IFC Satellite meeting at the ISI Regional Statistics Conference on *"Is the household sector in Asia overleveraged: what do the data say?"*

Kuala Lumpur, Malaysia, 15 November 2014

Household debt service ratio in Korea – some comments[1]

João Cadete de Matos, Bank of Portugal

[1] Discussion of the presentation *"Development of statistics for aggregate household debt service ratio in Korea"* by Jooyung Lee, Bank of Korea. The views expressed are those of the author and do not necessarily reflect the views of the BIS or the central banks and other institutions represented at the meeting.

Discussing the paper "Development of statistics for aggregate household debt service ratio in Korea" by Jooyung Lee

BANCO DE PORTUGAL
EUROSYSTEM

João Cadete de Matos • Director, Statistics Department
15 November 2014

IFC Satellite Seminar
Kuala Lumpur

Introductory remarks

- Debt service ratios have become increasingly important, as they enable tracking how much of their income households devote to principal and interest payments on their debts.

- This is more so the case at the current juncture, where we are experiencing a combination of both
  - high levels of private sector indebtedness across both advanced and emerging economies and
  - a subdued and stagnating growth outlook.

Introductory remarks

- Against this background, the initiative to develop a measure of aggregate household debt service ratio for Korea is particularly relevant, in order to monitor adverse possible consequences for the household budget.
- The latter could materialize in unfavourable macroeconomic impacts – via a drop in household consumption – as well as, from the financial stability perspective, they can result in lower loan quality standards, directly affecting banks' portfolios.
- It is also interesting that the measure is calculated for different debt purposes, such as residential mortgages, as well as repayment modalities – amortized repayment, single repayment and revolving debt.

Aggregate figures should be complemented with micro-data

- My main comment with respect to this indicator regards the fact that it is aggregate. Of course, aggregate figures provide a clear and concise overall picture of the reality they intend to portray.
- However, one thing that we have learned from recent economic events is that sometimes aggregate figures are not sufficient to fully grasp developments in economic variables as they refer to the average of distributions.
- Quite the contrary, these data should be complemented with micro-data, which enable exploring the heterogeneity hidden behind aggregate numbers. In fact, in many situations, the tails of the distribution provide the most important information.

Why is it important to have a better notion of the distribution in the case of households?

- On the one hand, low-income households typically tend to have higher portions of their income dedicated to debt servicing than high-income households. This is especially the case given one of the main characteristics of credit developments in the run up to the global financial crisis, i.e., the expansion of credit provided to lower credit-score households (the so-called subprime).
- On the other hand, low-income households also tend to be more exposed to adverse consequences once crises in fact take place, making them also in greater risk of being unable to fulfill their credit commitments.

Information needs

- Concerning information needs, some difficulties are also mentioned in getting detailed data on the debt service of households from some types of sources such as credit bureaus or credit institutions that are not banks.
- One could say that these difficulties are due to the non-existence of a public credit registry in Korea (the source of this information is the World Bank's "Doing Business" report).
- Public credit registries (CCRs) exist in several countries around the world and are typically managed by central banks as a service provided to the financial system. CCRs collect data on individual loans granted by credit institutions to their clients and deliver data on the aggregate credit liabilities of each borrower to the same credit institutions.

Input for the credit risk analysis of new credit applications

- In recent years, mainly after the global financial crisis, the information requirements on loans granted, on the cost of credit as well as other conditions to grant new loans, have increased dramatically and the existing CCRs went through important changes in order to respond to new statistical and analytical requirements.
- Against this background, countries that never had a public CCR before have plans to build one and there is a project to create a database containing data on individual loans at the European level, fed by data supplied by the National Central Banks of the Monetary Union (MU). This project, known as Anacredit, is being designed to fulfil the needs of detailed information on loans granted in MU countries both for financial supervision and stability evaluation purposes and for statistical and economic analysis needs.

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Sectoral classification used

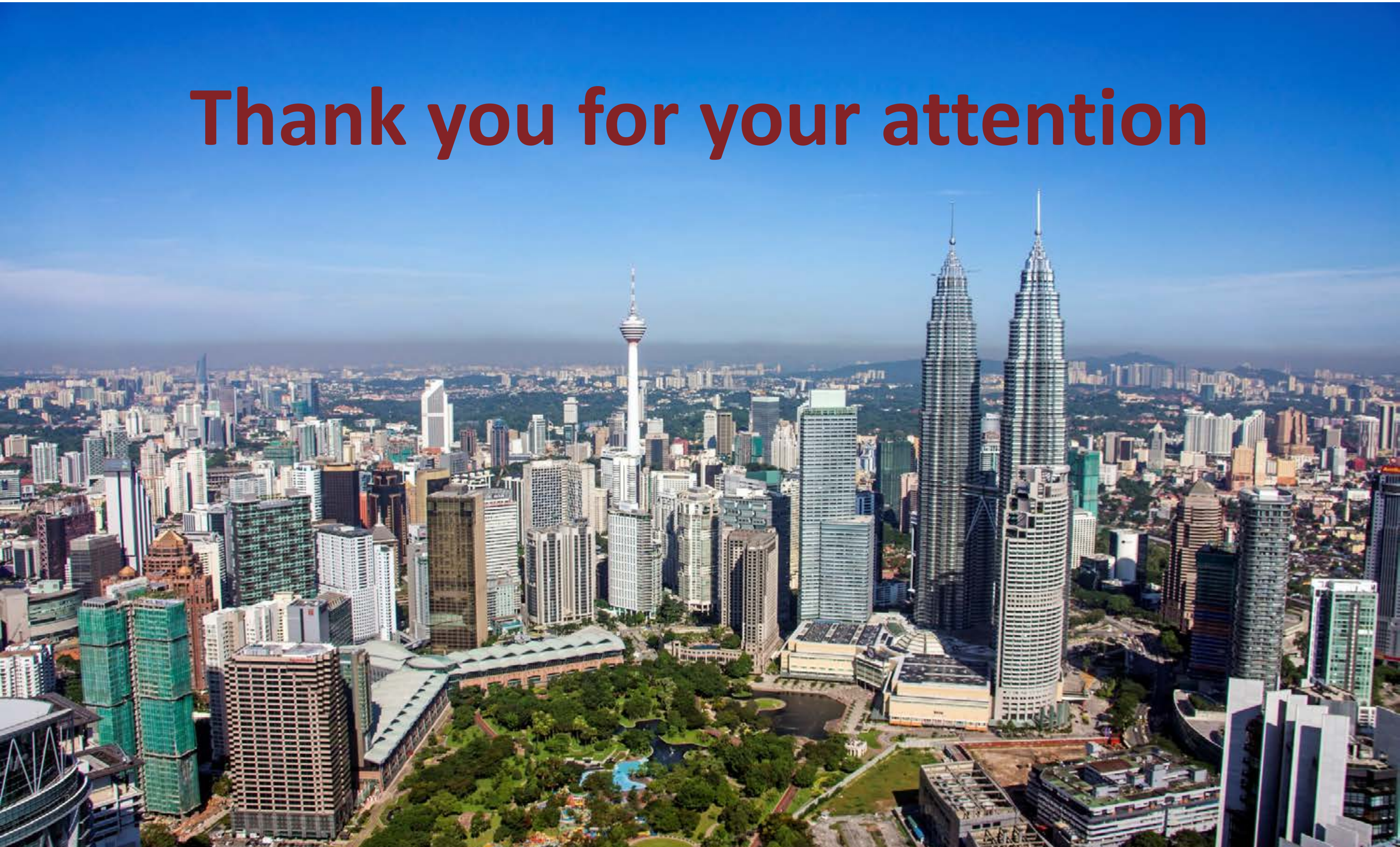
- It would be useful to have the split between households and non-profit institutions serving households (NPISH), as is foreseen in the SNA 2008 (as well as ESA 2010).
- Of course, whenever the split is not available, it is customary to use the aggregate sector comprising both subsectors. NPISH tend to have only a smaller weight in this aggregate, but it would however be interesting to isolate their impact on this measure.
- In fact, the motivation and needs that lead individuals and families to increase their debt are quite different from the NPISH.

Sectoral classification used

- Furthermore, the level of risk associated with these types of borrowers is quite different: families or individuals have commonly a regular level of income, while NPISH, with some exceptions, tend to depend on public or private grants, which are typically uncertain and increase the credit risk of these institutions.
- For these reasons, it could be worthwhile calculating the DSR mostly for households in the strict sense.

Fixed versus variable-rate loans

- One final point concerns fixed versus variable-rate loans. In my country, most mortgage loans are variable-rate loans, i.e., households pay a spread over a given inter-bank reference rate such as the Euribor (the spread however is normally fixed over the life of the contract). The rates paid, as well as the respective interest instalments, are reviewed in pre-defined periods – six months, a year, etc. This means that, in periods where reference rates are going up, average interest payments will likely also rise in tandem, thus potentially generating financial strains.
- Therefore, it would also be interesting to have some sort of indication of the share of variable-rate loans in the total outstanding amount of loans, especially for housing purposes.


Thank you for your attention

Irving Fisher Committee on
Central Bank Statistics

BANK FOR INTERNATIONAL SETTLEMENTS

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Session 3: How do we measure household financial soundness and assess the impact of house prices?

Discussing the paper "Development of statistics for aggregate household debt service ratio in Korea" by Jooyung Lee[1]

João Cadete de Matos
Director, Statistics Department

Debt service ratios have become increasingly important, as they enable tracking how much of their income households devote to principal and interest payments on their debts. This is more so the case at the current juncture, where we are experiencing a combination of both (i) high levels of private sector indebtedness across both advanced and emerging economies and (ii) a subdued and stagnating growth outlook.

Against this background, **the initiative to develop a measure of aggregate household debt service ratio for Korea is particularly relevant, in order to monitor adverse possible consequences for the household budget**. The latter could materialize in unfavourable macroeconomic impacts – via a drop in household consumption – as well as, from the financial stability perspective, they can result in lower loan quality standards, directly affecting banks' portfolios. It is also interesting that the measure is calculated for different debt purposes, such as residential mortgages, as well as repayment modalities – amortized repayment, single repayment and revolving debt.

My main comment with respect to this indicator regards the fact that it is aggregate. Of course, aggregate figures provide a clear and concise overall picture of the reality they intend to portray. However, one thing that we have learned from recent economic events is that sometimes aggregate figures are not sufficient to fully grasp developments in economic variables as they refer to the average of distributions. Quite the contrary, these data should be complemented with micro-data, which enable exploring the heterogeneity hidden behind aggregate numbers. In fact, in many situations, the tails of the distribution provide the most important information.

[1] I would like to thank Daniel Carvalho, Luís D'Aguiar and Luís Sobral, of the Statistics Department, for their contributions to these comments.

Why is it important to have a better notion of the distribution in the case of households? On the one hand, low-income households typically tend to have higher portions of their income dedicated to debt servicing than high-income households. This is especially the case given one of the main characteristics of credit developments in the run up to the global financial crisis, *i.e.*, the expansion of credit provided to lower credit-score households (the so-called subprime). On the other hand, low-income households also tend to be more exposed to adverse consequences once crises in fact take place, making them also in greater risk of being unable to fulfil their credit commitments.

Turning to information needs, some **difficulties** are also mentioned **in getting detailed data on the debt service of households from some types of sources such as credit bureaus or credit institutions that are not banks**. One could say that these difficulties are due to the non-existence of a public credit registry in Korea (the source of this information is the World Bank's "Doing Business" report). Public credit registries (CCRs) exist in several countries around the world and are typically managed by central banks as a service provided to the financial system. CCRs collect data on individual loans granted by credit institutions to their clients and deliver data on the aggregate credit liabilities of each borrower to the same credit institutions.

This information is a very important input for the credit risk analysis of new credit applications. In recent years, mainly after the global financial crisis, the information requirements on loans granted, on the cost of credit as well as other conditions to grant new loans, have increased dramatically and the existing CCRs went through important changes in order to respond to new statistical and analytical requirements. Against this background, countries that never had a public CCR before have plans to build one and there is a project to create a database containing data on individual loans at the European level, fed by data supplied by the National Central Banks of the Monetary Union (MU). This project, known as Anacredit, is being designed to fulfil the needs of detailed information on loans granted in MU countries both for financial supervision and stability evaluation purposes and for statistical and economic analysis needs.

An additional remark concerns the sectoral classification used. It would be useful to have the split between households and non-profit institutions serving households (NPISH), as is foreseen in the SNA 2008 (as well as ESA 2010). Of course, whenever the split is not available, it is customary to use the aggregate sector comprising both subsectors. NPISH tend to have only a smaller weight in this aggregate, but it would however be interesting to isolate their impact on this measure. In fact, the motivation and needs that lead individuals and families to increase their debt are quite different from the NPISH. Furthermore, the level of risk associated with these types of borrowers is quite different:

families or individuals have commonly a regular level of income, while NPISH, with some exceptions, tend to depend on public or private grants, which are typically uncertain and increase the credit risk of these institutions. For these reasons, it could be worthwhile calculating the DSR mostly for households in the strict sense.

One final point concerns fixed versus variable-rate loans. In my country, most mortgage loans are variable-rate loans, *i.e.*, households pay a spread over a given inter-bank reference rate such as the Euribor (the spread however is normally fixed over the life of the contract). The rates paid, as well as the respective interest instalments, are reviewed in pre-defined periods – six months, a year, etc. This means that, in periods where reference rates are going up, average interest payments will likely also rise in tandem, thus potentially generating financial strains. Therefore, it would also be interesting to have some sort of indication of the share of variable-rate loans in the total outstanding amount of loans, especially for housing purposes.