MEASURING ECONOMIC WELFARE: A PRACTICAL AGENDA FOR THE PRESENT AND THE FUTURE

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Introduction

• Lots of criticism on GDP in providing adequate guidance for policy:
  – Does not appropriately measure well-being (including its distribution), or progress of society more generally
  – Does not address environmental issues and ecological boundaries

• GDP ≠ (sustainable) well-being
• GDP ≈ measure of economic activity
• But what then?
Our response

• **Within the current system of national accounts:**
  – Putting more emphasis on other indicators within the system of national accounts
  – Integrating distributional information

• **Going beyond the current system of national accounts:**
  – Estimating unpaid household activities
  – Implementing System of Environmental-Economic Accounting (SEEA)

• **Measuring (sustainable) well-being using a dashboard of indicators** (e.g. OECD Better Life index), supplemented by an underlying framework of accounts
Staying Within the Current System of National Accounts
GDP versus Household Disposable Income

“It’s about households, stupid!”
(paraphrasing President Clinton)
Putting people at the centre

Very valid recommendations made in the Stiglitz-Sen-Fitoussi Report, in respect of macro-economic statistics:

1. When evaluating material well-being, look at income and consumption rather than production
2. Emphasise the household perspective
3. Consider income and consumption jointly with wealth
4. Give more prominence to the distribution of income, consumption and wealth
5. Broaden income measures to non-market activities
GDP growth versus real household adjusted disposable income (1996-2013)
GDP growth versus real household adjusted disposable income

Growth in GDP per capita has outpaced household income per capita in most OECD countries since 2010.
Percentage points difference in cumulative growth rates of real household income per capita and GDP per capita.

* See country note for the United Kingdom in the technical note.
Households’ Economic Well-being Dashboard

• Moving beyond GDP to focus on household economic resources …
  – GDP and household income – 3 indicators
  – Confidence, consumption, and savings – 3 indicators
  – Debt and net worth – 2 indicators
  – Unemployment – 2 indicators

• Updated quarterly approximately 4.5 months after the end of the reference quarter

• A blog each quarter focusing on one country’s indicators

GDP growth is the most prominent indicator of economic performance, however, it usually does not provide a full picture on the economic well-being of people. The first two charts show how much GDP and household income have grown since the first quarter of 2007. In most OECD countries, GDP dropped sharply at the beginning of the economic crisis, while the impact on household income was less pronounced. One of the explaining factors of the different movement was the impact of government intervention which is shown on the third chart, net cash transfers to households, of this dashboard.
Distribution of Income, Consumption, Saving and Wealth

“Every American should have above average income, and my Administration is going to see they get it” (an American president on campaign trail)
Distributional aspects

- Sub-classifications per main sector
  - Non-financial corporations: 11
  - Financial corporations: 96
  - General government: 15
  - Households: 7
  - NPISHs: 2

- **Need to integrate micro-data on households, to arrive at consistent and timely distributional information on income, consumption, saving and wealth**
  - More details on households, by income quintile/decile, by type of income, by composition of households

- **Expert Group Disparities in National Accounts (EG-DNA)**
- May also improve both micro-data and national accounts
Coverage rates (micro vs. macro)

*Micro aggregates divided by the adjusted national account totals.*

80-120% interval of relatively good alignment
Differences in results between micro and macro

(Adjusted) disposable income per consumption unit for the fifth quintile to the (adjusted) disposable income for the first quintile.
Results from 2015 exercise: Savings ratios

Saving as a percentage of disposable income by equivalized income quintile

- France
- United States
- Mexico

Legend:
- FRA 2011
- MEX 2012
- CHE 2011
- GBR 2012
- SVN 2012
- USA 2012
Going Beyond the Current System of National Accounts
Unpaid Household Activities

“Few tasks are more like the torture of Sisyphus than housework, with its endless repetition: the clean becomes soiled, the soiled is made clean, over and over, day after day” (Simone de Beauvoir)
Unpaid household activities

• Valuation of services => cost-based approaches:
  • Replacement cost approach: wage costs of similar activities
  • Opportunity cost approach: income foregone
  • Differences in labour productivity and quality of the output?
• Distinction between time spent on unpaid activities and leisure time
• Time use survey data: frequency, details and timeliness need (substantial) improvement
• Note: Clear relationship with some issues related to digitalisation
Experimental results

Value of own-account production of unpaid household services (% of GDP), 2015

[Bar chart showing the value of own-account production of unpaid household services for different countries (CAN, JPN, USA, FRA, ITA, GBR, DEU) using two methods: replacement cost method and opportunity cost method.]
Impact on growth rates

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Taking the Environment into Account

“Anyone who believes exponential growth can go on forever in a finite world is either a madman or an economist” (Kenneth Boulding)
Implementing environmental accounts

• System of Environmental-Economic Accounting (SEEA) Central Framework
  – Multi-purpose framework describing interactions between environment and economy
  – Links macro-economic data to environmental statistics on e.g. emissions to air and water, includes a broader set of assets
  – Uptake relatively good (goal of 100 countries by 2020)
  – Depletion adjusted GDP/NDP?

• Accounting for stocks and degradation of ecosystems
  – Experimental status, but much progress being made and consensus arising
  – Accounting for (degradation of) “free” ecosystems assets within national accounts?
Decomposition analysis

Figure 2.4.1 Index decomposition analysis of carbon dioxide emissions

% change w.r.t. 1995

- Energy-intensity
- Energy mix
- Economic activity
- Carbon dioxide emissions
### Ecological footprints

**Table 2.3.2. Greenhouse gas footprint (excluding F-gases) in CO₂-equivalents, biannual 2008-2016**

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<td>Emissions attributed to export</td>
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<td>The environmental balance of trade</td>
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<td>Net emissions by residents</td>
<td>Million tonnes</td>
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<td>245</td>
<td>229</td>
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<tr>
<td>Footprint</td>
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<td>305</td>
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<td>268</td>
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<td>Footprint per capita</td>
<td>Thousand kg</td>
<td>18,6</td>
<td>17,5</td>
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A Vision for the Future

“So, it has come to this. The global diversity crisis is so severe that brilliant scientists, political leaders, eco-warriors, and religious gurus can no longer save us from ourselves. The military are powerless, but there may be one last hope for life on earth: accountants” (Jonathan Watts)
Well-being versus GDP

- Starting point: Well-being is a multidimensional phenomenon
- One single measure not feasible
- OECD Better Life Index, various dimensions:
  - Housing
  - Income
  - Jobs
  - Education
  - Civic engagement
  - Health
  - Life satisfaction
  - Safety
  - Work-life balance, etc.
I have a dream!

- Accept and communicate that **GDP is first and foremost an indicator of (monetary) income or economic activity**
- **Continuously educate users**
- **Embed the framework** of national (monetary) accounts into a much broader framework, and establish a much better link between macro-economic framework and the work on sustainability and well-being
- **Practical approach**: start with including and regular updating of accounts for environment, unpaid household activities, health, and education
- Such a system will provide an improved information basis for analysing trade-offs and win-wins between various aspects of sustainability and well-being
Thank you for your attention!
Intermezzo on Digitalisation
Where is the digital economy in macroeconomic statistics?

The digital transformation is largely hidden in the core economic accounts and challenges our conceptual frameworks and measurement approaches:

- **Sharing economy** (Uber, AirBnB, eBay, etc.) => measurement of ‘informal’ activities
- **Participative role of consumers** (booking flights and holidays, self-service at supermarkets, etc.) => blurring the delineation between market production, unpaid household activities and leisure
- **Free services financed via advertising and provision of data**
- **Free assets produced by communities of people** (Wikipedia, open-source software)
- **Role of, and accounting for, data**
Measuring macroeconomic statistics in a digital economy

Response of the international statistical community

- OECD Measuring GDP in a digitalised economy
- OECD-IMF Can potential mismeasurement of the digital economy explain the post-crisis slowdown in GDP and productivity growth?
- OECD-IMF Measuring consumer inflation in a digital economy
- **Satellite account for the digital economy:**
  - Highlights digitally related activities
  - Includes extension of production and asset boundary (free services, role of data, etc.)
- More work needed on **volumes and prices**
- **Guidance note** in the context of the 2008 SNA