“Non-bank financial intermediation in the euro area: current challenges for harmonized statistics”

AUTHORS
Anna Agresti
Jean-Marc Israël
Clive Jackson

ARTICLE INFO

JOURNAL
"Banks and Bank Systems"

FOUNDER
LLC “Consulting Publishing Company “Business Perspectives”

© The author(s) 2018. This publication is an open access article.
Anna Agresti (Italy), Jean-Marc Israël (France), Clive Jackson (Ireland)

Non-bank financial intermediation in the euro area: current challenges for harmonized statistics

Abstract
Structural changes and innovation in the financial sector present challenges for statisticians in keeping statistics fit for purpose, and capable of meeting the needs of policy makers. Much of this innovation has been materialized in the non-bank financial sector. Non-bank financial intermediaries have then also become the focus for the work being carried out on “shadow banking”, although the shadow banking is by no means to be identified with the full non-bank financial sector. This paper provides an overview of the financial sector statistics which are collected by the European Central Bank and national central banks in Europe and which are an important source of information on non-bank financial intermediation. Some upcoming developments in the collection and publication of statistics are also presented.

Keywords: non-bank financial sector, “shadow banking”.
JEL Classification: G01, G15, G21, G23, E44.

Introduction
There are increasing demands on central bank statistics from monetary policy and financial stability users, as well as an increasing emphasis on micro-level data for policy purposes. In particular, structural changes and innovation in the financial sector present challenges for statisticians in keeping statistics fit for purpose.

Much of financial innovation has been materialized in the non-bank financial sector and hence non-bank financial intermediaries have then also become the focus for the work being carried out on “shadow banking”, although the shadow banking is by no means to be identified with the full non-bank financial sector. This requires information at the macro- and micro-level – for example along the lines of the “macro-mapping” exercise as recommended by the Financial Stability Board (FSB)1.

This paper provides an overview of the financial sector statistics which are collected by the European Central Bank (ECB) and national central banks in Europe – together, the European System of Central Banks (ESCB) – and which are an important source of information on non-bank financial intermediation. The ESCB is in the process of updating the statistical framework for the collection of financial sector balance sheet statistics in the context of the updated European System of Accounts 20102. In addition to the necessary amendments which result from the comprehensive review of the international statistical architecture, the ESCB is seeking to meet other user demands, and to broaden the scope of the statistics collected on banks and non-bank financial intermediaries.

1. Overview of non-bank intermediaries in the euro area
Credit institutions (which are commonly referred to as “banks”3) make up 51% (€32 trillion at end-2012) of the euro area financial sector by total assets, which has fallen from 58% since 2003. Credit institutions are the biggest part of the “Monetary Financial Institutions” (MFI) sector4, which also includes the ECB and national central banks, money market funds (MMFs) and some other deposit-taking corporations. Non-bank financial intermediaries are made of MMFs (classified in the MFI sector in the euro area), Other Financial Intermediaries (OFIs) and Insurance Corporations and Pension Funds (ICPFs).

Table 1. Overview of non-bank intermediaries

<table>
<thead>
<tr>
<th>Non-bank financial intermediaries</th>
<th>Coverage</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money market funds (in MFI sector)</td>
<td>Money market funds (with constant NAV)</td>
<td>Fund management</td>
</tr>
<tr>
<td>Investments funds (SNA 2008; “Non-MMIFs”)</td>
<td>Hedge funds</td>
<td>Securitization</td>
</tr>
<tr>
<td></td>
<td>Equity, bond, real estate, mixed funds</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exchange traded funds (ETFs)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private equity funds/companies</td>
<td></td>
</tr>
<tr>
<td>Financial vehicle corporations (securitization vehicles)</td>
<td>Residential MBS, commercial MBS, corporate ABS</td>
<td></td>
</tr>
</tbody>
</table>

1 “Credit institutions” also includes some supervised and authorized saving or credit institutions which do not have a banking license as such, but offer banking-like services.

© Clive Jackson, Jean-Marc Israë, Anna Agresti, 2013.
The views expressed in this paper are those of the authors and do not necessarily reflect those of the European Central Bank.

1 See FSB (2011b).

62

Banks and Bank Systems, Volume 8, Issue 4, 2013
Table 1 (cont.). Overview of non-bank intermediaries

<table>
<thead>
<tr>
<th>Non-bank financial intermediaries</th>
<th>Coverage</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABCP conduits, CDOs, CLOs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Synthetic securitization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Retained securitization” (for central bank refinancing)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFIs except IFs and FVCs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial corporations engaged in lending (FCLs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Securities and derivative dealers (SDDs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central clearing counterparties (CCPs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other entities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance corporations</td>
<td></td>
<td>Other intermediation activities</td>
</tr>
<tr>
<td>Pension funds</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The OFI sector has grown to €16 trillion in total assets at end-2012, based on overall data on the sector (source ECB, euro area accounts). Detailed regular balance sheet data are collected through monetary statistics for the largest part of OFIs, i.e. investment funds (“non-MMF investment funds” in ESA 2010) and financial vehicle corporations (FVCs) which are engaged in securitization transactions. OFIs, except investment funds and FVCs include a range of other activities, which will be discussed in a later section. ICPFs are a distinct sector, on which detailed statistics are also available within the ESCB. The ICPF sector is a sizeable one, and will only increase in size and importance owing to an ageing population. Constituents of non-bank financial intermediaries are summarized in Table 1.

Data have been collected (and are published) on investment funds from end-2008. Data on investment funds shares/units issued are collected monthly, by investment policy of the fund, with a full balance sheet collected quarterly. Investment funds shares/units issued have increased by 76% between 2009 Q1 and 2013 Q1 (Figure 1). Growth has been fastest for the shares/units issued by equity funds, which have more than doubled over the period. Bond funds have also increased over this period, mainly as the result of a change in the supervisory definition of MMFs, which resulted in significant reclassifications from MMFs to investment funds. Bond funds make up over a third of investment funds by shares/units issued at 2013 Q1, and equity funds and mixed funds each make up a quarter. Hedge funds resident in the euro are a small proportion of the total (approximately 2%)3. Along with investment funds, MMFs may be regarded as an alternative to bank deposits and some have been a funding source for lending – i.e. credit intermediation – outside the banking sector. However, in the current low interest rate environment there have been contractions in MMF shares/units issued (Figure 2).

The growth in FVC balance sheets has been due to the use of securitization by credit institutions. This growth can be split into two periods. In the period prior to the crisis, MFIs funded lending growth through an “originate to distribute” model which ended abruptly with the outbreak of the financial crisis in summer 2007 (Figure 3). As a result of the need for liquidity during the crisis, MFIs continued to move loans off-balance sheet to FVCs. However, instead of placing the asset-backed securities with investors as earlier, they have purchased or “re-tained” the securities themselves as collateral for central bank refinancing operations.

As this activity presented a challenge for the analysis of MFI credit to the economy, as well as

---

1 For ECB data on ICPFs, see http://www.ecb.europa.eu/stats/money/icpf/html/index.en.html.
3 Hedge funds managed in the euro area but registered in third countries are non-residents, and thus not recorded in this figure.
for analyzing the links to the non-bank intermediaries, additional data are collected from MFIs on the volume of loans which are transferred on- or off-balance sheet to FVCs. This allows for the headline lending series to be “adjusted” for the shifts between MFI and FVC balance sheets. The collection of data on loan transfers has also become relevant as financial sector restructuring has involved the setting up of so-called “bad bank” structures for the winding-down of non-performing loans.

In addition to data collected from MFIs on their positions vis-à-vis FVCs, the ESCB also commenced collection of data from FVCs resident in the euro area beginning with reporting period 2009 Q4. FVCs had total assets of €2 trillion in 2013 Q1, which is 14% lower than when the statistics were first collected. Assets mostly comprise loans which have been securitised by euro area MFIs, although securitisations carried out by non-euro area MFIs are also included, as are securitisations of non-loan assets and synthetic securitisations. Of the €1.6 trillion in euro area FVC debt securities outstanding in 2013 Q1, 56% are held by MFIs in the euro area (Figure 4), primarily as part of “retained” securitisations.

Notes: Net derecognition of loans to the domestic non-MFI private sector in securitisations, 12-month sum of flows (securitisations which did not result in derecognition of the securitized loans from MFI balance sheets are not included).

Fig. 3. Loans securitized and derecognized by euro area MFIs

2. Defining and measuring the shadow banking sector

This section highlights some limitations of the definitions of shadow banking currently used in the different frameworks. As the size of the shadow banking system and its relative riskiness depends on the defined perimeter, an appropriate definition and its implementation in an appropriate framework, are substantial, and sensitive, issues.

The major limitation of all these approaches is that definitions are rather general and they actually require further legal or statistical clarification and references to become operational. To be implemented for measurement purposes, these definitions need to group the different shadow banking entities or activities into defined statistical categories and sectors. However, the shadow banking sector cannot be accurately identified with a specific set of financial intermediaries, and the mapping of entities in statistical classes within the financial sector is thus made rather difficult. In addition, institutions within a defined sub-sector may have very different risk profiles (e.g. between plain vanilla investment funds and exchange traded funds). Similar entities or activities can actually be regulated and supervised differently in various jurisdictions, e.g. Financial Corporations engaged in Lending (FCLs) and Securities and Derivatives Dealers (SDDs). Actually, the institutional sectors (in 2008 SNA and ESA 2010) are defined for macroeconomic analysis, and not focused on risk assessment.

Based on the FSB broad definition of the shadow banking system, some quantitative initial assessment

1 A misnomer, as these entities are not (or no longer) actually banks. They are typically classified in the OFI or general government sub-sector, depending their characteristics.

2 There are several definitions of shadow banking. For a summary table see The Deloitte Shadow Banking Index: Shedding light on banking’s shadows, p. 15 (www.deloitte.com/us/shadowbanking).

3 The FSB takes a two-step approach in defining the shadow banking system: a wider definition for “casting the net wide” (the system of credit intermediation that involves entities and activities outside the regular banking system) and a narrower one for evaluating regulatory options (focusing on those entities and activities raising systemic concerns owing to maturity/liquidity transformation and/or leverage and/or showing indications of regulatory arbitrage). See FSB (2011a).
has been undertaken in an Occasional Paper of the ECB\textsuperscript{1}. A proxy for the perimeter of shadow banking has been constructed by adding the ESA sector comprising “non-monetary financial intermediaries other than insurance corporations and pension funds” (basically OFIs) to “MMFs” and then subtracting “investment funds other than MMFs”. As result of this approach, the shadow banking in the euro area is around €16 trillion. As mentioned above, macroeconomic statistics offer an overview, but do not allow the split of entities classified in a single sub-sector, e.g. the OFI sector, by riskiness. Actually, the OFI sector includes a broad range of financial institutions which may not perform shadow-banking-like services – e.g. central counterparties which primarily intermediate between MFIs, or regulated finance companies. Also, in the EU this sector contains many entities (SDDs and FCLs) that are partly regulated and are often consolidated in banking groups, hence not shadowing the banking sector. Many of those institutions are not involved in the securitization or repo activity. Against this background, it is worth selecting in the OFI sub-sectors, only specific ones that are more relevant for shadow banking risky activities. Work is ongoing in several fora (FSB, also in Europe at the initiative of the Commission) to further identify entities and activities pertaining to shadow banking linked to the risks associated to them.

3. Furthering the statistical coverage of non-bank intermediaries

Although there have been successes in the euro area in covering financial intermediation outside the banking sector – MMFs, other investment funds and FVCs – large parts of the financial sector remain outside the scope of statistics at a level of detail which would be useful in the analysis of shadow banking. It can be shown (ECB, euro area accounts) that investment funds and FVCs made up over half of the total OFI balance sheet by total assets at end-2012. This is largely concentrated in five countries in the euro area, in particular Luxembourg and the Netherlands (Figure 5).

As the perimeter of the OFI statistics is extended, reaching harmonized definitions may become more challenging. Nevertheless, the ESCB is seeking to enhance the publication of OFI statistics across the euro area, namely to FCLs and SDDs. Harmonized definitions of FCLs\textsuperscript{2} and SDDs\textsuperscript{3} have been agreed within the ESCB for this purpose. In terms of the available data to the ECB, the FCLs and SDDs are very concentrated in only few countries, and are often part of (and consolidated with) banking groups – particularly in the case of SDDs. Coverage is not yet complete. Although the data made available currently reflect only a small part of the “residual” OFI sector (Figure 6), the data on FCLs may comprise a significant proportion of non-bank financial intermediaries.

Notes: *Malta, Estonia, Slovenia, Slovakia, Greece, Cyprus.

Fig. 5. Coverage of detailed OFI sector statistics, by country (2012 Q4)

Notes: *Based on available data (partial coverage). **Due to classification and coverage issues.

Fig. 6. Detailed statistical coverage of OFIs in the euro area (2012 Q4)

Conclusion

To remain relevant, statistics must be adaptable for future financial innovation and responsive to different policy purposes. Euroarea financial sector statistics have been successful in covering a large part of non-bank financial intermediation, e.g. structural changes

\textsuperscript{1} Bakk-Simon et al. (2012).

\textsuperscript{2} FCLs: “Financial corporations principally specialised in asset financing for households and non-financial corporations. Corporations specialising in financial leasing, factoring, mortgage lending and consumer lending are included in this category. These financial corporations may operate under the legal form of a building society, municipal credit institution, etc.”

\textsuperscript{3} SDDs: “financial corporations authorised to provide investment services to third parties by investing in securities on own account as their business and principally engaged in the following financial inter-

mediation activities: (1) trading on their own account and/or risk of securities dealers; (2) underwriting of financial instruments and/or placing of financial instruments on a firm commitment basis.”

65
between MMFs and non-MMF investment funds and the scale and impact of securitization on credit institution’s balance sheets.

As coverage extends further into non-bank intermediaries specific national characteristics makes harmonization difficult. However, progress is being made in broadening the coverage of statistics on non-bank intermediation in the euro area in order to further support a wide range of (macro-economic, monetary, financial stability, micro-prudential) policy purposes. Measuring and monitoring of the shadow banking system, in particular, is a new challenge. Measuring on- and off-balance sheet transactions and interlinkages with credit institutions is crucial to support monitoring of the shadow banking system and prepare policy actions when relevant. However, this measurement of the shadow banking still lacks more operational definitions and agreement on which additional entities and activities need being more closely surveyed or supervized.

References