It is with great pleasure to address this High Level Forum of distinguished representatives of the international statistical community and from academia. I am most honoured to do so and would like to thank the member organizations of the Inter-Secretariat Working Group on National Accounts for this opportunity.

User perspective

I would like to share with you my thoughts about the role of the System of National Accounts from a user perspective. I am an intensive user myself of both macroeconomic and microeconomic data. Macroeconomic data are of particular importance, for instance, for our work at the UN in preparing our analysis of World Economic Situation and Prospects (WESP). These data feed into our global modelling systems that we use to make short-term forecasts of global trends and study the related policy challenges. With the data we have we have been able to come up with fairly accurate forecasts in recent years and we were also able to detect early on the unsustainable trends in the pattern of global economic growth and in financial markets that have been part of the main causes underlying the global financial crisis that we are facing today. In our analysis, this is the story of a crisis foretold.

1 See e.g. United Nations, World Economic Situation and Prospects, 2006, 2007 and 2008 and mid-year updates for continuous analyses of the link between the problem of the global imbalances, the US housing
In brief, the story runs as follows. The growth pattern that had emerged from the early 2000s came with high risks. Growth was driven to an important extent by strong consumer demand in the United States, stimulated by easy credit and underpinned by booming house prices, and by very high rates of investment demand and strong export growth in some developing countries, notably China. Growing US deficits in this period were financed by increasing trade surpluses in China, Japan and other countries accumulating large foreign-exchange reserves and willing to buy dollar-denominated assets. At the same time, increasing financial deregulation, along with a flurry of new financial instruments and risk management techniques (mortgage backed securities, collateralized debt obligations, credit default swaps, and so on), encouraged a massive accumulation of financial assets supported by growing levels of debt in the household, corporate and public sectors. In some countries, both developed and developing, domestic financial debt has risen four or five fold as a share of national income since the early 1980s. This rapid explosion in debt was made possible by the shift from a traditional ‘buy-and-hold’ banking model to a ‘dynamic-originate-to-sell’ trading model (or “securitization”). Leverage ratios of some institutions went up to as high as 30, well above the ceiling of 10 generally imposed on depositor-banks. The de-leveraging of this financial house of cards now under way has brought down established financial institutions and led to the rapid evaporation of global liquidity that together threaten the normal operations of the real economy.

Until recently, all parties seemed to benefit from the boom, particularly the major financial players in the rich economies, while the risks were conveniently ignored, despite repeated warnings – among others through our reports - that mounting household, public sector and financial sector indebtedness in the United States and elsewhere would not be sustainable over time. As strains in the US mortgage market were transmitted to the wider financial sector, fears of a meltdown escalated and have now spread around the world.

boom and mounting financial sector problems as well as for critique of the ‘decoupling hypothesis’ discussed further below. The reports can be accessed through http://www.un.org/esa/policy.
This past weekend, the leaders of the G-20, plus a few more, met to discuss some (but certainly not all) of the far-reaching reforms that will be needed to take us out of this crisis and to prevent it from happening again. The proposed reform of financial regulation and supervision, for one, will pose new and challenging demands on the kind of data we gather and how we present these. Improved data systems by themselves, of course, do not give us better policies, neither are they a sufficient condition for preventing financial crises from happening again: also after the Asian crisis some lessons were drawn for improved data reporting that could serve as early warning systems. Clearly, the improved data systems did not make all observers to see the same things and not all saw a crisis mounting. Some believed, for instance, that the financial turmoil had peaked after the fall of Bear Stearns early this year and that quick recovery would be possible. Also, many believed, including many here in Washington, that emerging markets would be insulated from the financial woes in the United States on the assumption that some kind of decoupling would have taken place as the dynamics of growth in developing countries would have become more detached from the business cycle in developed countries. This belief, as it has turned out, was wrong headed and has led to a gross underestimation of the global consequences of the crisis up unto the moment that the crisis had already arrived.

This is not to say that trying to improve our statistics does not matter. It matters a great deal. The more we have, the better; and the better statistics we have fitted to today’s reality, the more we can understand.

Let me address some of the challenges ahead, especially in regard of measuring our increasingly integrated global economy.

**SNA as international statistical standard**

Let me start by saying that I think that it is safe to argue that the System of National Accounts has evolved into the single, internationally recognized statistical standard for macroeconomic data. The System serves as the overarching standard to which other standards have harmonized their fundamentals. This in itself is a major achievement of the statistical community. We have achieved much greater alignment of the national accounts with monetary and financial statistics produced by financial regulators and
central banks, with government finance statistics, with international trade and balance-of-payments statistics, with data on international investment positions and with business statistics; to name just a few areas. But much more is needed to meet today’s challenges.

**The timing of this High Level Forum**

This meeting is timely for several reasons. First, it marks the release of the System of National Accounts 2008 after many years of collaborative efforts of the statistical community. I understand that Volume 1 already has been endorsed by the Statistical Commission as the new international statistical standard during its thirty-ninth session in 2008 and Volume 2 is expected to be endorsed in its upcoming fortieth session this coming February. Second, the release of the 2008 SNA should be viewed against the backdrop of this global financial crisis which will have severe consequences for the real economy.

In this light, I would therefore like to reflect on the suitability of the update of the System to provide timely and reliable statistics to meet the challenges of today amidst the raging global financial crisis and a world economy in recession. In keeping with the theme of this High Level Forum, I like to share my ideas for the research agenda for the System of National Accounts from a policy perspective, how to broaden the international consultation on this agenda and how to address the needs for capacity building in order to come to a truly **global** statistical information system.

**SNA and the global economy**

We have already come a long way in charting out today’s global economy.

I think the statistical community has done a great job in timely updating the System of National Accounts along with the revision of the Balance-of-Payments Manual since early 2000. The release of the 2008 SNA will definitely strengthen our resolve in measuring and understanding the new phenomena of the global economy, the financial innovations and the role of the public sector in the 21st century. Let me highlight a few of those improvements.

First, the 2008 version of the SNA now treats the new phenomenon of value chain management of production and trading on a strict change in ownership principle for “goods for processing” and merchanting trade. With the application of this principle, the need for consistency with the international financial flows and positions related to
production and trade is fully recognized. But not only that. It should help us to retool our instruments of how we analyze international trade and it should also help to rethink trade policy. The traditional view is to see trade as something involving primary goods, machinery, and final consumption goods and not much else in between and that trade is something that happens across borders between unrelated firms. Much of trade policy assumes the same. But in fact very little trade is of that kind anymore.

If during the break you need to go to the bathroom you most likely will find toilets of the “American Standard” brand, which may be called an American standard but of which the design is in fact done in Milan, the engineering in Munich, the mould building in France and the manufacturing is done in any low-cost country near to the buying customers. These integrated value chains dominate the dynamics of today’s global trading system. Those participating in the process may not even call it trade anymore, but rather “making things together wherever this is convenient”. National trade policies based on export promotion or tariff protection is less and less relevant in this scheme of things. This also applies to large parts of multilateral or bilateral trade negotiations for that matter. The focus should become much more on the factors that determine market access and on the factors that determine access to the value chains and integrated production processes, such as border administrations, regulatory barriers and standards on production and the operations of international firms, and so on. From this angle, it also has become critical to identify and measure separately the foreign direct investment flows that are directed to provide access to those global supply chains. Implementing this will provide important steps forward towards a better understanding of the dynamics of global trade.

Second, using theoretical insights from the growth-accounting literature, the new SNA has broadened and improved the description and classifications of non-financial assets such as those for intellectual property products. Moreover, the concept of capital services is now to be presented in supplementary tables for market producers.

Third, the new SNA further provides a broader economic interpretation of remittances and family transfers. The new definition also covers money transfers other than those related to formal and informal money transfers of migrant workers and now includes family transfers that result from new patterns of migration as well as transfers between households that are transmitted indirectly through non-profit organizations, for instance.

Fourth, there have been important improvements in capturing financial transactions. As I mentioned, the deregulation of financial markets and the unwieldy financial innovations
into exotic derivatives of all kinds have been important factors behind the exuberance of
the past decade and that has led us into this financial crisis. While these meant to provide
greater depth and efficiency in financial markets, they brought with them an increasing
lack of transparency in markets regarding how risks are passed on from one agent to the
next. The new SNA now properly handles, in theory at least, many of these innovations
and provides suitable descriptions of many of the new financial products, including
index-linked instruments. Also, the definition of financial services has been broadened
include those that manage financial risk and liquidity in addition to financial
intermediation per se. Moreover, a further breakdown of the financial institutions in the
financial sector is introduced to reflect the increasing diversity between the deposit taking
and other financial institutions. Of course, we might have wished this would have been
charted out in full already some time ago. Having these numbers in the very near future
will be critical to the resolve of policy makers and regulators to deal with the present
 crisis and in preventing future ones.

The update of the SNA has benefited from discussions on how to record government and
public sector interventions dealing with financial crises, as happened in the aftermath of
the crises of the 1990s in Mexico, Asia, Russia and elsewhere. This is, of course, also of
special importance today with the massive bailout packages that have been set in motion
worldwide. The SNA now explicitly defines such interventions, including the issuance of
government guarantees on bank deposits, capital injections through purchases of
(preferred) shares and provisions of loans, the treatment of nationalizations, the creation
of public restructuring units to deal with “bad” assets, the valuation of non-performing
loans in accordance with fair value valuation as memorandum items, and so on.

Yet the present financial crisis and what will be its aftermath poses us with much greater
challenges.

First, the derivatives market and the widespread use of securitization and the originate-to-
distribute model have caused risks to be scattered among a very wide range of financial
and non-financial agents. Consequently, also the valuation losses are spread widely
across all kinds of agents across the globe. It has become an increasing challenge to keep
track of this in our statistics.

Second, trading in derivatives has led to large off-balance sheet transactions by newly
created special purpose vehicles. With the increasing uncertainty about the counterpart
risk of the structured products, banks increasingly face liquidity risks because they
needed to fund their poorly performing special investment vehicles and they are no longer able to find demand for their securitized loans.

The lack of understanding who are the ultimate owners of the underlying risks have now led to a virtual freeze of the financial markets with the halting of the inter-bank lending operations and the drying up of the short-term financing of commercial papers through investment funds. Improved regulation will require better statistics that can track where risks from a wide array of market instruments are located, including those recorded off-balance sheets. It should also allow linking such balance sheet information to macroeconomic data, since more adequate financial supervision and regulation is not a matter of tracking risks among individual institutions, but those for the economy at large. In today’s context, for instance, with an ongoing fire-sale of assets, with is a lot of contagion and herding behaviour in the market, even institutions that look solvent today may turn out to be insolvent tomorrow. Regulators will need to be able to identify the connections of financial risk throughout the economy. What is needed is the establishment of, what we call in the literature, a macro-prudential regulatory framework; that is, one which defines financial regulation and supervision in the context of a broader counter-cyclical macroeconomic policy framework. The SNA will need to support the implementation of such macro-prudential regulatory framework and its coordination at the international level.

**Strategic considerations for research and consultation among users and producers of statistics**

This brings me to some challenges for future research. But not only that. If the process of fast global financial integration and the recent disastrous developments have made anything clear, it is the need for a much closer interaction between government, market players, analysts and statistical offices to make sure information systems keep up with rapidly changing realities. For one thing, the discussions about reforming the international financial architecture may drastically change the playing field in the years ahead. We must keep up with that. There will be many challenges ahead, but let me focus on four broad areas by way of conclusion of my talk and to kick start your deliberations.

*a) Integrated macroeconomic accounts*

Designing more elaborate macroeconomic accounts is the first challenge. The present crisis has clearly demonstrated that financial stability indicators should reflect the interconnections between banks and other financial institutions, on the one hand, and
between the financial sectors, the non-financial sectors and the rest of the world, on the other. This should lead to a better identification of the “great risk shift” and its implications for liquidity and solvency of financial market agents and for the macro economy at large.

This will require a much more detailed specification of balance sheets of financial and non-financial institutions in the SNA in order to better capture the complexity of the array of financial instruments, as well as the use of off-balance sheet transactions as vehicles to disperse risks nationally and internationally. In order to obtain better insights in positions and exposures, attention should turn to the understanding of the new structured products by geographical breakdown and composition in terms of sector, maturity and foreign currency and ultimate owners of risk.

Such additional detail in presenting balance sheets should ease the identification of currency mismatches that pose vulnerability of financial systems to exchange-rate shocks, the identification of maturity mismatches to signal limitations in rolling over debt to stave off solvency risks, and the identification of emerging asset market bubbles.

This should not only be confined to financial institutions and the business sector. Much more statistical research is also needed to improve the elaboration of the integrated household accounts connecting household income, consumption and wealth to support a broader range of measures of well being, distribution and poverty. Moreover, it should be designed such that it can fit a broader framework for macroeconomic policy analysis, that is, one which is not merely concerned with price and financial stability, but which focuses on long-term growth and employment generation.

Such integrated accounts should also not only serve to gain better insight into wealth transfers between businesses, the government sector and households, but it should also support the analysis of distributional consequences of asset price adjustments, bailouts and restructurings of bad debts, and so on. Tax payers have a right to hold their government accountable and know how and to what extent the massive bailouts of the financial sector will affect their wealth and income, today and in the near future.

Much of such improvements could be made by building on the experience of the construction of extended social accounting matrices and satellite accounts as recognized instruments of the present SNA.
b) Integration of commercial databases and macroeconomic accounts

The financial crisis has also shown the urgency of a second main area for improvement: the integration of commercial databases with the macroeconomic accounts. This is essential to keep the integrated financial and macroeconomic accounts up to date and keep consistency between individual business and macroeconomic perspectives. Doing so will require major new efforts to harmonize coding and classification systems. The effort of the European Central Bank in developing the Central Securities Database in collaboration with 27 affiliated national central banks is a good example of how we could move further in this direction. The ECB has achieved a pretty much comprehensive coverage of all securities which are either issued by a European issuer or any of its subsidiaries, or held by any European financial institution. The international statistical community should promote this kind of work worldwide. This would facilitate better policy analyses leading to improved identification of vulnerabilities in the financial sector and the global economy at large and support the development of new and more effective early warning systems.

c) Broadening and improving institutional interactions between users and producers of data

A third challenge is to develop the statistics in much closer collaboration with all stakeholders. Some lessons were drawn from the financial crisis in Asia and other emerging markets in the second half of the 1990s, leading to attempts at the design of early warning systems to detect financial vulnerabilities. However, the focus on just emerging markets rather than to also include the developed economies and the failure to keep up with the derivatives markets and many other financial innovations, emphasizes this need to intensify interactions between the users and producers of macroeconomic and financial statistics so as to ensure that our data frameworks keep up with new trends and information needs. Statistical offices should therefore consider organizing regular national and international meetings with market players from the international financial and corporate sector along with government representatives and financial regulators and analysts of macroeconomic trends and economic and financial development.

d) Scaling up of the statistical capacity of emerging economies and developing countries

The last challenge I would like to emphasize, is the need to double efforts to strengthen capacities of emerging market economies and other developing countries in improving
their statistical systems. The crisis quickly became global as an expression of how integrated our world economy is. However, since so many failed to see the vulnerability of emerging markets to the financial woes that originated in the United States, it is clear that the linkages are complex and not straightforward to read. Improving our insight in those linkages requires that all countries strengthen their national statistical systems. Economic structures differ strongly across these countries. We should make sure that the implementation of the new SNA is well adapted to country needs and conditions. Having said this, it holds more broadly that much more support is needed to strengthen the capacity of countries to measure a wider array of financial and non-financial wealth accounts, including measuring more adequately and more timely the balance sheets of all institutional agents as well as their respective international investment positions. This also holds in the areas of value chains in international trade and foreign direct investment and workers remittances and family transfers, issues I referred to earlier.

I am aware that important initiatives are underway through statistical capacity building projects implemented by UN, the World Bank and others. But much more is needed to come not only to an effective System of National Accounts that is implemented worldwide, but will also allow to establish a true System of International Accounts that will ease our insight in the dynamics of the global linkages.

These are a few, but no small challenges ahead of us and I hope that you will make progress in these areas during your deliberations in the coming two days. Perhaps you will be able to run ahead of the further steps that will be made in reforming the international financial system. You are already spending more than the five and something hours that the leaders of the G-20 deliberated on the reforms last Saturday. The changes and the fixes will not be established overnight, that much is clear, but we do not have much time either, knowing that a lot more bad economic weather is ahead of us. Hopefully, in these two days you will think ahead of the curve as statisticians and analysts of global economic problems. I look very much forward to listening to your insights and recommendations of how to move ahead.