

Is micro-data reporting the future for interest rate statistics?

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1. Introduction

The availability and integrated management of micro-databases at the national central banks is of key importance, as it allows improving flexibility and reducing reporting burden and data overlaps.

In the field of Monetary and Financial Statistics (MFS) this gained particular significance with the recent financial turmoil and the decision to implement the Single Supervisory Mechanism. This paper presents a recent experience of *Banco de Portugal* (BdP) in launching a reporting scheme to collect data on new loans granted to Non-financial corporations (NFC) on an operation-by-operation basis.

The paper is organised as follows: in the next section, there is a brief reference to the MFS path; in the third section it is described the new micro-data set; in the fourth section some examples of analyses enabled by micro-data are commented; and finally, the last section presents the main conclusions.

2. The MFS information

According to its Organic Law⁴ and whilst Statistical Authority in the framework of the National Statistical System⁵ as well as member of the Eurosystem, BdP is responsible for the compilation of MFS. In this context, the Portuguese Central Bank is entitled of computing and disseminating information on the balance sheets of Banco de Portugal (BdP) and Other Monetary Financial Institutions (OMFI) and data on the interest rates applied by OMFI on euro denominated deposits and loans vis-à-vis Households and NFC resident in the Euro Area. This information is considered of utmost importance for the evaluation of the Portuguese financial system and of the economy in general. More particularly, the statistics on interest rates are essential to appraise the transmission mechanism of monetary policy and to assess the convergence of euro-area financial markets. In addition, it is a key instrument to provide insights on the financing conditions and on the deposits remunerations, to evaluate the financial margin of the banking sector and to improve the knowledge on the debt service effort of the non-financial sector.

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⁴ Law 5/98 of 31 January 1998.

⁵ Law 22/2008 of 13 May 2008.

Following the publication of Regulation ECB/2001/18, transposed to the national context with the Instruction 19/2002 of BdP, in January 2003 the Portuguese Central Bank started to compile and disseminate interest rate statistics harmonised and comparable across the Euro Area. Within this legal frame, the interest rates data were collected from a sample of institutions (less than twenty), considered representative of the universe and which was revisited, and if necessary revised, at the end of each year. This Instruction defined the collection of information on new business and outstanding amounts and on the corresponding interest rates, with details by institutional sector, instrument, initial period of rate fixation and purpose of the loans.

Subsequent to the issuance of Regulation ECB/2009/7 and Instruction 12/2010, and in parallel with the implementation of the additional requirements associated with new operations, concerning mainly a further breakdown by initial period of rate fixation, by loan volume and whether it is totally collateralized, BdP started collecting interest rates data from the universe of the resident OMFI (around 70 institutions) instead of maintaining the sample approach.

3. The new micro-data on interest rates

In 2012, in the framework of the financial crisis and of the Financial Assistance Programme to Portugal, BdP considered necessary, for the purpose of financial stability analysis, to encompass more detailed information on the evolution of banks' credit to NFC. With this objective, it has launched Instruction 20/2012, which set up a new monthly reporting scheme for individual data on interest rates and amounts of new euro denominated loans, including overdrafts, granted by OMFI to NFC resident in the Euro Area. The new report entered into force in July, for the reference period June 2012, and provides monthly details, on a loan-by-loan basis, about the NFC fiscal number, date of the operation, contractual maturity, initial period of rate fixation, amount, annualized agreed rate, existence of collateral securing the total amount granted, nature of the loan ("totally new", "renegotiated" or "automatically renewed and other"⁶) and residency of the NFC ("Portugal" or "other Euro Area country"). It establishes that the micro-data report is only required to OMFI that reach the threshold of 50 million euro of new loans to NFC, in the aggregated report of each month.

The implementation of this new report was quite effortless for the majority of the MFI, as it requires basically the submission of the individual information underlying the aggregated report. Furthermore, if in the future the aggregated data on new operations were entirely replaced by a micro-data reporting system, it would certainly reduce the reporting burden of all OMFI and increase the quality of the data available in BdP. Moreover, the possibility of using the NFC fiscal number, which is available for all corporations resident in Portugal, to link this micro-data with the information available in other statistical databases, allows a multiplicity of analysis, namely by NACE classification, firm size (micro, small, medium or large), private vs. state-owned and exporting vs. non-exporting corporation. As mentioned in a recent study by Santos (2013), the specific features of each loan – not only the

⁶ The "automatically renewed and other" loans are not considered under the ECB concept of new business.

characteristics of the operation itself, but also the characteristics of the lending OMFI and of the borrowing NFC – are determinant for the interest rate applied, and these features should be taken into consideration when comparing the interest rates for different countries. Therefore, the availability of similar databases with individual information in other countries would certainly improve international comparisons.

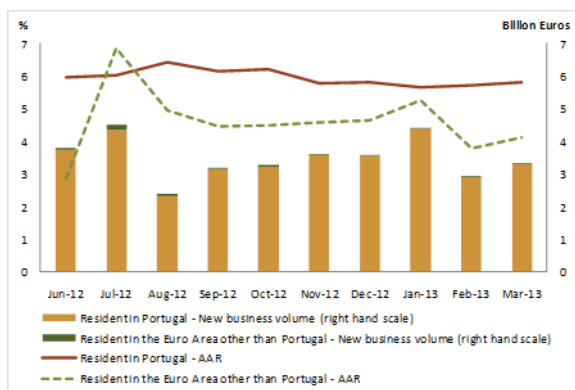
4. The potentialities of micro-data – some examples

The new micro-data set comprises a monthly average of twelve institutions (with around 140 000 records), among which only ten OMFI were required to send information every month (approximately 130 000 records). Therefore, for the sake of consistency, the following analysis considers this constant sample of 10 institutions, which represents around 85% of the total monthly new loans, including overdrafts, reported by all resident OMFI in the aggregated tables. The micro-data constant sample comprises a monthly average of 44 000 new loans, excluding overdrafts, which corresponds to a total amount of 3.5 billion Euros. Regarding overdrafts, there are over 85 000 monthly operations, which stand for an average amount of 10 billion Euros.

As illustrated in Figure 1, over 95% of the loans to NFC, excluding overdrafts, are granted to residents in Portugal, even though the interest rates are, on average, higher for this segment. Considering only the operations with resident NFC, the majority of the loans (around 80%) are short term (up to one year) and the differential between long term (above one year) and short term interest rates remains negative for the whole period (figure 2). These analyses by resident / non-resident and by contractual maturity are only enabled by the current available micro-data, as the aggregated report only comprises the total Euro Area operations and the breakdown of loans by initial period of rate fixation.

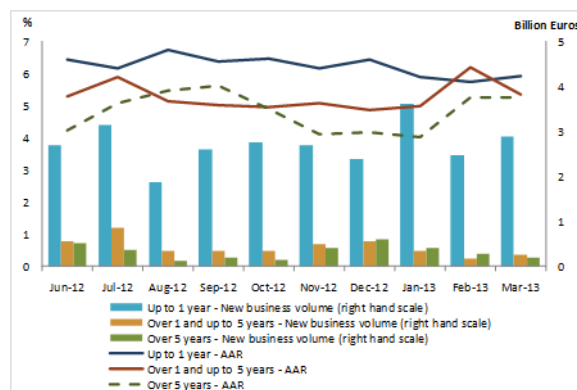
New loans, excluding overdrafts, granted to resident and non-resident NFC

Figure 1



New loans, excluding overdrafts, granted to resident NFC, by maturity

Figure 2

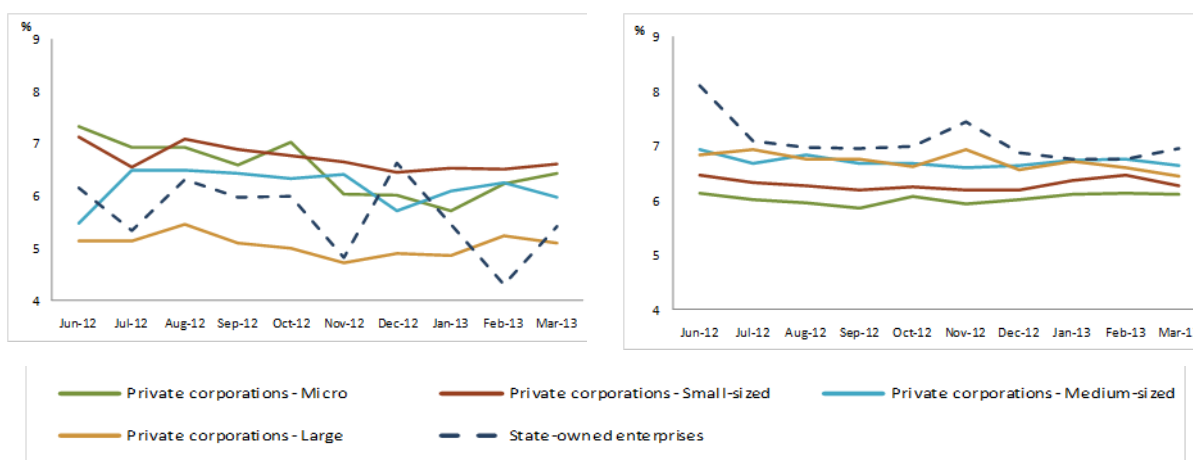


Interest rates on new loans granted to resident state-owned and private NFC,¹
by firm size

Figure 3

New loans, excluding overdrafts

Overdrafts



¹ Excluding private non-financial holdings.

Furthermore, with the aggregated data, the loan volume was the only indicator accessible to distinguish the operations with small and medium-sized enterprises (SME) from the operations with large enterprises. In addition, the breakdown between private and state-owned enterprises was totally unavailable. Currently, linking the micro-data with other data-bases, it is possible to disaggregate the loans by state-owned and private NFC and, for the last ones, additionally by firm size. A closer look at figure 3 suggests that credit conditions are on average tighter for private SME than for private large enterprises. The opposite seems to be valid for overdrafts, as can be seen in figure 4. In what concerns the state-owned enterprises, the interest rates on the new loans do not present a regular behaviour, while in the case of overdrafts the interest rates are usually higher than the ones applied for private corporations.

5. Concluding remarks

In conclusion, according to BdP experience, the micro-data reporting presents several advantages as it allows to reduce the reporting burden, to improve the quality of the data, to enhance the economic analysis by taking advantage of the integrated management of different databases and to improve the capacity to respond to ad hoc information requests.

This type of solution should be encouraged in other countries and in other statistical fields, as for example the deposit operations and the corresponding interest rates.

References

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