Towards the 2025 SNA and BPM7

Guidance Note AI.1 on Valuation Principles and Methodologies

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Introduction

- As agreed, a **dedicated Task Team** has been mandated to draft the Guidance Note (GN) AI.1 on Valuation principles and methodologies
- Amongst others, motivated by discussions on valuation principles and methodologies for ecosystem services and assets
- Excellent group of 15 -20 people, with **various backgrounds (SNA, SEEA,IPSAS, academics and research)**
- The main objective of the Guidance Note is to **a more holistic view on the valuation of transactions and positions, including the main conceptual foundations**, in order to arrive at more precise guidance in the 2025 SNA
- Discussion has been split between **valuation issues relevant for the update of the 2008 SNA and BPM6 (this meeting)**, and valuation methodologies for ecosystems (to be discussed at a later meeting)

Organisation of this presentation

- Valuation principles for transactions
- Valuation principles for positions
- Valuation methodologies for transactions
- Valuation methodologies for positions
- Summary of recommendations
- Way forward

Principles for valuing transactions (1)

- 2008 SNA/BPM6: **market prices**
- Quite some discussion: market prices versus exchange values
- On the other hand, **clear consensus about the main elements for valuing transactions**:
  - *"the SNA does **not attempt** to determine the **utility** of the flows and stocks that come within its scope. Rather, it measures **the current exchange value** of the entries in the accounts in money terms, that is, the values at which goods, services, labour or assets are in fact exchanged or else could be exchanged for cash"*
  - *"**amounts of money that willing buyers pay to acquire something from willing sellers**; the exchanges are made between independent parties and on the basis of commercial considerations only, sometimes called **"at arm's length"**.*
  - prices paid or the exchange values *"… should **not necessarily be construed as equivalent to a free market price**; that is, a market transaction should not be interpreted as occurring exclusively in a purely competitive market situation. In fact, a market transaction could take place in a monopolistic, monopsonistic, or any other market structure"*

Principles for valuing transactions (2)

- The 2008 SNA is slightly ambiguous when it comes to the main principles for valuing transactions:
  - **Paragraph 3.118 refers to exchange values**, i.e., *"the value at which goods, services and assets are in fact exchanged or else could be exchanged for cash"*.
  - However, **paragraph 2.59 of the 2008 SNA refers to market prices**: "*Transactions are valued at the actual price agreed upon by the transactors. **Market prices are thus the basic reference** for valuation in the SNA*".
- **Paragraph 3.67 of the BPM6** is fully consistent with this guidance, but it contains a **nice connection between the notion of market prices and the notion of exchange values**, as follows:
  - ***"Market prices refer to current exchange value, that is, the values at which goods and other assets, services, and labor are exchanged or else could be exchanged for cash. Market prices are the basis for valuation in the international accounts"***
- **Recommended to use the above BPM-definition, in a slightly adapted form, as the principle for valuing transactions**

Principles for valuing transactions (3)

- Problem: market prices and exchange values are also used as (preferable) methodologies for valuing transactions => **when discussing methodologies, better to refer to <u>observed</u> market prices and <u>observed</u> exchange values**
- Furthermore, if forced to choose between market prices and exchange values as the main principle, one may have a **slight preference for exchange values**, because of its broader reference beyond market transactions, and because one usually does not observe market prices as such
- Importantly, the above is also **consistent with the arm's length principle (ALP) applied in business accounting**

Principles for valuing transactions (4)

- **Exceptions to the use of (observed) market prices and (observed) exchange values, from a conceptual perspective**:
  - Transfer pricing
  - Concessional pricing
  - Cross-subsidisation?
- In practice, it is recognised that it is **very difficult to adjust source data**, and the **observed values/prices will have to be accep**ted, with a very limited number of exceptions (e.g., concessional loans by employers to employees)

Principles for valuing positions (1)

- Current guidance for valuing positions in the 2008 SNA and BPM6:
  - *"For the balance sheets to be consistent with the accumulation accounts of the SNA, every item in the balance sheet should be valued as if it were being acquired on the date to which the balance sheet relates. This implies that when they are exchanged on a market,* ***assets and liabilities are to be valued using a set of prices that are current on the date to which the balance sheet relates*** *and that refer to specific assets"*

Principles for valuing positions (2)

- Important to make distinction between **initial recognition of assets (use of principles for valuing transactions)** versus the **subsequent valuation**
- In the latter case, one can observe **quite a number of exceptions to the above principle**, because of the absence of active markets for the relevant (second-hand) assets
  - Most fixed assets
  - Natural resources
- One could also argue that the **SNA is primarily looking for the contribution of the capital services provided by these assets** (in business accounting: current operational value)
- In the case of financial instruments, the **consistent recording of debtor and creditor positions also drives the valuation, in this case, at nominal value** for instruments not actively traded on a market
- One can question whether the above valuations are consistent with the main principles; whatever the case, **more clarification and qualification of the principles is needed, whereby especially the notion of capital services needs to be elaborated**

Methodologies for valuing transactions (1)

- **Observed exchange values (or observed market prices)**
  - Goods, services and assets transacted on the market
- **Market-equivalent prices**
  - Goods, services and assets transacted in barter
  - Goods produced for own final use
  - Housing services from owner-occupied dwellings
  - Own-account capital formation of assets, which are relatively homogeneous and regularly traded on the market
  - Unpaid household services, if quantities and prices of equivalent services are available

Methodologies for valuing transactions (2)

- **Indirect valuation**
  - Insurance services
  - FISIM
  - Reinvested earnings
- **Sum-of-costs**
  - Non-market output of governments and NPISHs
  - Own-account capital formation of assets, which are not homogeneous and/or not regularly traded on the market (default)
  - Unpaid household services (default)

Methodologies for valuing transactions (3)

Specific issues:

- The current guidance is not that clear about the **appropriateness of using observed market prices in the case of the application of market-equivalent prices' method**. This especially concerns issues around **market conditions** (e.g., maturity of the markets, markets not being distorted by, for example, government interventions, etc. => recommended to add clarifications
- The current guidance could also gain from **further clarifications with regard to the application of the sum-of-costs method**. This concerns the estimation of labour input provided by owners and family members of unincorporated enterprises; the extent of capital services to be included; and the rate to be used in estimating the return on invested capital.
- NB: For the proposed **extension of capital services**, by also including other non-financial assets used in production, beyond fixed assets, and the **consistency of the sum-of-costs method for market and non-market producers**, reference is made the separate issues note.

Methodologies for valuing position (1)

- Observed market prices
- Market-equivalent prices
- Valuation based on past expenses
- Nominal value
- Indirect valuation
- Net present value of future returns
- (Assessments by experts)

Valuation methodology highly dependent on the type of assets

Methodologies for valuing position (2)

Financial instruments

- **(Actively) traded on the market:**
  - Market(-equivalent) prices
  - Occasionally pricing models for e.g., certain types of derivatives
- **Not (actively) traded on the market:**
  - Nominal value (deposits, loans, other accounts receivable/payable)
  - Unlisted equity (see Guidance Note D.2)
  - Insurance technical reserves and pension entitlements (including standardized guarantees): net present value for annuities and DB pension schemes; value of accumulated asset for DC pension schemes; business accounting practices for other types

Methodologies for valuing position (3)

Non-financial assets: fixed assets

- Valuation based on past expenses (PIM), possibly verified by market-equivalent prices in the case of well-established market in second-hand assets
- Net present value of future benefits, in the case adequate data on past investments are not available

Non-financial assets: valuables

- Assessments by insurance corporations, or the valuations by experts
- Valuation based on past expenses: e.g., historical acquisition costs, either or not adjusted for price changes since data of acquisition

Non-financial assets: natural resources

- Net present value of future resource rents using residual value method, unless adequate data on actual rents/royalties are available

Methodologies for valuing position (4)

Specific issues:

- The current guidance could gain from adding **clarifications on the application of the net present value of resource rents for natural resources**. In this respect, it is recommended to include much **more details on the application of the net present value method**, in line with what is already included in SEEA Central Framework, including the more detailed recommendations in Guidance Note WS.10 on Valuation of mineral and energy resources
- The 2008 SNA, and to a lesser extent BPM6, do not contain that much **guidance on nominal value**, although it is omnipresent in the valuation of financial instruments. It is therefore recommended to **add clarifications, in line with the guidance currently included in GFSMCG 2014 and PSDG**, thereby also including clarifications on the measurement of nominal values for zero-coupon/deep-discount securities and other debt instruments that do not accrue interest

Summary of recommendations

Recommendation 1: Provide further clarification on the valuation principles of the SNA (and the BPM):

- **Further clarify the overarching principles for valuing transactions**: either (i) the term "market prices", defined as the prices paid between two independent parties, i.e., a valuation of transactions at arm's length, or (ii) the term "exchange values", defined as the values at which goods, services, labour or assets are in fact exchanged (between two independent parties) or else could be exchanged for cash
- While realizing that both represent the same notion, **a certain preference is given to exchange values, and a slightly adapted phrasing of BPM6 in which both notions are combined**
- Clearly **distinguish these principles from observed market prices or observed exchange values**, which are the preferred methods for valuing transactions (and positions)
- **Further clarify the principles for valuing positions, in particular non-financial assets, where the notion of capital services**, or – as framed in the International Public Sector Accounting Standards (IPSAS) – current operational value, needs to be introduced and elaborated

Summary of recommendations

Recommendation 2: Add more **clarifications on the appropriateness of market conditions, when using observed market prices to arrive at market-equivalent prices**. This first and foremost concerns issues related to the maturity of the markets and/or the markets not being distorted by, for example, government interventions. It does not relate to market structures (competitive, monopolistic, oligopolistic, monopsonistic or other types of markets), regarding which the macro-economic statistics are basically indifferent

Recommendation 3: Add more **clarifications with regard to the application of the sum-of-costs method**. This concerns the estimation of labour input provided by owners and family members of unincorporated enterprises; the extent of capital services to be included; and the rate to be used in estimating the return on invested capital. **For the proposed extension of capital services, by also including other non-financial assets used in production, beyond fixed assets, and the consistency of the sum-of-costs method for market and non-market producers, reference is made the separate issues note**

Summary of recommendations

Recommendation 4: Add **clarifications on the application of the net present value of resource rents for natural resources**, in which the resource rent is estimated by using the residual value method. In this respect, it is also recommended to include much **more details on the application of the net present value method**, in line with what is already included in SEEA Central Framework, including the more detailed recommendations in Guidance Note WS.10 on Valuation of mineral and energy resources

Recommendation 5: Add **clarifications on the concept of nominal value, in line with the guidance currently included in GFSMCG 2014 and PSDG**, thereby also including clarifications on the measurement of nominal values for zero-coupon/deep-discount securities and other debt instruments that do not accrue interest

Summary of recommendations

Recommendation 6: Include recommendations on **alternative valuation methodologies on transactions and positions beyond the sequence of economic accounts** (especially unpaid household services and human capital). This could be done concisely in the general text on valuation principles and methodologies (see below), and somewhat more extensively in the new chapters on well-being and sustainability

Recommendation 7: Provide more details on the **relationship between the SNA and BPM on the one hand, and business and public sector accounting standards on the other hand**. Apart from some very concise references in the introductory chapters of the SNA and BPM, the chapters on non-financial corporations and the one on government would probably provide the best fit for a somewhat more extensive text

Summary of recommendations

Recommendation 8: Reconsider the way in which the guidance on valuation is presented in the 2008 SNA, and possibly also BPM6. As a minimum, it is recommended to **introduce a more in-depth discussion of valuation principles and methods in the 2025 SNA Chapter 4/BPM7 Chapter 3 on Flows, stocks and accounting rules**. As the relevant text may become too lengthy, it may be considered useful to add an annex with more details on, for example, the various methods for valuing transactions and positions. Specific guidance on valuing particular transactions and assets could be included in the most relevant chapters, in line with what is done in the 2008 SNA and BPM6

Way forward

- For now, **the discussion is restricted to those parts which are considered relevant for the update of the 2008 SNA and BPM6**, thus excluding the section on ecosystem services and assets
- If endorsed by the AEG and BOPCOM, the part relevant for the update of the 2008 SNA and BPM6 may be put forward for **global consultation**, after taking into account the comments and suggestions by the AEG and BOPCOM, and excluding the part on ecosystem services and assets
- Following a possible global consultation, **another meeting of the group on valuation** will be organized, probably sometime in May – June, **to discuss the valuation methods for ecosystem services and assets in more detail**, with the advantage of having an agreed position on the valuation principles and methodologies in the SNA and BPM
- Expected to submit a **revised Guidance Note to the AEG meeting**, scheduled for July 2023, **to discuss the methodologies for valuing ecosystem services and assets**

Thank you for your attention!