10 International IDEA (International Institute for Democracy and Electoral Assistance), IPU and Stockholm University, 2013.

[^157]:    11 Ibid.
    12 Kenya, Mauritania and Rwanda have quota systems that include both reserved seats and legislated candidate quotas within one level/house of parliament. A number of women are elected through the system of reserved seats, while another set are elected through a legislated candidate quota. Algeria and Iraq use unique quota systems, which combine features of legislated candidate quotas and reserved seats. The weighted average of the proportions of seats held by women in the five countries with both reserved seats and legislated candidate quotas is 29 per cent (not shown in figure 5.2). Additionally, in Georgia, the legislation on political parties sets a gender quota of 30 per cent in every 10 candidates on the list, and provides for financial incentives to those parties which comply with this requirement. No sanctions are provided for parties which decide not to comply with these requirements. Due to the non-mandatory nature of these rules, Georgia is not classified as a country with legislated candidate quotas. International IDEA, IPU and Stockholm University, 2013.
    13 At least one party in each country.

[^158]:    14 IPU, 2014.
    15 International IDEA, IPU and Stockholm University, 2013.
    16 IPU, 2014.

[^159]:    7 International IDEA, IPU and Stockholm University, 2013. IPU, 2010; IPU, 2011b; IPU, 2011c; IPU 2013; IPU, 2014. United Nations, 2015a.
    International IDEA, IPU and Stockholm University, 2013.
    21 Most electoral systems can be classified as: "majority electoral system" (requiring that candidates achieve a majority of votes in order to win. "Majority" is normally defined as 50 per cent-plus-one-vote) and "proportional representation" (the overall votes of a party are translated into a corresponding proportion of seats in an elected body - a party that wins 30 per cent of the votes will receive approximately 30 per cent of the seats). International IDEA, IPU and Stockholm University, 2013.

[^160]:    22 International IDEA, IPU and Stockholm University, 2013. 23 Ibid.
    24 As at April 2014.
    25 Major political parties are those with at least 5 per cent of seats in the national parliament (either the upper or lower houses in case of a bicameral system).
    26 European Commission, 2015a (database accessed 11 March 2015).

[^161]:    27 International IDEA and IDB, 2011.
    28 Ibid.
    29 Weighted average calculated by the United Nations Statistics Division based on IPU, PARLINE database on national parliaments, www.ipu.org/parline-e/parlinesearch. asp (accessed 25 March 2015). Data for Andorra, Canada, Cyprus, Estonia, Ireland and the Lao People's Democratic Republic obtained from the IPU, 2011c. Data for Armenia, Gambia and Lesotho obtained from IPU, 2013.

[^162]:    World Values Survey, 2015 (accessed 19 March 2015).
    Goldsmiths University of London, 2013; Guardian (The), 11 July 2013.
    United Nations, 2014c.
    34 Answers have been aggregated for the categories "agree strongly" and "agree" based on the World Values Survey, 2015.

    35 In some countries conducting World Values Surveys, the proportion of respondents who disagree with the statement: "on the whole, men make better political leaders than women do" increased since the mid-1990s. United Nations, 2014c.
    6 UN Women and International IDEA, 2011
    7 IPU, 2011b.

[^163]:    42 Calculated by the United Nations Statistics Division based on IPU and UN Women, 2015.
    43 United Nations, 1995b.
    44 United Nations, 2000a.

[^164]:    45 IPU and UN Women, 2015.
    46 UNECE, 2015 (database accessed 20 March 2015).

[^165]:    47 Senior-level civil servants are defined according to ISCO 1120: senior government officials (e.g. government administrators, administrators at intergovernmental organisations, ambassadors, consul-general, etc.).
    48 UNECE, 2015 (database accessed 20 March 2015).

[^166]:    49 United Nations Statistics Division (database accessed 20 March 2015).
    50 Compiled by the United Nations Statistics Division from the database on women and men in decision-making,

[^167]:    54193 United Nations Member States plus State of Palestine. United Nations, 2015d.
    55 United Nations, 2015b (website accessed 20 March 2015).
    56 UNODC, 2015. Crime and criminal justice statistics, http://www.unodc.org/unodc/en/data-and-analysis/ statistics/crime.html. Accessed 16 April 2015.
    57 European Commission, 2015a (database accessed 11 March 2015) and UNECLAC, 2015 (website accessed 20 March 2015).

[^168]:    58 European Commission, 2015a (database accessed 11 March 2015).
    59 Compiled by the United Nations Statistics Division from the database on women and men in decision-making, European Commission, 2015a; and official websites from national Supreme Courts (accessed in August 2015).
    60 UNECLAC, 2015 (website accessed 20 March 2015).

[^169]:    61 UNESCAP and LOGOTRI, 2001.
    62 UN Millennium Project, 2005; Chattopadhyay and Duflo, 2004.
    63 Data comparability across countries may be limited by some variations in local government structures and tiers of subnational governments taken into account.
    64 European Commission, 2015a.
    65 Demofonti, 2012.

[^170]:    66 Center for American Women and Politics, Eagleton Institute of Politics, Rutgers, The State University of New Jersey (accessed 20 March 2015).
    67 European Commission, 2015a (accessed 11 March 2015).
    68 Analysis based on 26 developing countries and 3 developed countries. UNDP, 2014.
    69 Local government includes all tiers of government below the national level. The representation of women in local government is calculated as an average of shares of women across all tiers of the subnational government.

[^171]:    70 UNESCWA, 2015.
    71 United Nations, 1995a.

[^172]:    72 The study included 120 films "roughly equivalent" to a Motion Picture Association of America rating of G, PG, or PG-13. Films were originally from Australia, Brazil, China, France, Germany, India, Japan, Republic of Korea, Russian Federation, United Kingdom and the United States. Smith, Choueiti and Pieper, 2014.
    73 Additional studies have reached to similar results. For example, Lauzen, M. Martha (2015). It's a Man's (Celluloid) World: On-Screen Representations of Female Characters in the Top 100 Films of 2014. http://womenintvfilm.sdsu.edu/files/2014 (accessed 10 March 2015); New York Film Academy. Gender inequality in film. Blog. www.nyfa.edu/film-school-blog/gender-inequal-ity-in-film/ (accessed 29 June 2014).
    74 Smith, Choueiti and Pieper, 2014.

[^173]:    75 OpEd Project (The), 2012.
    76 Gender Report: A Closer Look at Gender and Online News, 2013 (accessed 29 June 2014).
    77 Guardian (The), 23 October 2012 (accessed 29 June 2014) and Women's media center, 2014 (accessed 29 June 2014).
    78 International Women's Media Foundation, 2011.
    79 Ibid.

[^174]:    80 European Commission, 2015a (database accessed 11 March 2015).
    81 According to the source, part-time regular persons are those who work less than full time and are on the regular, continuing payroll of the organization; part-time contract persons are those who work part time on a fixed-term contract arrangement. International Women's Media Foundation, 2011.
    82 Catalyst, 2014b; European Commission, 2012.
    83 McKinsey \& Company, November 2013.
    84 World Values Survey (accessed 19 March 2015).

[^175]:    86 Catalyst is a nonprofit organization and has the mission to expand opportunities for women and business. http:// www.catalyst.org/who-we-are (accessed April 2015).
    87 Catalyst, 2014a (accessed 23 March 2015).
    88 Credit Suisse AG Research Institute, 2012.

[^176]:    96 The 500 major companies in the world are ranked based on their revenues for their respective fiscal years ending on or before the indicated year in the Global 500 list. Compiled by the United Nations Statistics Division from Fortune, 2014 (accessed 8 October 2014).
    97 Data cover senior executives and non-executive directors in the two highest decision-making bodies in each company, which are usually referred to as the supervisory board and the management board (in case of a twotier governance system) and the board of directors and executive/management committee (in a unitary system. European Commission, 2015a.

[^177]:    1 United Nations General Assembly, 1993.

[^178]:    2 Ibid.
    3 Ibid.
    4 United Nations, 2006a.

[^179]:    5 Ibid.
    6 WHO, 2013a.
    7 Ibid.
    UNODC, 2013.
    9 Ibid.
    10 For example, a study in the United Kingdom examined the cost categories of justice, health care, social services, housing, legal services, lost output, and pain and suffering. The study estimated the cost of domestic violence in England and Wales alone to be US\$25 billion per year. Walby, 2009.
    World Bank, 2014.
    United Nations General Assembly, 1993.
    3 United Nations, 1995.

[^180]:    14 See Statistical Annex available at http://unstats.un.org/ unsd/gender/worldswomen.html.

[^181]:    15 End Violence Against Women Now, 2014.
    WHO, 2013a.
    UNDP, UNFPA, UN Women and UNV, 2013.

[^182]:    18 Available at http://unstats.un.org/unsd/gender/worldswomen.html.

[^183]:    21 The Convention on the Rights of the Child (Article 1) defines a "child" as a person below the age of 18 . However, surveys on violence against children have covered different age ranges. There is no international consensus on the methodology for collecting data on this sensitive issue, including on the target population.

[^184]:    22 UNICEF, 2014a.

[^185]:    23 Ibid.
    24 Ibid.
    25 Ibid.
    26 UNICEF, 2014b.

[^186]:    27 Ibid.
    UNICEF, 2014a.
    Refers to those less than 18 years of age.
    UNICEF, 2014a.
    31 Statistical Annex, available at http://unstats.un.org/ unsd/gender/worldswomen.html.
    UNICEF, 2014a.
    33 White House Task Force to Protect Students from Sexual Assault, 2014; Journal of American College Health, 2009; Krebs and others, 2007.

[^187]:    37 UNFPA, UNICEF, UN-Women, ILO and OSRSG/VAC, May 2013.
    38 Statistics Canada, 2013. Measuring Violence Against Women: Statistical Trends 2013.
    39 UNFPA, UNICEF, UN-Women, ILO and OSRSG/VAC, 2013.

[^188]:    Source: European Union Agency for Fundamental Rights, Violence against Women: An EUwide Survey, 2014.
    a ISTAT, 2006.
    b Fiji Women's Crisis Centre, 2013.
    c Haut-Commisariat au Plan, 2009.

[^189]:    40 WHO, 2005.

[^190]:    42 ICF International, 2014.
    43 It should be noted that one of the methodological issues related to surveys on violence against women is that, after awareness campaigns, for example, women may find it easier to talk about their experiences. Therefore, disclosure of violence may be higher in a subsequent survey even though the level of violence may not have increased.
    44 In general, it can be seen that the differences between lifetime experience of intimate partner physical and/or sexual violence and experience in the last 12 months are wider for results from the EU FRA survey than for DHS. This may be due to a number of reasons and further research into this is needed, however contributing factors may be the wider age reference period for the EU FRA survey as compared to DHS (18 to 74 years compared to 15 to 49 years) and also a reflection of the possibility to stop the violence or leave a violent relationship. Higher levels of current (in the last 12 months) violence in developing countries is a common finding and can be expected if women cannot leave the relationship.

[^191]:    45 United Nations, 2013a.
    46 It should be noted that the figures reported by DHS refer to the emotional aspect of psychological violence only and do not include the experience of controlling behaviour.

[^192]:    47 United Nations, 2013a.
    48 Instituto Nacional de Estadística y Geografía, 2011.

[^193]:    49 Viet Nam General Statistics Office, 2010.
    50 ICF International, 2014.
    51 Fiji Women's Crisis Centre, 2013.

[^194]:    52 United Nations, 2010.
    53 WHO, 2005; Promundo, International Center for Research on Women, 2012.
    54 Statistical Annex, available at http://unstats.un.org/ unsd/gender/worldswomen.html.

[^195]:    55 UNICEF, 2013.
    56 Ibid.

[^196]:    57 Statistical Annex, available at http://unstats.un.org/ unsd/gender/worldswomen.html.
    58 UNICEF, 2013.

[^197]:    59 Based on data compiled by the United Nations Statistics Division from Demographic and Health Surveys.

[^198]:    60 United Nations, 2014.
    61 Promundo, International Center for Research on Women, 2012.
    62 United Nations, 2014.

[^199]:    64 UNODC, 2014.
    65 Ibid . At present, there is no sound estimate of the number of victims of trafficking in persons worldwide. These gender breakdowns are based on the numbers of detected victims of trafficking as reported by national authorities. These official figures represent only the visible part of the trafficking phenomenon and the actual figures are likely to be much higher.
    66 Ibid.
    67 Ibid.

[^200]:    71 Gauthier and Laberge, 2000;Kelly, Lovett and Regan,

    2005; Fugate and others, 2005.

[^201]:    68 ICF International, 2014.
    69 Ibid.
    70 UNODC, 2015.

[^202]:    72 OECD, 2015; Minimum Set of Gender indicators, 2014.
    73 UN Women, 2011/2012.
    74 Ibid.
    75 Ibid.
    76 Lovett and Kelly, 2009.

[^203]:    a Secretariat of the Pacific Community, 2010.

[^204]:    1 United Nations, 1995.
    2 Other aspects of the environment that may have a different impact on the lives of women and men could not be analysed due to lack of data (see box 7.1).

[^205]:    3 United Nations, 2012.

[^206]:    8 UNICEF and WHO, 2015.
    UNICEF and WHO, 2012.
    UNICEF and WHO, 2011.
    Ibid.
    12 Unweighted averages calculated by the United Nations Statistics Division based on data for 36 countries provided by the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation, 2014a. Data refer to the latest available in the interval 2005-2013.

[^207]:    18 Geldsetzer and others, 2014; Khera and others, 2015.
    19 Malhotra and Upadhyay, 2013.
    Kanamori and Pullum, 2013.
    UNICEF and WHO, 2015.

[^208]:    22 Unweighted averages calculated by the United Nations Statistics Division based on data prepared by the WHO/ UNICEF Joint Monitoring Programme for Water Supply and Sanitation, 2014a.
    23 WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation, 2014a.

[^209]:    24 Unweighted averages calculated by the United Nations Statistics Division based on data for 66 developing countries provided by the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation, 2014b.
    25 Ghana Statistical Service, 2012.

[^210]:    26 National Institute of Statistics of Rwanda, DFID and UN Rwanda, 2012.
    27 Budlender and others, 2010.
    28 International Energy Agency, 2014.
    29 Köhlin and others, 2011.

[^211]:    30 Sustainable Energy for All Initiative, 2013.
    31 Ibid.

[^212]:    33 Data based on ICF International, DHS Program STAT Compiler, www.statcompiler.com/ (accessed March 2015). Data shown in Statistical Annex, http://unstats. un.org/unsd/gender/worldswomen.html.
    WHO, 2006.
    Ibid.
    Bonjour and others, 2013.

[^213]:    37 WHO, 2014a. This figure is much higher than previous estimates, primarily due to the inclusion of new diseases, such as cardiovascular diseases.
    38 Globally, 7 million deaths were attributable to the joint effects of household (HAP) and ambient air pollution (AAP) in 2012 (WHO, 2014a).
    39 WHO, 2014a.
    40 Ezzati and Kammen, 2002.
    41 See for example Dasgupta and others, 2006.
    42 WHO, 2014a.

[^214]:    43 United Nations Environment Programme, 2012.
    44 Intergovernmental Panel on Climate Change, 2014.

[^215]:    49 Computed by the United Nations Statistics Division based on data from the Centre for Research on the Epidemiology of Disasters (CRED) and Université Catholique de Louvain, 2015.
    50 Myanmar Government, Association of Southeast Asian Nations and United Nations, 2008.
    Sri Lanka Department of Census and Statistics, 2005.
    Oxfam International, 2005.
    Frankenberg and others, 2011.
    Oxfam International, 2005.

[^216]:    55 Frankenberg and others, 2011.
    56 Ibid.
    57 Iwate, Miyagi and Fukushima prefectures.
    58 Government of Japan, 2012.

[^217]:    59 USA National Weather Service, 2015.
    60 Myung and Jang, 2011.
    61 Eklund and Tellier, 2012.
    62 Åström, Forsberg and Rocklöv, 2011.
    63 Articles published in English in PubMed between 2008 and 2010.
    64 Åström, Forsberg and Rocklöv, 2011.

[^218]:    70 Ajibade, McBean and Bezner-Kerr, 2013
    Frankenberg and others, 2013.
    Venn, 2012.
    Ibid.

[^219]:    74 Government of Japan, 2012.
    75 Castro García and Reyes Zúñiga, 2009.
    76 United Nations Economic and Social Council, 2013.
    77 United Nations Economic and Social Council, 2013. Projects designed to advance gender equality include humanitarian aid projects coded 2 a (the project has the potential to contribute significantly to gender equality) and 2 b (projects with the principal purpose of advancing gender equality) on the gender marker scale.
    78 United Nations Office for the Coordination of Humanitarian Affairs, 2014.

[^220]:    79 Government of Japan, 2012.
    80 Ariyabandu, 2009.
    81 UNDP and UNISDR AM, 2013.

[^221]:    82 United Nations, 2015.
    83 Ibid.
    84 Intergovernmental Panel on Climate Change, 2014.
    85 United Nations, 2015.
    86 United Nations, 1995.

[^222]:    87 Data on 31 countries based on the ISSP Research Group, 2012. Data shown in Statistical Annex, http://unstats. un.org/unsd/gender/worldswomen.html.
    88 Unweighted averages computed by United Nations Statistics Division based on data from the ISSP Research Group: International Social Survey Programme.
    89 Data for 31 countries based on the ISSP Research Group, 2012. Data shown in Statistical Annex, http://unstats. un.org/unsd/gender/worldswomen.html.
    90 Ibid.

[^223]:    91 Ibid.
    92 Data based on the ISSP Research Group, 2012. Data shown in Statistical Annex, http://unstats.un.org/unsd/ gender/worldswomen.html.
    93 See, for example, Mairena and others, 2012.
    94 Agarwal, 2001.

[^224]:    95 Ibid.
    96 Agarwal, 2001; Agarwal, 2009a; Agarwal, 2009b; Agrawal and others, 2006; Agrawal and Chhatre, 2006.
    97 Mwangi, Meinzen-Dick and Sun, 2011.
    98 The study was developed under the framework of the Poverty Environment Network, a project of the Center for International Forestry Research.
    99 Sunderland and others, 2014.
    100 Reed, 2010.

[^225]:    101 The survey covered 83 member countries of the World Meteorological Organization (WMO) (43 per cent of all WMO member countries).
    102 World Meteorological Organization, 2013.

[^226]:    103 European Commission, 2015.
    104 Members of the government who have a seat on the cabinet or council of ministers.
    105 Members of the government who do not have a seat on the cabinet.

[^227]:    106 The United Nations Framework Convention on Climate Change is an international treaty that provides a framework for the 195 parties to work together to consider what can be done to limit average global temperature increases resulting in climate change and to cope with its impact.
    107 United Nations Framework Convention on Climate Change, 2014.
    108 Ibid.

[^228]:    1 United Nations, 2012, para 2

[^229]:    2 The $\$ 1.25$ a day poverty line is at 2005 purchasing power parity (PPP) prices, and represents the average of the national poverty lines of the 15 poorest developing countries in the same year.
    3 United Nations, 2015b.
    Ibid.
    5 TheWorldBankandthe InternationalMonetaryFund, 2015.
    6 The poverty rate (or poverty incidence or headcount index) is the proportion of the population living in households with income or consumption expenditures below the poverty line. A poverty line may be internationally defined in terms of a single global standard, such as that set by the World Bank of $\$ 1.25$ per day for extreme poverty, or it may be country-specific. It also may refer to an absolute or a relative standard.

[^230]:    7 Data compiled by the United Nations Statistics Division (as at April 2014). Data shown in the Statistical Annex available at http://unstats.un.org/unsd/gender/worldswomen.html.
    8 There are no significant differences in the living arrangement of girls and boys (younger than 15), as shown in Chapter 1 on Population and families. Therefore, the child poverty rates (without taking into account intrahousehold inequality) are similar between the two sexes. However, more boys than girls are found among the poor because there are more boys than girls in that age group of population.
    9 Brady and Kall, 2008.

[^231]:    Source: Economic Commission for Latin America and the Caribbean (ECLAC), CEPALSTAT, 2014. Estadisticas e indicadores sociales (accessed July 2014).
    Note: Data based on national poverty lines. Data presented for 17 countries.

[^232]:    10 ECLAC, 2014.
    11 United Nations, 2014a.
    12 See Chapter 1 on Population and families.
    13 See for example James and others, 2008; Arza, 2012; United Nations, 2013; UN Women, 2015.
    14 Data available for 11 countries only. In the other 19 countries included in the comparison, the number of lone fathers living with children is too small to allow for the calculation of reliable poverty rates.

[^233]:    15 See, for example, Kodras and Jones, 1991.
    16 UN Women, 2015.
    17 Ibid.
    18 Börsch-Supan and others (eds.), 2011.
    19 United Nations, 2014a.
    20 Luxembourg Income Study, 2014.

[^234]:    22 EUROSTAT, Income and Living Conditions database online (2014a).
    23 See for example Gornick and Jantti, 2010.
    24 Vartanian and McNamara, 2002.
    25 See for example Arza, 2012; ILO, 2014; UN Women, 2015.

[^235]:    26 Vlachantoni, 2012.
    27 James and others, 2008.

[^236]:    28 Data compiled by the United Nations Statistics Division for this report. Data are based on poverty lines of 60 per cent of equivalized median income in European countries and national poverty lines in the rest of countries.
    29 World Bank, 2013.
    30 UN Women, 2015. The results are based on a householdlevel wealth asset index and data from Demographic and Health Surveys and Multiple Indicator Cluster Surveys. While this analysis fills in some of the existing data gaps and shows a link between gender and poverty, it is, however, a scholarly solution to a statistical capacity problem in developing countries. More efforts at international and national levels are needed to promote a better utilization, from a gender perspective, of existing monetary poverty data and the development of poverty measures that adequately capture the gender gap (see box 8.1 and box 8.2). Wealth indices have limitations when utilized as measures of poverty, particularly when envisioned as tools for monitoring changes over time. From a gender perspective, the measurement of wealth indeces is subject to the challenges inherent in the use of household-level data. In addition, more clarity is needed with regard to what types of poor are identified based on the method and what are the direct implications for policymaking. Such indices also discriminate poorly at the lower end of the wealth scale. Hartgen and other, 2013; Booysen and others, 2008.

[^237]:    31 Analysis based on CEDLAS and the World Bank, July 2014. Only countries with more than five data points over time and similar methodology in measuring pov-

[^238]:    erty were included in the analysis, based on metadata information from CEDLAS and the World Bank, 2012. 32 Less than 2 percentage points.
    33 CEDLAS and the World Bank, Socio-Economic Database for Latin America and the Caribbean (SEDLAC) (July 2014).

[^239]:    34 Statistics Canada, 2014. Analysis based on data on lowincome cut-offs after tax, 1992 base. Data shown in the Statistical Annex available at http://unstats.un.org/ unsd/gender/worldswomen.html.

[^240]:    36 Unweighted averages calculated by United Nations Statistics Division based on data from ICF International, Demographic and Health Survey (DHS) Programme database (2014) for 50 developing countries (latest available within the 2005-2012 time period).
    37 Data based on ICF International, 2014. Data shown in the Statistical Annex, http://unstats.un.org/unsd/gender/worldswomen.html.

[^241]:    38 Unweighted averages based on data on 51 countries from ICF International, 2014. Data shown in the Statistical Annex, http://unstats.un.org/unsd/gender/worldswomen.html.

[^242]:    39 Unweighted averages calculated by United Nations Statistics Division based on data from ICF International, 2014.

    40 Eurostat, 2014b.

[^243]:    42 Ibid.
    43 Ibid.
    44 Ibid.

[^244]:    Source: World Bank and the International Finance Corporation, 2014. "Time series" in Women, Business and the Law, 2012. Removing Barriers to Economic Inclusion (accessed May 2014). Note: Assessment based on 80 developing countries.

[^245]:    46 World Bank and the IFC, 2014.
    47 Hallward-Driemeier, Hasan and Rusu, 2013.
    48 Ibid.

[^246]:    49 Ibid.
    50 Doss and others, 2011.

