The Belgian shadow banking sector with a focus on other financial intermediaries (OFIs)\(^1\)

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\(^1\) This paper was prepared for the meeting. The views expressed are those of the authors and do not necessarily reflect the views of the BIS, the IFC or the central banks and other institutions represented at the meeting.
Belgian shadow banking sector with a focus on OFIs

Paper for the IFC-NBB Workshop
‘Data needs and statistics compilation for macroprudential analysis’
(18-19 May 2017)

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This paper delineates the Belgian shadow banking sector according to the FSB framework and explains the statistical information used. While remaining limited in size, a substantial share of the sector consists of other financial intermediaries (OFIs). OFIs include e.g. leasing and factoring companies, lenders in consumer and mortgage credit but also a large group of other entities. This diverse and sometimes variable composition can lead to volatile movements. A further split up into sub-sectors is done to distinguish the real shadow bank entities from entities that do not pose shadow banking risks and to exclude entities that are consolidated in the regulatory perimeter. This exercise enhances our understanding of the shadow banking sector and helps to downsize it to credit intermediation posing bank-like risks to the financial system.

Key words: shadow banking, other financial intermediaries, consolidation

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1. Introduction

It is widely acknowledged that the shadow banking sector offers substantial benefits in leading to a diversification of funding sources for the economy, investment opportunities for investors and income sources for banks, as well as leading to an increased shock absorption capacity of the economy by sharing of the direct risks among multiple investors. However, the financial crisis demonstrated that if non-bank financial intermediation has characteristics comparable to banking activities, including maturity transformation and liquidity transformation, and leverage, it may become a source of risk. To be more specific, owing to connections with other financial institutions and with the real economy, adverse events in the shadow banking sector may lead to systemic risks.

In that context it is necessary to provide a comprehensive overview of the shadow banking system and the associated potential risks. The NBB subscribes to the international work done at European level, and from 2016 onwards it took part in the annual monitoring exercise concerning the shadow banking sector conducted by the Financial Stability Board (FSB). In the specific case of Belgium, besides the delineation of the shadow banking sector, the interconnections between shadow banking entities and the other financial and real sectors of the economy were studied. Subjects covered by the Bank’s analyses include the contractual and non-contractual links between asset management vehicles and Belgian financial institutions, and the way in which they are treated for the purposes of risk management. Important efforts were made to enhance the monitoring framework on a continuous basis, but differences still exist between definitions of the shadow banking sector used and not all data gaps have been solved yet.

This paper describes, in a first section, the Belgian monitoring framework for shadow banks. It explains how the shadow banking sector is delineated, provides results for 2016 and puts them in an international perspective. This section reveals that important data gaps remain in the Other Financial Intermediaries (OFIs), more precisely with respect to the entities consolidated in the regulatory perimeter and to the composition of the other OFIs. These data gaps as well as a proposal to change the methodology will be dealt with in the second section of the paper. In this section a detailed analysis based on microdata breaks down the remaining OFIs into different categories. A third section summarizes the impact on the delineation of the Belgian shadow banking sector of the proposed changes in the methodology.

2. Framework for monitoring the Belgian shadow banking sector

How to delineate the shadow banking sector?

The delineation of the Belgian shadow banking sector is consistent with the framework developed by the FSB and is part of the 2016 FSB monitoring exercise¹.

¹ FSB, Global Shadow Banking Monitoring Report 2016.
The FSB has been conducting annual monitoring exercises since 2011 to assess global trends and risks in the shadow banking. The 2016 year’s monitoring covers 28 jurisdictions. This framework has been described in the NBB Annual Report 2016 and the NBB Macroprudential Report 2017.

The FSB defines shadow banking as credit intermediation that involves entities and activities outside the regular banking system, and therefore lacking a formal safety net. It should be stressed that this definition does not mean that the shadow banking sector escapes from regulatory requirements; the sector is regulated in a different manner than ‘regular’ banks, and a separate chapter of this report is devoted to describing the existing regulatory framework for shadow banks and to assessing if current regulation is sufficient to mitigate the risks detected.

This broad FSB definition starts from the monitoring universe of non-bank financial intermediation (MUNFI) which is the sum of financial assets of non-bank financial entities, pension funds and insurance companies and is calculated using flow of funds data in financial accounts (established on a residential basis, meaning that only entities residing in the country are taken into account). Note that the financial accounts’ data only cover on-balance sheet exposures (not off-balance sheet links).

In a second step, the FSB narrows down this concept towards non-bank credit intermediation that poses bank-like risks to the financial system. These bank-like risks are: maturity and liquidity transformation, leverage and credit risk transfer. This narrowing down was done for the first time in the 2015 monitoring exercise based on economic functions (EF), where authorities assess whether or not non-bank financial entities and activities are involved in shadow banking risks (e.g. maturity/liquidity transformation and leverage) and, if yes, are classified in an economic function.

For the 2016 monitoring exercise, five economic functions were defined:

1. EF1 Management of collective investment vehicles with features that make them susceptible to runs.
2. EF2 Loan provision that is dependent on short-term funding.
3. EF3 Intermediation of market activities that is dependent on short-term funding or on secured funding of client assets.
4. EF4 Facilitation of credit creation.
5. EF5 Securitisation-based credit intermediation and funding of financial entities.

Note that the FSB delineation framework is applied in seven Euro Area countries.

While the European institutions stick to the same broad definition for shadow

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2 AR = Argentina; AU = Australia; BE = Belgium; BR = Brazil; CA = Canada; CI = Cayman Islands; CH = Switzerland; CL = Chile; CN = China; DE = Germany; ES = Spain; FR = France; HK = Hong Kong; ID = Indonesia; IE = Ireland; IN = India; IT = Italy; JP = Japan; KR = Korea; MX = Mexico; NL = Netherlands; RU = Russia; SA = Saudi Arabia; SG = Singapore; TR = Turkey; UK = United Kingdom; US = United States; ZA = South Africa.

3 Non-bank financial entities consist of money market funds (S123), non-money market funds (S124), other financial intermediaries (S125), financial auxiliaries (S126) and captive financial institutions (S127).

4 Belgium, France, Germany, Ireland, Italy, Netherlands, Spain.
banking as the FSB, they use diverging approaches to further narrow down the sector.

Results for Belgium for 2016

The Belgian MUNFI amounted to € 1,196 bn at the end of 2016 (283 % of GDP), compared to € 1,105 bn banking assets. It showed a steady increase and exceeded the banking sector in 2012. In order to calculate a narrow shadow banking measure that is consistent with the FSB methodology and includes non-bank credit intermediation that poses bank-like risks to the financial system, pension funds (€ 25 bn) and insurance companies (€ 314 bn) are disregarded in a first stage. The measure is further narrowed down by excluding equity funds (€ 39 bn), stockbroking firms and B-REITS (€ 8 bn), financial auxiliaries (€ 61 bn) and captive financial institutions (€ 471 bn). The main reason for excluding equity funds is that these entities have no credit intermediation function: the share of assets under management invested in credit-related assets is well below the 20% threshold set by the FSB. Stockbroking firms’ assets as well as their liabilities are short term and only for the purpose of doing transactions with clients. They act as pure brokers for clients and are not engaged in credit intermediation. B-REITS mainly invest in income-generating (commercial) real estate and are all listed on a stock exchange, implying that they are not subject to run risk. They are furthermore legally limited in the provisioning of credit, and, hence remain below the 20% threshold mentioned above, and in the use of leverage. Financial auxiliaries (mainly consisting of financial head offices in Belgium) are excluded because they act on behalf of clients and do not own the assets or liabilities being transacted. The captive financial institutions, finally, mainly engage in intra-group transactions with very little engagement in investment or borrowing with entities external to the group. Their expansion was mainly linked to the attractiveness of the tax regime applied to them and has diminished from 2013 onwards because of the low interest rate environment, which lowered tax advantages.

Note that the last FSB shadow banking exercise was conducted in 2016 for data up to 2015. Results have been published in the Global Shadow Banking Monitoring Report 2016. In this section we update the Belgian data to 2016.
Chart 1 – The Belgian financial sector
(in € billion)

Source: NBB calculations based on NAI-data.
MUNFI: monitoring universe of non-bank financial intermediation
PF: pension fund
IC: insurance company
Entities consolidated into a banking group\(^6\) for prudential purposes, should be excluded as much as possible from the shadow banking sector as they are already subject to appropriate regulation/supervision of shadow banking risks. In the same way, retained securitisation should be excluded. Retained securitisation vehicles take loans from a bank and turn these into debt securities which are given back to the same bank for use as collateral for accessing central bank funding. Data available at this stage, only permit to exclude the latter from the shadow banking definition, at the end of 2016 retained securitisation amounted to €61 bn.

All in all, the Belgian narrow shadow banking sector, delineated according to the FSB methodology, amounted to €217 bn at the end of 2016, representing 51 % of GDP. The bulk of the Belgian narrow shadow banking sector consists of investment funds, which are classified under EF1. EF1 includes the Belgian money market and non-money market non-equity investment funds (€111 bn at the end of 2016), which are almost all open-ended and hence susceptible to run risk. They can take

\(^6\) The FSB currently only considers for exclusion consolidation into banking groups or entities subject to Basel-equivalent prudential regulation. Discussions are ongoing to consider consolidation into insurance companies and financial conglomerates as well.
the legal form of undertakings for collective investment in transferable securities (UCITS) or alternative investment funds (AIFs) and are offered to the public as well as to institutional investors.

The second largest category of shadow banks relates to EF2, consisting of loan provision that is dependent on short-term funding and which is done by other financial intermediaries as leasing and factoring companies, lenders in consumer and mortgage credit and other entities (€ 97 bn at the end of 2016). EF2 consists of all other OFIs with a view of taking a prudent approach because the available statistical information did not allow for a further split up. A further split up into subsectors is required to distinguish the real shadow bank entities (e.g. lenders in consumer credit) from entities that do not pose shadow banking risks (e.g. private equity companies). The diverse composition of the other OFIs also entails a lot of volatility in the data series. Moreover, they are to a large extent prudentially consolidated into banking/insurance groups. Section 2 of the paper deals with these issues. It proposes a refinement of the methodology which would, once applied, reduce the level of EF2 considerably. The impact on the delineation of the Belgian shadow banking sector of the proposed changes in the methodology will be summarized in section 3.

The third, and last category of shadow banks consists of securitization activities by financial vehicle corporations that are not retained on the balance sheets of Belgian banks. This small group of activities (€ 10 bn at the end of 2016) is categorized under EF5. The securitisation market peaked in 2011-2012, essentially due to the retained securitisation of mortgage loans. The securitisation vehicle turns these bank loans into debt securities and gives them back to the same bank that uses them as collateral for accessing central bank funding. Note that this part of the securitisation market is not considered as shadow banking. The important decline of the securitisation market at the global level also affected the Belgian market and the issuance lost momentum since 2013. Belgian banks instead placed more covered bonds in the market, as a less risky alternative.

Besides the Belgian entities mentioned so far, foreign investment funds play an important role in Belgium. These are to a large extent Luxemburg funds, but also include funds of German, French or Irish origin. As these foreign funds are not residing in Belgium, they are not automatically included in the shadow banking sector calculated by using flow of funds data established on a residential basis. They are neither under the supervision of Belgian authorities; they have to follow a notification procedure with FSMA in order to make an offer to the public. However, these funds are often commercialised and managed by Belgian banks and have close interconnections with the Belgian banking system. The FSB advises to consider funds that are domiciled abroad but managed/marketed domestically as ‘offshore funds’ and to report them in EF1. From this perspective, they are included in the analysis of the Belgian shadow banking sector narrow measure, which is raised by the amount of investments by Belgian residents in foreign funds (€ 199 bn at the

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7 With the exception of foreign alternative public funds.
8 Foreign UCITS funds are notified in Belgium, foreign managers of AIF’s notify their activities.
9 However, the FSB does not include these offshore funds in its global aggregate of shadow banking, in order to avoid double counting between countries.
end of 2016) and, hence, amounts to €416 bn at the end of 2016, representing 99% of GDP.

Chart 3 – Belgian shadow banking sector according to FSB narrow concept
(in € billion)

The shadow banking sector has almost continuously been growing since 1995, except for the years 2008 and 2011 and, recently, in 2016. Developments in the stock of investment funds are the result of net purchases/sales and valuation effects. The sector has gained importance from 1995 until the beginning of the financial crisis. After six years of decrease during and after the crisis, it regained momentum in the years 2013-2015. According to the most recent data of 2016, a new decrease was observed as a result of net sales of funds, valuation effects being slightly positive. The recent loss of interest for funds was mostly situated in the money market and bond funds, as well as in the funds offering capital protection, while net purchases were observed for mixed funds. The stock of money market funds returned to normal after the fast growth in 2015. This was explained by the investment strategy of funds with a floor-monitoring mechanism that temporarily switched from equity funds to money market funds to keep the floor. The developments in the second largest category of shadow banks, namely loan provisioning by other financial intermediaries, is subject to fluctuations caused by the changing composition of the sector. As to non-retained securitisation, the loss of interest observed since 2013 continued.

Belgian shadow banks in an international context (data 2015)

The share in GDP of the Belgian shadow banking sector is comparable to that of the Netherlands, Germany and France. Just like in Belgium, investment funds are the main component in these countries. The exceptional position of Ireland has to do with its role as a financial centre, more specifically the important presence on Irish
territory of investment funds and securitisation vehicles that are often established by foreign financial institutions.

**Chart 4 – International comparison of shadow banking sector: narrow FSB measure¹**
(at the end of 2015, in % gdp)

![Chart Image]

Sources: FSB, NBB.

1 Entities consolidated in banking groups are excluded if these data are available. AR = Argentina; AU = Australia; BE = Belgium; BR = Brazil; CA = Canada; CI = Cayman Islands; CH = Switzerland; CL = Chile; CN = China; DE = Germany; ES = Spain; FR = France; HK = Hong Kong; ID = Indonesia; IE = Ireland; IN = India; IT = Italy; JP = Japan; KR = Korea; MX = Mexico; NL = Netherlands; RU = Russia; SA = Saudi Arabia; SG = Singapore; TR = Turkey; UK = United Kingdom; US = United States; ZA = South Africa.

2 Narrow measure including investments by Belgians in foreign investment funds.

3 Residual: part of shadow banking sector not classified in an economic function.

### 3. Focus on other Other Financial Intermediaries

To determine the size of the sector of the Other Financial Intermediaries (S125), data from the financial accounts statistics were used. In principle financial accounts are meant to describe the national economy as a whole, which means that all entities within the economy have to be covered. This is an important advantage compared to various other financial statistics which each cover only a specific part of the financial sector. Moreover, financial accounts are compiled in accordance with international standards (SNA 2008 / ESA 2010), so the definitions and methodologies are consistent across countries. On the other hand national (financial) accounts are drawn up to monitor the national economy by deriving (macro-)aggregates, so they are not primarily meant to analyse risks or measure shadow banking.

To achieve the 100% coverage in the financial accounts, multiple sources have to be integrated into one consistent framework. For the OFI-sector, there are two types of data sources available. First, some OFIs are obliged to provide a periodic (often
quarterly) direct reporting of their activities and their balance sheets to a supervisory authority. This is the case for the Financial Vehicle Corporations, the stockbroking firms and the B-REITs. Based on the different direct reporting schemes, these companies can easily be isolated from the total OFI sector. For all the other OFIs direct comprehensive reporting schemes are not available. The main sources for these companies are indirect counterpart data and the annual accounts. In this section, annual accounts data are analysed on a micro level to further break down the other OFIs into different categories.

**Which companies are classified as other OFIs?**

The entities in the other OFI sector have no comprehensive reporting obligations to a supervising institution. This means no official lists of entities exist for the other OFI sector, unlike for many other financial sectors. The list of entities is therefore derived from the business register. In the business register NACE-codes are available, which provide already a good view on the activities of the entities. Moreover, some activities of the other OFIs require an initial licence. Companies wishing to develop leasing activities have to apply for a licence at the Federal Public Service Economy. Companies with consumer credit or mortgage credit activities need to be registered nowadays by the FSMA (Financial Services Market Authority). However, the available information on licences cannot be decisive as such for the sector allocation. For some companies the licenced activity is ancillary to the main activity (which is sometimes even non-financial).

Almost all legal entities in Belgium are required to report annual accounts to the Central Balance Sheet Office, which is a part of the National Bank of Belgium. They have to use standardised templates which contain the balance sheet, P&L statement, various additional tables and an annual report for the larger companies. Because the data are exhaustive, no oversampling is needed. However the annual accounts also have limitations. The data is only available on an annual basis and the time lag is at least seven months. In addition the templates follow an accounting framework which is not always consistent with the statistical requirements. To include the annual accounts data from the other OFIs in the financial accounts, various adjustments have to be made to obtain macroeconomic relevant results. The regular integration in the financial accounts is executed on a macro level. For this exercise the data for the years 2014 and 2015\(^\text{10}\) from the other OFIs were analysed on a micro level and combined with the information in the business register and with other data sources to break down the aggregates into different functional categories in order to improve the delineation of the shadow banking in Belgium.

**2 x 6 functional categories**

In all, 466 companies were analysed. The first part of the exercise consisted in breaking down the other OFIs into two groups. The first group contains the consolidated entities. These entities are part of a larger banking or insurance group, which means they are fully integrated in the consolidated balance sheets of a credit

\(^{10}\) In this paper only the 2015 results will be presented. The 2014 data show a similar outcome.
institution or an insurance corporation. Although these entities have to be considered as separate institutional units according to the national accounting framework, they are included in the prudential supervision of the parent credit institution or insurance corporation. Hence, these entities might not be considered as a part of the shadow banking perimeter. The second group contains the non-consolidated entities; they are not subsidiaries of a larger banking group. The breakdown was performed by investigating the shareholder structure of the other OFIs. The main sources for this were on the one hand the information on the parent company in the annual accounts and on the other hand the tables on subsidiaries from the reports of the Belgian banks and insurance corporations. Of the 466 other OFIs, 50 companies are consolidated entities. The largest of these consolidated entities are all part of the four large financial groups in Belgium: Belfius, BNP Paribas Fortis, ING and KBC. In Belgium the financial sector is highly concentrated around these four institutions. Ten of the fifty consolidated entities are subsidiaries of foreign credit institutions.

The results of the breakdown are shown in chart 5. Of the € 94 bn of total assets of the other OFIs, € 54 bn arises from consolidated entities. Broken down by financial instruments, almost all of the debt securities and most part of the credit instruments belong to the consolidated entities. In contrast, the non-consolidated entities are almost entirely responsible for the equity held on the asset side of the other OFIs.
In the second part of the exercise the other OFIs were split into six functional categories based on the NACE-codes and enhanced with other data sources, such as the annual reports. A number of companies have developed activities in two or more categories. These cases were attributed to the category of the principal activity of the company. The six categories are:

- (Financial) leasing
- Consumer credit
- Factoring
- Mortgage lending
- Private equity
- Miscellaneous

The leasing category contains leasing companies which engage primarily in financial leasing. Many companies offer to their customers other types of leasing, like operational leasing, renting etc. Only those leasing companies with more than 50% financial leasing on the balance sheet are considered OFIs. If not, they are classified as non-financial corporations in the national accounts. The consumer credit companies are all registered as consumer credit companies and it is their main activity. The same reasoning is valid for the mortgage companies. The factoring companies are mainly identified by the NACE-code. The private equity companies are OFIs with most of their assets consisting of unlisted equity. Finally, the miscellaneous category contains all companies that cannot be classified in one of the five previous categories.

The two groups of consolidated and non-consolidated other OFIs were split into these six functional categories. The results for the consolidated entities are pictured in chart 6. Just over half of the total assets (27.2 of 53.6 € bn) of the consolidated
entities are situated in the miscellaneous category. These entities are SPVs created by the credit institutions mainly for tax purposes, like the notional interest deduction. They are financed by their parent company (a bank) through equity and short term loans. They invest to a large extent in debt securities. The leasing category represents 9.8 € bn of the total assets. All large banks have subsidiaries involved in financial leasing. Moreover the consolidated leasing companies are substantially larger than the non-consolidated leasing companies where the total assets amount to 3.5 € bn. The same is even more valid for both the consolidated entities engaged in consumer credit and in factoring. The large consumer credit and factoring subsidiaries of the credit institutions account for over 90% of the market share: 7.9 € bn compared to 0.9 € bn for the non-consolidated entities in the consumer credit category, and 8.4 € bn compared to 0.7 € bn in the factoring category. Regarding the private equity category, the consolidated entities have very few activities. The credit institutions have no subsidiaries engaged in mortgage lending.

**Chart 6 – Consolidated entities by category**
(at the end of 2015, total assets in € billion)

The breakdown of the non-consolidated entities into the six categories is shown in chart 7. The largest category is formed by the private equity companies. They account for 33.8 € bn or 83% of the total assets of the non-consolidated entities. The private equity companies invest 90% of their assets in equity. Some very large listed investment companies are classified in this category. They hold a diversified portfolio of unlisted equity as well as some minority investments in listed companies. In addition a large number of smaller private equity companies are classified in this category. Some of them were created for tax incentives. These private equity companies, like investment fund shares invested in equity, might be considered to fall outside the scope of the shadow banking.

The leasing companies recorded in the non-consolidated entities are mainly subsidiaries of large car manufacturers which provide predominantly financial leasing – more than operational leasing – to their customers. Hence they are classified as financial leasing companies. The largest company classified in the
consumer credit category is also a subsidiary of a car manufacturer, which main activity is providing consumer finance to its customers. These subsidiaries are mainly financed by affiliated companies within the multinational group. The other non-consolidated consumer finance companies and the non-consolidated factoring companies are rather small and limited in number. The mortgage lending category has decreased significantly in the last years to 0.1 € bn. The social credit providers, previously classified in this category, have been reclassified to the general government sector. Most of the remaining entities are in runoff. The miscellaneous category contains a diverse group of smaller companies. Some of them are created rather recently in the context of new financial innovations, such as crowd funding and providing micro credit. Lastly in this category were also recorded the entities, where after analysis of the annual accounts, one could conclude that they initially should not have been classified as OFIs. In all, the non-consolidated entities which are not classified in the private equity category, can still be considered as part of the shadow banking.
4. Conclusions

This paper investigated the important data gaps which remained in the Other Financial Intermediaries (OFIs), more precisely with respect to the entities consolidated in the regulatory perimeter and to the composition of the other OFIs. A new refinement of the methodology is proposed to enhance the measurement of the shadow banking sector according to the FSB narrow definition.

The impact of the proposal is considerable. If results for 2015 are extrapolated to 2016, only 8% of the other OFIs would be considered as shadow banks and included in EF2 – loan provision that is dependent on short-term funding. Of the € 97 bn formerly included in EF2, € 35 bn is private equity and € 55 bn consists of entities consolidated within a banking or insurance group. As there is no specific FSB guidance on the treatment of private equity so far, we follow the general guidance stating that entities that do not engage in credit intermediation with bank-like risks, are excluded from the shadow banking sector. Only the remaining € 7 bn can be considered as shadow banking. Hence, the narrow measure of shadow banking would fall from € 217 bn to € 128 bn.

Nevertheless, there remains room for improvement. This paper has shown that the entity classifications of the other OFIs can be further refined, which would enhance the shadow banking delineation as well as the financial statistics as a whole. Moreover there is a need to explore new data sources, besides the annual accounts data currently used, to better capture the more recent developments in the financial sector.
Chart 8 – New delineating of the Belgian shadow banking sector
(at the end of 2016, in € billion)

Source: NBB calculations based on NAI-data.
MUNFI: monitoring universe of non-bank financial intermediation
PF: pension fund
IC: insurance company
References

NBB; Annual Report 2016.
Annex1: Data tables.

Financial assets of the other OFIs by category and by financial instrument.
(at the end of 2015, in € millions)

<table>
<thead>
<tr>
<th>Category</th>
<th>transferable deposits</th>
<th>other deposits</th>
<th>debt securities</th>
<th>short term loans</th>
<th>long term loans</th>
<th>equity</th>
<th>investment fund shares</th>
<th>receivable/payable</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leasing</td>
<td>79</td>
<td>76</td>
<td>0</td>
<td>2 305</td>
<td>7 252</td>
<td>59</td>
<td>41</td>
<td>24</td>
<td>9 836</td>
</tr>
<tr>
<td>Consumer credit</td>
<td>87</td>
<td>227</td>
<td>15</td>
<td>2 648</td>
<td>4 901</td>
<td>2</td>
<td>-</td>
<td>13</td>
<td>7 893</td>
</tr>
<tr>
<td>Factoring</td>
<td>90</td>
<td>-</td>
<td>-</td>
<td>8 285</td>
<td>1</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>8 376</td>
</tr>
<tr>
<td>Mortgage credit</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Private equity</td>
<td>26</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>46</td>
<td>193</td>
<td>-</td>
<td>0</td>
<td>267</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>126</td>
<td>2 132</td>
<td>21 318</td>
<td>940</td>
<td>2 508</td>
<td>57</td>
<td>9</td>
<td>93</td>
<td>27 183</td>
</tr>
<tr>
<td>Total</td>
<td>409</td>
<td>2 435</td>
<td>21 334</td>
<td>14 180</td>
<td>14 709</td>
<td>311</td>
<td>50</td>
<td>130</td>
<td>53 556</td>
</tr>
<tr>
<td>Leasing</td>
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<td>0</td>
<td>-</td>
<td>2 154</td>
<td>1 257</td>
<td>64</td>
<td>-</td>
<td>5</td>
<td>3 547</td>
</tr>
<tr>
<td>Consumer credit</td>
<td>20</td>
<td>-</td>
<td>-</td>
<td>405</td>
<td>344</td>
<td>107</td>
<td>-</td>
<td>2</td>
<td>878</td>
</tr>
<tr>
<td>Factoring</td>
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<td>-</td>
<td>-</td>
<td>662</td>
<td>0</td>
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<td>-</td>
<td>0</td>
<td>701</td>
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<td>Mortgage credit</td>
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<td>-</td>
<td>-</td>
<td>36</td>
<td>83</td>
<td>4</td>
<td>-</td>
<td>0</td>
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<tr>
<td>Private equity</td>
<td>352</td>
<td>648</td>
<td>180</td>
<td>1 041</td>
<td>1 042</td>
<td>30 364</td>
<td>150</td>
<td>5</td>
<td>33 783</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>94</td>
<td>137</td>
<td>70</td>
<td>310</td>
<td>806</td>
<td>132</td>
<td>264</td>
<td>8</td>
<td>1 820</td>
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<tr>
<td>Total</td>
<td>580</td>
<td>785</td>
<td>250</td>
<td>4 609</td>
<td>3 532</td>
<td>30 676</td>
<td>414</td>
<td>20</td>
<td>40 866</td>
</tr>
<tr>
<td>Total</td>
<td>989</td>
<td>3 220</td>
<td>21 584</td>
<td>18 789</td>
<td>18 241</td>
<td>30 986</td>
<td>464</td>
<td>150</td>
<td>94 422</td>
</tr>
</tbody>
</table>
Liabilities of the other OFIs by category and by financial instrument.
(at the end of 2015, in € millions)

<table>
<thead>
<tr>
<th>Category</th>
<th>Debt securities</th>
<th>Short term loans</th>
<th>Long term loans</th>
<th>Listed shares</th>
<th>Unlisted shares</th>
<th>Other equity</th>
<th>Receivable/payable</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consolidated entities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leasing</td>
<td>-</td>
<td>1 121</td>
<td>11 718</td>
<td>-</td>
<td>405</td>
<td>-</td>
<td>22</td>
<td>13 266</td>
</tr>
<tr>
<td>Consumer credit</td>
<td>-</td>
<td>1 009</td>
<td>5 898</td>
<td>-</td>
<td>823</td>
<td>186</td>
<td>6</td>
<td>7 922</td>
</tr>
<tr>
<td>Factoring</td>
<td>-</td>
<td>8 717</td>
<td>-</td>
<td>-</td>
<td>114</td>
<td>-</td>
<td>2</td>
<td>8 833</td>
</tr>
<tr>
<td>Mortgage credit</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Private equity</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>248</td>
<td>-</td>
<td>0</td>
<td>249</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>-</td>
<td>13 109</td>
<td>162</td>
<td>-</td>
<td>13 368</td>
<td>127</td>
<td>16</td>
<td>26 782</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>-</td>
<td>23 957</td>
<td>17 777</td>
<td>-</td>
<td>14 957</td>
<td>314</td>
<td>45</td>
<td>57 051</td>
</tr>
<tr>
<td><strong>Non-consolidated entities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leasing</td>
<td>-</td>
<td>2 080</td>
<td>1 820</td>
<td>-</td>
<td>611</td>
<td>234</td>
<td>13</td>
<td>4 758</td>
</tr>
<tr>
<td>Consumer credit</td>
<td>-</td>
<td>168</td>
<td>426</td>
<td>-</td>
<td>229</td>
<td>4</td>
<td>2</td>
<td>828</td>
</tr>
<tr>
<td>Factoring</td>
<td>-</td>
<td>694</td>
<td>0</td>
<td>-</td>
<td>59</td>
<td>3</td>
<td>0</td>
<td>757</td>
</tr>
<tr>
<td>Mortgage credit</td>
<td>4</td>
<td>30</td>
<td>64</td>
<td>-</td>
<td>41</td>
<td>2</td>
<td>0</td>
<td>143</td>
</tr>
<tr>
<td>Private equity</td>
<td>601</td>
<td>6 378</td>
<td>866</td>
<td>22 580</td>
<td>3 415</td>
<td>2 912</td>
<td>14</td>
<td>36 765</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>112</td>
<td>128</td>
<td>663</td>
<td>1</td>
<td>296</td>
<td>561</td>
<td>5</td>
<td>1 767</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>717</td>
<td>9 478</td>
<td>3 839</td>
<td>22 582</td>
<td>4 652</td>
<td>3 717</td>
<td>34</td>
<td>45 018</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>717</td>
<td>33 435</td>
<td>21 617</td>
<td>22 582</td>
<td>19 609</td>
<td>4 030</td>
<td>79</td>
<td>102 069</td>
</tr>
</tbody>
</table>

Belgian shadow banking sector with a focus on OFIs 19
The Belgian shadow banking sector with a focus on other financial intermediaries (OFIs)¹

Martine Druant and Steven Cappoen,
National Bank of Belgium

¹ This presentation was prepared for the meeting. The views expressed are those of the authors and do not necessarily reflect the views of the BIS, the IFC or the central banks and other institutions represented at the meeting.
Belgian shadow banking sector with a focus on OFIs

IFC-NBB Workshop, 18-19 May 2017

Financial Statistics - Prudential Policy and Financial Stability
Steven Cappoen - Martine Druant
Overview

1. Monitoring framework
2. Focus on other ‘Other Financial Intermediaries’ (other OFIs)
Belgian shadow banking sector: monitoring framework

- Consistent with FSB framework:
  - credit intermediation that involves entities and activities outside the regular banking system, and therefore lacking a formal safety net
  - from broad to narrow measure: from assets based on financial accounts towards non-bank credit intermediation with bank-like risks

- European framework:
  - ESRB (EU Shadow Banking Monitor): follows FSB approach for broad definition, not for narrow definition
  - EBA: slightly different definition (excl. non money market investment funds)
### Financial sector overview based on financial accounts

<table>
<thead>
<tr>
<th>Financial sector</th>
<th>Code</th>
<th>Financial assets 2016 (billions of euro)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial corporations</td>
<td>S12</td>
<td>2424</td>
</tr>
<tr>
<td>Central bank</td>
<td>S121</td>
<td>123</td>
</tr>
<tr>
<td>Deposit-taking corporations</td>
<td>S122</td>
<td>1105</td>
</tr>
<tr>
<td>Money market funds (MMFs)</td>
<td>S123</td>
<td>2</td>
</tr>
<tr>
<td>Non-MMF investment funds</td>
<td>S124</td>
<td>148</td>
</tr>
<tr>
<td>Other financial intermediaries (OFIs)</td>
<td>S125</td>
<td>175</td>
</tr>
<tr>
<td>Financial auxiliaries</td>
<td>S126</td>
<td>62</td>
</tr>
<tr>
<td>Captive financial institutions and money lenders</td>
<td>S127</td>
<td>471</td>
</tr>
<tr>
<td>Insurance corporations and pension funds</td>
<td>S128+S129</td>
<td>339</td>
</tr>
</tbody>
</table>

**MUNFI: Monitoring Universe of Non-bank Financial Intermediation**

- Important note: based on residential concept

Sources: NAI, NBB.
Shadow banking: broad and narrow measure

<table>
<thead>
<tr>
<th>Financial corporations</th>
<th>Financial assets 2016 (bn of euro)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central bank</td>
<td>S121</td>
</tr>
<tr>
<td>Deposit-taking</td>
<td>S122</td>
</tr>
<tr>
<td>Corporations</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td>1105</td>
</tr>
<tr>
<td>Money market funds</td>
<td>S123</td>
</tr>
<tr>
<td>(MMFs)</td>
<td>2</td>
</tr>
<tr>
<td>Non-MMF investment</td>
<td>S124</td>
</tr>
<tr>
<td>funds</td>
<td>148</td>
</tr>
<tr>
<td>Other financial</td>
<td>S125</td>
</tr>
<tr>
<td>intermediaries (OFIs)</td>
<td>175</td>
</tr>
<tr>
<td>Financial auxiliaries</td>
<td>S126</td>
</tr>
<tr>
<td></td>
<td>62</td>
</tr>
<tr>
<td>Captive financial</td>
<td>S127</td>
</tr>
<tr>
<td>institutions and</td>
<td>471</td>
</tr>
<tr>
<td>money lenders</td>
<td></td>
</tr>
<tr>
<td>Insurance corporations</td>
<td>S128+S129</td>
</tr>
<tr>
<td>and pension funds</td>
<td>339</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 Some countries provide more detailed data to exclude the known sub-sectors that should not be considered as shadow banks, and, hence, to calculate the residual other financial institutions to be included in the shadow banking definition.

Sources: NAI, NBB.
Towards the FSB narrow concept – economic functions

<table>
<thead>
<tr>
<th>Economic Function (EF)</th>
<th>Definitions</th>
<th>Examples of classified entity types¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>EF1</td>
<td>Management of collective investment vehicles with features that make them susceptible to runs</td>
<td>Fixed income mutual funds, Credit hedge funds, Real estate funds mixed funds, ETFs, other funds</td>
</tr>
<tr>
<td>EF2</td>
<td>Loan provision that is dependent on short-term funding</td>
<td>Finance companies, leasing companies, Real estate credit companies, Factoring companies, Consumer credit companies</td>
</tr>
<tr>
<td>EF3</td>
<td>Intermediation of market activities that is dependent on short-term funding or on secured funding of client assets</td>
<td>Broker-dealers</td>
</tr>
<tr>
<td>EF4</td>
<td>Facilitation of credit creation</td>
<td>Insurance companies (including monolines), Mortgage guarantee insurers</td>
</tr>
<tr>
<td>EF5</td>
<td>Securitisation-based credit intermediation and funding of financial entities</td>
<td>Securitisations, ABCP, Synthetic ETFs, Mortgage-backed securities</td>
</tr>
</tbody>
</table>

¹ From the 2014 information-sharing exercise.
## Classifying entities according to economic functions approach

*(billions of euro)*

<table>
<thead>
<tr>
<th>Sector</th>
<th>Include</th>
<th>Why not</th>
<th>EF1</th>
<th>EF2</th>
<th>EF3</th>
<th>EF4</th>
<th>EF5</th>
<th>No EF</th>
</tr>
</thead>
<tbody>
<tr>
<td>S123</td>
<td>MMFs</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S124</td>
<td>Non MM Investment funds</td>
<td>Y except equity funds</td>
<td>Equity funds: no credit intermediation</td>
<td>109</td>
<td>199</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Investment by BE in foreign funds</td>
<td>Report as offshore</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S125</td>
<td>1. FVCs</td>
<td>Y except retained securitisation</td>
<td></td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Stockbroking firms</td>
<td>N</td>
<td>Act as pure brokers for clients, no credit intermediation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. B-REITs</td>
<td>N</td>
<td>No run risk, no credit intermediation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Other OFIs</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S126</td>
<td>Financial auxiliaries</td>
<td>N</td>
<td>Act on behalf of clients</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S127</td>
<td>Captive fin. institutions</td>
<td>N</td>
<td>Intragroup transactions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Current FSB narrow concept – results 2016
(billions of euro)

Source: NBB.
Evolution of Belgian narrow shadow banking
(billions of euro)

Sources: NAI, NBB.
Focus on EF2: loan provision that is dependent on short-term funding

- Consists of other ‘Other Financial Intermediaries’ (other OFIs): 97 bn euro, almost half of narrow shadow banking sector
- Prudent approach
- Heterogeneous group (volatility)
- To a large extent prudentially consolidated into banking/insurance group
- Better knowledge necessary: first results in next section (2015)
Breaking down the other OFI-sector

Framework of the data: national financial accounts
Main goal is not shadow banking or risk measurement, yet a statistical framework providing an overview of the national economy and its institutional sectors (applying ESA 2010).

Financial accounts OFI-sector (S.125): two types of data sources

- Reports to supervisory authorities:
  - FVC
  - Stockbroking firms
  - B-REIT – GVV/SIR

- Annual accounts and counterpart data:
  - Other OFIs

Aim is using **micro-data** to classify all companies of the other OFIs in different categories based on their main activity and whether or not they are part of a larger banking group.
Methodology for breaking down the other OFI-sector

What entities are included in the other OFIs?

- List of entities is set by the business register
- No supervisory obligations for these entities. Some activities do require an initial licence:
  - e.g. leasing, consumer credit, mortgage lending

Classification into different categories based on:

- NACE-codes in the business register
- List of licenced activities
- Annual accounts analysis
- Annual report, website, etc

Data sources:

- Mainly the annual accounts
- Additionally NBB Financial Statistics, Euronext, FSMA, Credit Register, Ministery of Finance, etc
Methodology for breaking down the other OFI-sector

**Annual Accounts?**

- Mandatory reporting for almost all companies in Belgium (more than 400,000 companies)
- Standardised templates
- Collected by the Central Balance Sheet Office at the NBB
- Contains balance sheet, P&L, additional tables, annual report

**Limitations:**

- Annual data, not quarterly
- Time lag of at least 7 months
- Accounting framework, not statistical

This analysis will be conducted annually. There is no intention to integrate the data in the quarterly financial accounts.
Breaking down the other OFI-sector: results

- Total number of entities analysed: **466**
- First analysis on the parent company and/or the shareholdership of the entities.
- **50 entities are part of a larger banking or insurance group**, which means they are fully integrated in the consolidated balance sheets of a credit institution or insurance corporation.
  - 10 of the 50 entities are subsidiaries of foreign credit institutions.
- Highly concentrated market in Belgium: 4 large financial groups.
  - Belfius, BNP Paribas Fortis, ING, KBC.
Breaking down the other OFI-sector: results

6 categories were identified based on NACE-codes and enhanced with other data sources.

- (Financial) Leasing
- Consumer credit
- Factoring
- Mortgage lending
- Private Equity
- Miscellaneous

Some companies are active in two or more categories: classification according to the principal activity.
Breaking down the other OFI-sector: results

Consolidated entities vs. non-consolidated entities

(in billions of euro, 2015)
Breaking down the other OFI-sector: results

Consolidated entities by category

**Total assets** (in billions of euro, 2015)

- **Leasing**: 9.8
- **Consumer credit**: 7.9
- **Factoring**: 8.4
- **Mortgage lending**: 0.3
- **Private equity**: 0.0
- **Miscellaneous**: 27.2
Breaking down the other OFI-sector: results

Consolidated entities by category

- **Miscellaneous:** these are SPVs created by banks for tax purposes (notional interest deduction). They are financed by the banks through equity and short term loans. The SPVs mainly invest in debt securities.

- **Leasing:** all large banks have subsidiaries involved in (financial) leasing activities.

- **Consumer credit** and **Factoring:** Subsidiaries established by the banks. Very high market share (90%+) for both consumer finance and factoring.

- **Mortgage lending** and **Private Equity:** zero or marginal
Breaking down the other OFI-sector: results

Non-consolidated entities by category

**Total assets** (in billions of euro, 2015)

- Leasing: 0.9
- Consumer credit: 0.7
- Factoring: 0.1
- Mortgage lending: 3.5
- Mortgage lending: 1.8
- Private equity: 33.8
- Miscellaneous: 0.1
Breaking down the other OFI-sector: results

Non-consolidated entities by category (1)

- **Private Equity:**
  - Some very large listed investment companies are classified in this category (GBL, Ackermans & Van Haaren, GIMV). They hold a diversified portfolio of private equity and minority investments in listed companies.
  - A large number of smaller private equity companies, some created for tax incentives (Arkimedes funds).

- **Leasing:** mainly subsidiaries of large car manufacturers which provide leasing solutions for their customers. Predominantly financial leasing (vs. operational leasing), hence classified as a financial company (OFI).
Breaking down the other OFI-sector: results

Non-consolidated entities by category (2)

- **Consumer credit**: largest entity is a subsidiary of a car manufacturer, which main activity is consumer finance. Some smaller entities.
- **Factoring**: limited number of small companies.
- **Mortgage lending**: some small entities, most of them in runoff. Mortgage lending in Belgium nowadays is provided by banks (and to some extent by the government).
- **Miscellaneous:**
  - some recent developments: microcredit providers, crowd funding companies
  - various SPVs
  - some misclassified entities
Breaking down the other OFI-sector in 2015: conclusions

- **57%** of total assets of the other OFIs (53,5 bn) are held by entities which are part of a larger banking group. They are separate institutional units according to national accounts, yet **integrated in the consolidated accounts of credit institutions**. Hence, these entities are already under prudential supervision.

- **36%** of total assets of the other OFIs (33,8 bn) are held by **private equity** companies (not consolidated in a banking group). These activities might not be considered as shadow banking.

- **8%** of total assets of the other OFIs (7,1 bn) might be identified as **shadow banking** (EF2: loan provision)  
  
  Extrapolate to 2016

**Data gaps?** Room for improvement:

- Enhancing of entity classifications
- Exploring new data sources for recent developments
New FSB narrow concept – results 2016
(billions of euro)

Source: NBB.