SNA Research Agenda - Update

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Gulab Singh

UN STATISTICS DIVISION

Content of Presentation

- Introduction
- FISIM
- Recording of Emission Permits Issued Under Cap and Trade Scheme

Introduction

- The SNA is designed to give a realistic and compact view of the economy that is suitable for policy and analytical use.
- As the economy changes and policy and analytical needs evolve, the SNA must be reviewed to see if it is still relevant for these purposes.
- The most obvious example of a change in economic conditions that provokes a reassessment of the adequacy of the national accounting framework is the financial crisis that evolved from late 2008 onwards.

Introduction

- There are always some emerging features that may cause national accountants to re-assess their current methodology.
- Annex 4 of the 2008 SNA list such issues that have emerged in the course of the SNA update but where more extensive consideration is needed.
- Some may result not in changes to the SNA but simply greater clarification of some points.

FISIM

Within the framework of *2008 SNA* Financial services cover

- Financial services directly measured (include insurance and pension funding services)
- Financial intermediation services indirectly measured (FISIM)
- Services for which fees or commissions are explicitly charged

FISIM

- Are imputed for all loans and deposits vis-à-vis residents and non-residents (excluding interbank-transactions);
- Are provided by deposit-taking corporations and other financial intermediaries, excluding insurance corporations and pension funds

Estimates of FISIM

- Are derived by comparing bank interest rates on loans and deposits to a reference rate
- Refer to a single reference rate reflecting the inter-bank market risk-free rate

FISIM

2008 SNA recommendations related to financial services and FISIM

- Extended definition for financial services - the production of financial services is the result of financial intermediation, risk management, liquidity transformation and auxiliary financial activities
- Lending of own funds is also a financial intermediation service
- Use a reference rate to calculate FISIM
- Reference rate has no service element in it and reflects the risk and maturity structure of financial assets and liabilities to which FISIM applies
- Different reference rates should be used for different currencies

FISIM

FISIM in *2008 SNA*

- FISIM should be compiled on the basis of the difference between ***market interest rates*** on loans and deposits and a ***reference rate*** as a rate between bank interest rates on deposits and loans
- The ***reference rate*** should contain ***no service element*** and reflect the ***risk and maturity structure of deposits and loans***
- The ***inter-bank rate*** may be a suitable choice
- Various reference rates for loans and deposits have been proposed
  - By user (internal and external); and
  - By currency denomination (domestic and foreign currencies)

FISIM

- A European Task Force on FISIM has been launched in October 2010

- ISWGNA has constituted a Task Force to investigate:
  - **First clarification question (Risk management):** *How should financial institutions' risk management/ mitigation activities be characterized and reflected in FISIM?*
  - At least two views have formed on this question.
    - The first is that risk premia should be included in FISIM to cover costly risk mitigation activity and/or purchased insurance against specified risks.
    - The second is that risk premia should be excised from FISIM because they do not represent payments for services but are only distributive flows.

FISIM

Second clarification question (Liquidity transformation): Transforming short-term deposits into long-term loans is inherent to financial intermediation. How should this transformation element be represented in FISIM? Should the differences in maturities be reflected in FISIM calculations? If so, how?

- Two views have formed on this question as well, again characterized by choice of reference rate.
  - The first view interprets the language of the 2008 SNA as referring to a reference rate that is not matched to the specific maturities of the instruments on which FISIM is calculated. This allows instrument maturity to affect the current price value of output of financial services (and generally to affect the *relative* prices of the services associated with those instruments).
  - The second view has characterized its position in terms of reference rates matched to deposit and loan assets by maturity, thus by implication excluding maturity premia from FISIM.

FISIM

Third clarification question: : How can FISIM be made consistent in international trade?

- Simply put, exports of FISIM from the resident of one country should equal the imports of FISIM received by the resident of another country and vice versa, regardless of the currency unit selected to show these flows.
- How does the calculation of FISIM, via conversion between domestic and foreign currency, and via selection of reference rate, affect this balance?

- **Fourth clarification question:** What are the implications for the price and volume measures of FISIM that follow from the clarification of the issues raised above?

FISIM - Way forward

- This work would be carried out by an international Task Force comprising representatives of ISWGNA agencies (Eurostat, IMF, OECD, UN and World Bank), national statistical offices, central banks and other institutions with expertise and interest in indirectly measured financial services in the national accounts.
- Meetings of Taskforce: 3-4 March 2011, Washington
  5-6 July 2011, New York
- Task Force would report to the ISWGNA

Emission Permits

Introduction

- In an emissions trading system (ETS), liable entities – those responsible for emissions (for example electricity generators or large industrial plants) – must hold allowances to match their emissions over a given timeframe
- A cap on the total number of allowances available sets a limit on the total quantity of emissions.
- Liable entities have the possibility to sell or acquire allowances, with a view to minimising their cost of compliance.
- Trading of allowances establishes a market price for emissions and promotes least-cost actions to meet the cap.

Emission Permits

- At the most basic level, schemes simply need to define
  - Emissions quotas (*i.e.* what an “allowance” represents and how it will be measured),
  - Determine how these rights will be allocated to participants in the scheme,
  - Ensure that rights can be enforced and set rules to enable trading.
- Within these broad parameters a wide range of ETS designs are possible and indeed are currently being implemented in various countries.
- A common definition of the unit of trade (an allowance) is important, particularly where schemes are linked.

Emission Permits

One allowance represents

- The emission of one tonne of carbon dioxide (tCO_2), or
- One tonne of carbon dioxide equivalent (tCO_2eq), that is, the equivalent quantity of another greenhouse gas that gives the same amount of warming based on conversion factors adopted by the United Nations Framework Convention on Climate Change (UNFCCC).
- Cap and trade schemes are the most common manifestation of emission allowance schemes
- These are designed to regulate (fix) the quantity of emissions (total cap), and the price of the allowances fluctuate over their life in line with changes in demand and availability.

Treatment of Emission Permit in 2008 SNA

- 2008 SNA takes the view that the atmosphere is not considered as an asset, because:
  - It is not possible to place a value on the atmosphere, nor
  - Is it possible to enforce ownership rights in a way that can meaningfully allocate benefits from its use to owners.
- Therefore emission permits are classified as taxes On production
- It is inherent in the concept that the permits will be tradable and that there will be an active market in them.
- The permits therefore constitute assets and should be valued at the market price for which they can be sold

Treatment of Emission Permit in 2008 SNA

2008 SNA made no recommendations as to whether

- Taxes and subsidies should be imputed when permits are issued without charge or at cost lower than the market price,
- How to record changes in the value of payments during their lives
- The AEG recommended to form a Task Force to further consider the treatment of emission allowances and permits in the national accounts.

Task Force on Emission permits

A Task Force constituted in 2009, considered issues relating to the emission permits and recommended two alternative treatments:

The first alternative

- Records a prepayment of tax equal to the payment by a unit that acquires the permit at the time of issue.
- Thereafter, any difference between the market price and issue price represents a marketable contract (a non-financial non-produced asset) for the holder of the permit.
- At the time of emission, the value of the tax payment recorded is equal to the issue price.
- This approach therefore means that recorded taxes payable by an emitter for a given permit are equal to cash received by government.

Task Force on Emission permits

The second alternative treats

- Permits as financial assets sold by governments (which therefore incur matching liabilities).

- Capital transfers from government to acquiring units, equivalent to the market value of permits, are imputed when government provides permits for free or below market price.

- The tax recorded in respect of a surrendered permit is equivalent to the market price of the permit at the time of emission.

Clarification by ISWGNA

- The payments for emission permits, issued by governments under cap and trade schemes, should be recorded at the time the emissions occur as taxes on production on an accrual basis.
- The timing difference between the cash received by government for the permits and the time the emission occurs gives rise to a financial liability (accounts payable) for government and a financial asset (accounts receivable) for the holder.
- The difference between the pre-paid tax value of the permit and the market value of the permit represents a marketable contract (non-produced non-financial asset) for the holder.

Clarification by ISWGNA

- The total financial liability of a govt at any point in time, in respect of emission permits, is equal to the cash it has received through sales of the permits up to that point in time minus any taxes it has received through the surrender of these permits.

- The financial liability of that govt to any particular permit that exists on the market (including those issued by other governments), which it has committed to accept, at surrender, as a tax payment for emissions that occurred within its jurisdiction, is equal to its total outstanding liabilities, in respect of emission permits, divided by the total number of outstanding permits; including those permits issued by other govts within the scheme - where governments have agreed collective responsibility to accept all permits.

Clarification by ISWGNA

- For schemes where Governments have agreed collective responsibility to accept all permits, the total value of the financial part of the permit is equal to the outstanding liabilities of all governments divided by the total number of outstanding permits.
- The value of the non-produced non-financial part of the permit is equal to the difference between the market price of the permit and the total value of the financial asset.

Clarification by ISWGNA

- At the time of emission the tax receipt recorded by any govt for a single permit is equal to the outstanding liability that government has in respect of that permit at that point in time.
- A tax on production to the Rest of the World is also recorded reflecting the extinguishing of liabilities owed by other governments (and the collective nature of the scheme) in respect of the permit.
- The non-produced non-financial part of the permit disappears as an "other change in volume".

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