

**United Nations Statistical Commission 2011**

**Seminar on  
Shifting Paradigms: Innovative Statistical Frameworks To  
Meet Global Challenges**

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**Global and National Statistical Systems for Sustainable Global  
Development**

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Exactly two years ago when we were – as we know now – at the deepest point of the global crisis, I also had the honour to address this meeting. At that point in time, I stressed - among other things – that statistics have a critical role to play not only in understanding better the impact of the crisis, but also to provide the necessary information to, first, hold governments accountable for the massive fiscal stimulus and financial sector bailouts and how the costs of these will be distributed, and, second, to provide better insight in the vulnerabilities of the global economy and financial markets to serve as early warning systems. The quick spread of the crisis around the world made us more aware of the strong interdependence across economies as well as about the interconnectedness between financial markets, commodity markets and the real economy.

We are now slowly climbing out of the crisis and many governments have started to move from fiscal stimulus to austerity measures. Yet the recovery is uneven and global imbalances continue to worry policy makers, even though – as recent G20 Summits have made clear – with not much agreement as to what to do about them.

Meanwhile, continued fragile financial sectors and expansionary monetary policies in developed countries have been a factor in pushing large amounts of hot money to emerging economies, which in turn has led to undesired exchange rate effects and is posing policy challenges in those countries. Although world leaders feel less pressed these days to coordinate macroeconomic policies, they do recognize that they need to be concerned with the international spillover effects of their national policies. New data initiatives are underway to better chart out financial vulnerabilities and their cross-border implications, as well as to better account for the increasing complex international linkages through trade, finance and migration.

For all these reasons, it makes perfect sense to start thinking of a truly global statistical system, as Walter Radermacher is proposing. I applaud and welcome this idea, but before proposing new frameworks of sorts, we have to ask ourselves what more needs and can be done to fulfil the promises of the existing, mostly national frameworks, and what more can and should be done to put the necessary data in front of us that will effectively serve the analysis of the most pressing problems and challenges of our times. Calls for new data or statistical frameworks should be discussed in this light.

### **Policy analysis and statistics: a disconnect?**

Let me give you five seemingly random examples of concurrent problem areas where statistics and analytical frameworks are not well connected:

- Following the Asia, early warning systems were developed as a tool for crisis prevention. Yet, they have not helped IMF economists see the present crisis coming. Perhaps because the early warning system did not focus on the right countries or the right financial vulnerabilities. But as a recent report of the IMF's Independent Evaluation Office concluded, the lack of data was not the core reason for the failure of IMF economists to see the dark clouds packing. Rather, the report says that much available data were ignored or misinterpreted, meaning that they did not "connect the dots", such as the links between the house price bubble,

the growth of mortgage derivatives and other exotic financial instruments, on the one hand, and the unsustainable global imbalances, on the other. If I may say so, we at the UN, using similar information, did not have any problems in connecting the dots and warned that a crisis was looming well ahead of the crash in our *World Economic Situation and Prospects*.

- The second example is the renewed strong rise in food prices over the past six months. The World Bank recently estimated that 44 million more people have fallen into poverty because of the spike in food prices. The FAO equally has given estimates of large numbers of people at increased risk of food insecurity because of it. But these are all indirect estimates and are not based on direct observations. No doubt, higher food prices in most contexts will put more people at danger of poverty and hunger, but by how much we typically can only tell long after the fact. To date we only have patchy information about the true impact on poverty and hunger of the 2007-8 food crisis. At the same time, we also have greater difficulty in predicting likely trends in commodity prices, because of higher volatility and the impact of, also volatile, financial factors and speculation. More timely availability of food price indices and household consumption data would be most welcome, but it will only be a partial solution to the need of being able to more directly measure the impact. We need to be able to better anticipate food price shocks, for which we need to go beyond looking at supply and demand conditions and will require more information on the role of financial variables in commodity markets.
- Similarly, we know as yet little – much too little – about the precise impact of the crisis on the progress towards the MDGs. We have a good, internationally agreed reporting system that measures progress towards the targets but typically the information comes with a two or three year time lag. We do not have an agreed framework how to monitor policy efforts and other determinants towards the achievement of the MDGs. At DESA (together with UNDP and the World Bank) we work with country models which look integrally at the broad range of factors that influence progress towards the MDGs and its economy-wide implications. These models are useful to assess policy options and financing needs to achieve

the MDGs, but the analysis too often is hampered by data limitations; not so much the lack thereof, but inconsistencies across data sources or inadequate specifications of the data. For instance, for assessing the cost of achieving the MDG it is useful to have budget data specified such one can have a clear picture of the precise cost of primary education or the health programs that help reduce child and maternal mortality. Such data is often presented that way and when it is often inconsistent with macroeconomic data. Such limitations imply that to this point we can only make some informed guesses about the possible impact of the crisis on the MDGs.

- A fourth example is the risk of so-called “currency wars”, something we talked about a lot in the second half of 2010 and which is still lurching out there. Some parties have blamed the quantitative easing policies of the United States for injecting too many dollars into the global system and which would have inundated emerging economies with too much “hot money”. As I already mentioned, this in turn has given rise to undesired exchange rate effects and varieties of policy responses, including imposing capital controls. While we can broadly monitor trends in aggregate short-term capital flows, but timely and consistently tracking origin and destination of such flows is much more difficult and something one cannot obtain from existing published data. This makes it much harder to assess the spillover effects of financial market trends and monetary policies in one country on to the next.
- Finally, last but not least, we are facing vast development challenges in the context of closing limits to environmental sustainability. At the UN, we have prepared various studies suggesting that green economic growth can be a win-win solution, both in the short and long-run. Not just because less pollution and waste by investing in clean energy, energy efficiency and more sustainable resource use would counteract environmental degradation, but also in the belief that doing so can create more jobs and stimulate economic growth. We say that, but most of that we can only base on some case study analysis or specific sector information, which is often incomplete or not equally applicable to all country contexts, or

based on economy-wide models with many assumptions not all fully informed by context-specific information.

## Messages

What do these rather heterogeneous examples have in common? In the light of this morning's discussion, I have presented them to shed light on three key messages for what I see as the priorities for the further development of both national and global statistical frameworks:

- The first message is an obvious one, but which we often seem to forget, namely that having more or even better data by itself does not guarantee we will correctly identify emerging problems or trends. I guess you all know what economists answer when asked: "how much is  $2 + 2$ "? Actually, they may have two answers, one is "it depends" and the other is "I do not have enough data". The first answer is always true, but the second is not necessarily true. It is about how we connect the dots.
- The second message follows from the first. We need to embed our data collection in integrated frameworks which will help us better connecting the dots. We have strong existing integrated frameworks, in particular the SNA, but these are still in need of further strengthening and extension: both into the international arena and into linking economic to social and sustainable development indicators. There may be good reasons why SAMs and EEA either were no longer imperatives for full implementation of the SNA implementation framework (as in the case of the SAMs) or are being furthered as separate systems (as in the case of the EEA), but we would be at great loss if the connexion gets lost or loses priority. I will belabour this point further below, but the related message here is use existing frameworks to make better use of available data and validate the quality and consistency of data across sources (SAM is excellent tool for that), even before we move to all kinds of new data collection.

- My third message is that, since there is still so much to gain from fully implementing existing frameworks, we should only cautiously, but incrementally move to enhance the frequency of the collection of certain types of data and expand national frameworks into better measurement of global linkages.

## Challenges

Let me enter in a bit more substance to explain what I mean with these messages, even though this can only be brief and perhaps incomplete as I only have a few more minutes left. Let me focus on three areas which I think deserve greater priority to meet the challenges ahead of us: (a) the implementation and further elaboration of integrated macro-financial accounts; (b) the further integration of macroeconomic, sectoral and social statistics; and (c) the integration of environmental, economic and social statistics. Let me stress that none of these are new (which is precisely the beauty of it!) and they all use the SNA as its pivot.

### *a) Integrated macro-financial accounts*

Starting from the third message, I think the SNA should continue being the centrepiece of national statistical systems which could gradually evolve into a global system which fully accounts for the global linkages. Conceptually, the statistical community has already 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 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 21<sup>st</sup> century. These include ways to properly account for global value chains in production and trade, inclusion of non-financial assets such as those for knowledge and intellectual property products, a broader economic interpretation of remittances and family transfers, as well as important improvements in capturing financial transactions. Seeing these improvements reflected in the data will be critical to enhance our capacity to assess the global economy.

The global financial crisis has set additional challenges which will need to be accounted for with some urgency. 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 and, as I mentioned, such instruments also increasingly influence commodity trading and price fluctuations. 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.

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.

The SNA will need to support the implementation of such macro-prudential regulatory framework and its coordination at the international level. 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 financial instruments, as well as the use of off-balance sheet transactions as vehicles to disperse risks nationally and internationally.

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.

Finally, back to the international linkages, at least for key financial aggregates we should identify the international exposure by specifying geographical origin and destination if we wish to support the proper assessment of international spillover effects. These could be steps towards a more global system, but could start by using the national information and have an international agency make a global consistency check. One way of doing this would be what I did (as an academic) more than twenty years ago when I developed a “world accounting matrix” which attempted to fully account for trade and financial linkages between countries build up from national data sources. It would make sense to consider doing such a global consistency check more systematically as a starting point for a system that would chart out global linkages in greater detail.

#### ***b) Integration of macroeconomic and social statistics***

Much of the improvements I just mentioned could be made by building on the experience of the construction of extended social accounting matrices and satellite accounts, which are recognized instruments of the present SNA. We use these integrated accounting frameworks a lot in our analytical work on what we call “socially inclusive macroeconomic policies”. This analytical work includes the study of financing options for achieving the MDGs and their macroeconomic trade offs, which have conducted as part of capacity development projects in a number of developing countries. Unfortunately, the availability of SAMs is too sparse and infrequent. I may step on some soar toes in saying so, but I think this highly unfortunate. Not only because it limits the analytical work seeking greater coherence between macroeconomic and social policies, but also



because it leaves a lot of data discrepancies and inconsistencies across key statistical sources (such between national accounts and household survey data) unresolved. The construction of SAMs can be tedious and maybe a reason for not giving it high priority in the implementation of the SNA. However, doing so in full could greatly help assessing feasible strategies to achieve the MDGs, as much as to strengthen the national statistical system at large.

*c) Integration of macroeconomic and environmental statistics*

The integration of socio-economic and environmental accounts (SEEA) is the third area for which we have already well developed conceptual frameworks but for which much more data collection needs to take place. The “green economy” is a central theme for the Rio+20 Conference to be held in 2012. While the concept of a “green economy” may still be somewhat elusive, the challenges are clear. The world is on an environmentally unsustainable development path. Without drastically reducing the amounts of waste, GHG emissions and other pollutants, putting an end to the rapid deforestation, land degradation and loss of biodiversity, the earth may not be able to sustain the livelihoods of the 9 billion people that are projected to inhabit it by the middle of the century. Such pressures on the planet’s resources will only mount if developing countries rightfully and successfully pursue high growth strategies to overcome poverty. To find more sustainable development pathways we will need to know what environmental space is left, what are exactly the environmental vulnerabilities facing each country, and what is needed to ‘decouple’ economic growth from environmental degradation. More important than measuring a ‘green’ GDP will be to implement environmental accounts which can be properly linked to sectoral and macroeconomic data.

Doing so, should allow us to better measure environmental risks in conjunction with economic processes. It should allow deriving indicators to track progress towards greater environmental efficiency of production and consumption, and the pressures on natural resource base of the economy, as well as indicators showing needs for further progress in developing clean technologies and financing gaps. But, if we want to know whether investing in clean energy or sustainable agriculture is also good for economic growth, job

creation and poverty reduction, we equally need to link the environmental accounts to input-output tables and social data contained in social accounting matrices.

As I have said a few times already, all of what I have proposed here by and large is already embedded in our conceptual statistical frameworks with the SNA as its pivot. While we increasingly need to expand the framework into better capturing the global linkages, an enormous lot of work still needs to be done to implement these integrated economic, social and environmental accounting frameworks. We will be able to improve on them through applied policy analysis. We stand ready to support this through our capacity development, using our global modelling work, our model-based assessments of feasible MDG strategies, and the work we are initiating on green growth strategies using economy-wide model frameworks.