



## Private Placement Instruments and the Wholesale Funding of the Banking System in Ireland

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### Abstract

This Letter examines the use of private placements as an alternative source of wholesale funding for Irish resident credit institutions over the decade up to end-2014. Private placements are a sub-set of total bond issuance and not all Irish-resident banks used these instruments. These debt securities (or bonds) are arranged privately between an issuer and an investor. There is a well-developed international market for the provision of wholesale funding to the banking system through private placements and this topic is addressed in the international literature. The objective of this research is to estimate, insofar as possible, the role played by private placements in the wholesale funding of the banking system in Ireland before the onset of the Financial Crisis and to outline how this has changed over the past decade. In order to do so, we have collected primary data from Irish-resident banks on an annual basis covering a 10-year period. Data was collected by means of a survey which enabled us to identify that cohort of banks that availed of this funding source. The results presented here suggest that approximately €121 billion of these bonds were outstanding by 2007 with both Irish domestic market and IFSC banks actively participating in this wholesale funding channel. The importance of these instruments as a source of wholesale funding has since declined significantly and had fallen to €29 billion by 2014. This was particularly the case for the Irish domestic market banks. Finally, we have used the emerging statistics on holdings of securities (SHS) to provide greater insight into who held the remaining bonds by 2014.

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## 1 Introduction

In recent years, the Central Bank of Ireland has undertaken research into sources of non-bank funding for the Irish non-financial corporations (NFC) sector. This work — Coates, Moloney and Osborne-Kinch (2015) — explored the use of private placement bonds, particularly in the US marketplace. The authors have since endeavoured to expand the parameters of this research to determine whether similar instruments and funding sources formed any part of the wholesale funding of the banking system in Ireland.

The Financial Crisis was characterised by a substantial decline in wholesale bank funding both in Ireland and at a global level. As regards interbank deposits and bank bond issuance, this is well documented. An important source of wholesale bank financing, however, was private placements. These are comparatively less documented and understood. This Letter endeavours to shed light on this aspect of the decline in wholesale bank funding in Ireland.

European banks have increasingly come to rely on wholesale funding to supplement traditional retail deposits (Le Leslé, 2012), particularly in the period before the onset of the financial crisis. Such wholesale funding enabled banks to fill a funding gap at a time of competition for retail deposits. It also supported finance for bank lending and investments in financial assets. This ranged from short-term, unsecured funds (commercial paper (CP) and wholesale certificates of deposit (CD)) through to long-term bond funding (IMF, 2013). Both short and long-term wholesale funding can also be accessed via private placement markets.

These markets allow a debt issuing bank (or a placement agent acting on their behalf) to place a debt directly with a prospective investor(s) without offering these instruments for sale publicly. This funding source provides scope to access a more diverse investor base and to avail of greater flexibility through tailor-made private placements (IMF, 2013).

This Economic Letter is structured as follows: Section 2 explores the role of publicly-issued bonds and privately-placed bonds as sources of wholesale bank funding (and some of the principal differences between these instruments); Section 3 outlines our methodology in estimating the issuance of private placements by the banking system; Section 4 summarises our findings on the issuance of debt via the private placement mechanism by the banking system in Ireland over the past decade and details our combination of the primary survey data collected with SHS micro-data. Section 5 concludes.

## 2 What are Private Placements

Rauh and Sufi (2010) previously noted that debt issuance can be classified as public debt (bonds); programme debt (commercial paper and medium-term notes); and private placements (privately-placed debt issues). In practice, the latter can take the form of long-term bond-type instruments, programme debt and short-term money market instruments (including wholesale certificates of deposit).

For the purposes of this research, we have also included privately-placed bilateral loans<sup>2</sup>, primarily from German investors, and Rule 144A<sup>3</sup>

<sup>2</sup>German Schuldscheine and Registered ACS Bonds (or Namensschuldverschreibung).

<sup>3</sup>These are non-US bonds issued to US qualified institutional buyers (QIBs). According to Rauh and Sufi (2010), there is substantial evidence that Rule 144A private placements are more like bonds than concentrated private placements and a significant portion are subsequently registered as public bonds.

private placement issuance. These are discussed in more detail below.

## 2.1 Public Bonds versus Private Placements

A public bond is issuer-driven where debt securities are issued to prospective investors through the public capital markets. These take the form of a syndicated transaction where the investment bank (or arranger) is retained to sell the debt on behalf of the issuer. The former acts as a book-runner and builds the order book by means of collation and allocation. The terms and conditions of a given bond are standardised.

By contrast, private placements tend to be investor-driven through a process known as 'reverse-enquiry'. The issuance is arranged privately and the debt is placed with investors without recourse to the public markets. These take the form of customised (or bespoke) deals that are tailored to meet the specific needs of the investor. The issuance is completed through an investment bank (or arranger) operating on behalf of their own clients. The latter will be the ultimate purchaser of these instruments.

There are potential benefits to issuing these instruments. Private placements can give rise to execution savings as the administration and execution costs are lower than running a full syndication process<sup>4</sup>. Coupon rates may potentially be lower on foot of the bespoke nature of the deals whilst market risk is reduced (i.e. execution and reputational risks are lower). Finally, there are diversification benefits as the issuer can access a broader investor community and the process can assist issuers in building relationships with investors (IMF, 2013; DLA Piper, 2016).

<sup>4</sup>In other words, retaining an investment bank(s) to sell debt publicly.

<sup>5</sup>The number of respondents reporting an amount outstanding under private placement instruments remained broadly stable over the period covered by this survey.

## 2.2 Mechanics of Book-Building

Private placements are often issued on a reverse-enquiry basis such that the request to issue an instrument is not initially made by the treasury department of the issuing credit institution but is on foot of a request from an external counterparty. Upon receiving such an approach, the prospective issuer communicates their funding requirements and the level they are willing to pay.

The arranger — generally an investment bank in the UK — has a mandate to execute and place bonds on behalf of their own clients, rather than the issuer. In this regard, they mediate investor demand with banks funding needs. In some cases, the funding supply may be interbank in nature (i.e. proprietary investment or own money management) as opposed to being on-sold to another (ultimate) investor(s).

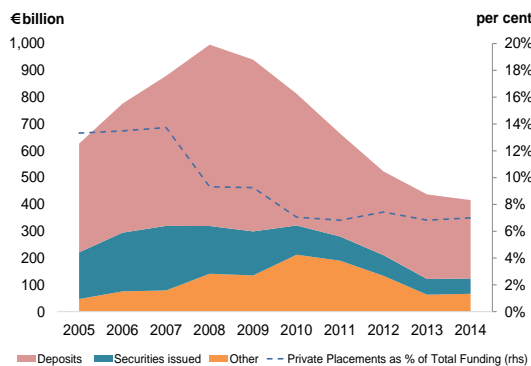
## 2.3 Overview of the role of Private Placements

The total liabilities for all Irish-resident banks peaked at approximately €1.5 trillion by end-2008 before falling back over time. In the case of those banks covered by this research (i.e. those that reported the issuance of private placement instruments), the equivalent figure was €996 billion in 2008 (Chart 1)<sup>5</sup>. This subsequently fell to €416 billion by 2014, a reduction of 58 per cent from the peak. For these banks, debt securities issued — whether public or private — accounted for 28 per cent of total liabilities in 2005. This fell back to 18 per cent in 2008 and 14 per cent in 2014.

The amount outstanding under private placements stood at some €121 billion by 2007,

accounting for 14 per cent of total liabilities. The amount outstanding, however, was to fall sharply with the onset of the financial crisis and by 2014, the equivalent proportion was just 7 per cent.

Figure 1: Composition of Liabilities of the Banking System in Ireland, 2005-2014



Source: Money and Banking Statistics (2005-2014) and authors own calculations.

Notes:(i) Securities Issued refers to all debt securities issued with the exception of bilateral loans (including German Schuldscheine and Registered ACS) as these are not classified as securities for ECB statistical reporting purposes.(ii) Private placements as a proportion of total liabilities include German Schuldscheine and Registered ACS.(iii) Data above refers only to those banks that reported an amount outstanding under private placements.

Private placement debt securities are a sub-set of total debt securities liabilities. These instruments accounted for 47 per cent of total debt

securities liabilities in 2007 but this had fallen to 37 per cent by 2014<sup>6</sup>. The reduction in the total quantum of private placement debt securities is reflected in the steep retrenchment in total debt securities between 2007 and 2014.

### 3 Methodology and Data Limitations

At the outset, the authors identified a range of possible constraints that needed to be overcome. Data specifically identifying private placements has not historically been collected on the Central Bank of Ireland statistical returns.

#### 3.1 Overview of Methodology

The usage of private placement instruments as a source of wholesale funding over the decade 2005 to 2014 had not previously been disaggregated or separately identified on Central Bank of Ireland statistical returns. To overcome this, we undertook primary data collection. A survey was issued to approximately 60 credit institutions<sup>7</sup>, both Irish-owned and foreign-owned branches and subsidiaries, resident in Ireland<sup>8</sup> for completion on a best-efforts basis.

This survey covered (i) amounts outstanding; (ii) instrument type; (iii) counterparty sector; and (iv) counterparty country. The collated data indicated that 16 banks had availed of this source of funds. These respondents included the main Irish domestic market banks and the largest IFSC banks<sup>9</sup>. The data was

<sup>6</sup>Total private placement debt securities amounted to €121 billion in 2007. When German Schuldscheine and Registered ACS are excluded, the figure is closer to €113 billion. For comparability purposes, it is the latter figure that we have used here as the bilateral loan-type instruments are not treated as debt securities in the Money and Banking time-series above.

<sup>7</sup>After an earlier pilot, this survey was issued in April 2015 as a one-off exercise in the collection of historical data.

<sup>8</sup>This adheres to the locational by residency concept in the International Banking Statistics (Coates and Moloney, 2015).

<sup>9</sup>The domestic market banks are those that have a significant level of retail business with Irish households and NFCs. This cohort includes, but is not limited to, Irish headquartered banks. It does not, however, include the more internationally focused banks in the IFSC.

collected across the entire 10-year time series with respondents asked to provide detailed security-by-security information for each year-end.

Finally, we also used the ESCB data on Securities Holdings Statistics (SHS) to explore counterparty relationships.

### 3.2 Data Limitations

Where necessary, respondents estimated results for given time periods as data was often of a semi-soft nature<sup>10</sup>. Others reported that different instrument types were not differentiated and/or IT systems have been discontinued.

In some cases, credit institutions were not covered by this survey. For instance, a number of institutions have exited the Irish banking system over time by revoking their banking licences. Other institutions have been run-down (or liquidated) and the capital markets team personnel who would have been familiar with this information had exited the institution<sup>11</sup>.

Finally, in many cases the respondent credit institutions have very limited knowledge (line of sight) or communication with the ultimate investor. To this end, respondents can only report on a first-counterparty basis. In the case of bilateral loans, the issuer is more likely to have better information in this regard.

### 3.3 Treatment of Bilateral Loans

The data presented here includes two forms of bilateral loan arrangements where an Irish-

resident credit institution can place debt directly with an investor (or via an arranger). These are *Schuldscheine* and Registered ACS Bonds.

In the case of the former, these are unsecured. Similar to the other private placement instruments covered by this research, issuance costs tend to be low and there is a degree of flexibility that allows the term and coupon to be tailored to the needs of the investor. Investors generally include German insurance corporations and pension funds whilst the applicable accounting rules do not require the application of mark-to-market treatment to these instruments (Hofbauer, 2014). In the case of the latter, these are secured (covered) bonds issued under loan documentation. The investor community is similar to the *Schuldscheine*.

Notwithstanding their transferability, such instruments are not treated as debt securities for the purposes of compiling a statistical balance sheet (ECB, 2014)<sup>12</sup>. Given the modality of their issuance and similarity to other private placement instruments we have included them in our headline figures here, albeit that the relevant amounts are disaggregated in Section 4.

## 4 Results

### 4.1 Estimated Issuance and Amounts Outstanding

The data presented here indicates that the private placement of debt securities has been an important feature of the wholesale funding model of the banking system in Ireland over the years. The data indicates that this activity peaked in 2007 when €121 billion of private placements were outstanding.

<sup>10</sup>In other words, known to certain staff at the Dealer Desk or Capital Markets team(s) but, inevitably, there has been substantial staff turnover in these areas over time.

<sup>11</sup>In these cases, we endeavoured to fill this gap by utilising data from a number of industry publications over time but in the absence of completed primary survey data, this will necessarily still be underestimated.

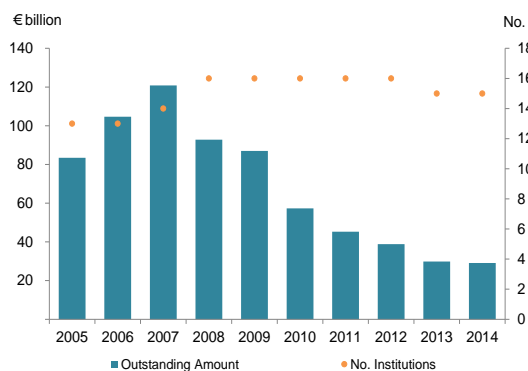
<sup>12</sup>These are treated as loans in the MFI (Monetary Financial Institutions) balance sheet statistics.

This declined rapidly over the subsequent years. For instance, the total amount outstanding had fallen by more than 50 per cent in the four years up to 2012. By 2014, private placement funding had fallen to €29 billion (or by 76 per cent from the peak) (Figure 2).

Unlike private placements by the NFC sector where credit agency ratings are not required (Coates et al, 2015; DLA Piper, 2016) our research indicates that such ratings were the principal determinant of access to this funding source for credit institutions with potential investors, in some cases, mandating minimum ratings.

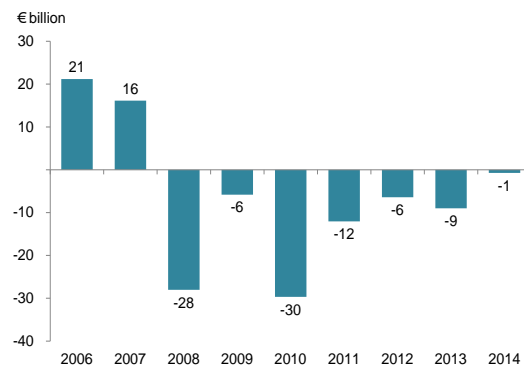
With the onset of the Financial Crisis, the downgrading of banks credit ratings, and associated fall in investor confidence, made it more difficult to roll-over extant funding and dissipated any appetite for new issuance. Consequently, this was reflected in significant net redemptions in 2008 and 2010 (Figure 3).

Figure 2: Outstanding Amounts of Private Placements, 2005-2014



Source: Survey dataset and authors own calculations

Figure 3: Net Issuance of Private Placements, 2005-2014

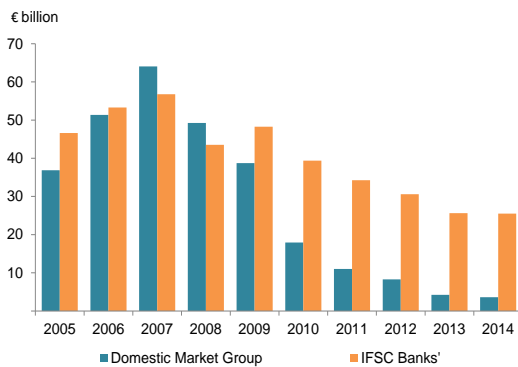


Source: Survey dataset and authors own calculations

In 2007, the domestic market banks' and the IFSC banks' had comparable levels of private placements outstanding (or approximately €60 billion for each cohort). Irish domestic banks' reliance on private placements, however, had fallen significantly by 2014.

Between 2007 and 2014, the reduction for domestic market banks' and the IFSC banks' was 94 per cent and 55 per cent, respectively. As a result, the latter accounted for 88 per cent of the total amount outstanding by 2014 compared to 47 per cent in 2007 (Figure 4).

Figure 4: Outstanding Amounts — Irish Domestic Market Banks' and IFSC Banks', 2005-2014

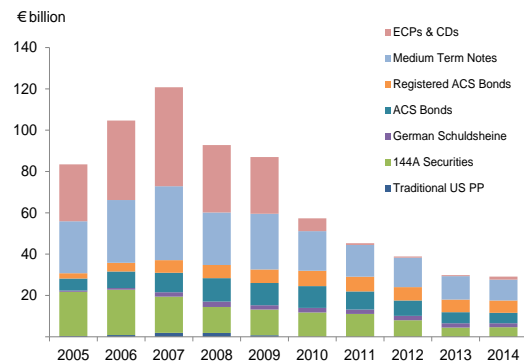


Source: Survey dataset and authors own calculations

Note:(i) Just three foreign-owned credit institutions accounted for close to 90 per cent of the total for the IFSC Banks cohort in each year.

Finally, the data presented here indicates that short-term instruments, generally commercial paper and certificates of deposit, were amongst the predominant instruments in use. These accounted for €48 billion (or 40 per cent) of the total by 2007. The use of short-term instruments diminished significantly over the latter years, falling to €1.5 billion in 2014. Investors were not prepared to roll-over and the banks were required to repay the funds. Similarly, the use of medium-term notes was also reduced sharply, falling by €25 billion (or 70 per cent) by 2014. By contrast, bilateral loans remained relatively constant (in absolute terms) and increased as a proportion of the total (Figure 5).

Figure 5: Outstanding Amounts — Broad Typology of Funding Instruments, 2005-2014



Source: Survey dataset and authors own calculations

Note:(i) Certificates of Deposit (CDs) are negotiable time deposits whilst Commercial Paper (CP) is an unsecured source of funds. These are generally classified as short-term money market instruments (or debt securities) for statistical purposes (IMF, 2003).(ii) In some cases, respondents reported under a residual category of other where this primarily related to CP and CDs.

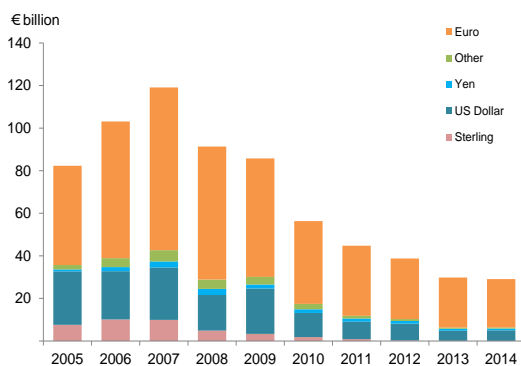
## 4.2 Counterparty by Sector and Geography

There are certain challenges presented by using survey data to comment on the profile of the holders of these private placement debt securities. Specifically, first counterparty only data was generally available to respondent banks in many cases. The use of such data would create a misleading and incomplete profile of counterparties. Indeed, it would likely indicate that most holders were credit institutions resident in the City of London but the latter are generally not the ultimate holders of these debt securities.

One possible option is to consider the currency of denomination of the securities issued (Chart 6). The majority of the private placements issued by the Irish banking system were

euro-denominated which might suggest that the majority of the holders are within the euro area (EA). In 2005, the share attributable to non-euro-denominated instruments stood at 44 per cent. This has fallen over time and stood at just 22 per cent by 2014. This was matched by a steep rise in the share of euro-denominated instruments, even as the total quantum of debt fell.

Figure 6: Private Placements by Nominal Currency, 2005-2014



Source: Survey dataset and authors own calculations

Commenting on the currency composition of cross-border liabilities, Avdjiev et al (2015) had noted that positions in currencies other than the five major currencies have been growing steadily over the past decade. This is clearly not applicable to the particular instruments examined here. The share attributable to these other currencies fell from 4 per cent to 2 per cent between 2007 and 2014.

Another approach is to generate estimates using SHS micro-data. SHS are new data

that have been collected by the ESCB since 2014<sup>13</sup>. This granular information on holdings of individual securities allowed us to identify the holders, by sector and country, of the private placement debt securities outstanding at end-2014.

Of the private placement debt securities reported as outstanding at end-2014, approximately 67 per cent were matched to the SHS database. The value of the matched securities was €19.5 billion<sup>14</sup>. This process provided us with granular data on the sector and country of residence of the holders of each bond at that date.

Based on the sample used, our results indicate that the non-bank sector including investment funds (IF), money-market funds (MMF) and others came to hold up to 78 per cent of these outstanding debt securities (by value) at end-2014<sup>15</sup>. EA investment funds are estimated to have held 16 per cent of the total by Q4 2014. Money-market funds are also estimated to have held a large portion, at 13 per cent. Other EA financial corporations accounted for a further 12 per cent. This is broadly consistent with Avdjiev et al (2015) where the latter found that many banks have come to rely heavily on wholesale or non-deposit sources of funding, often from non-bank financial intermediaries about whom information is sparse.

<sup>13</sup>The SHS time-series commenced from Q4 2013 and it is not possible to use this source to estimate counterparty profiles across the entire period examined here.

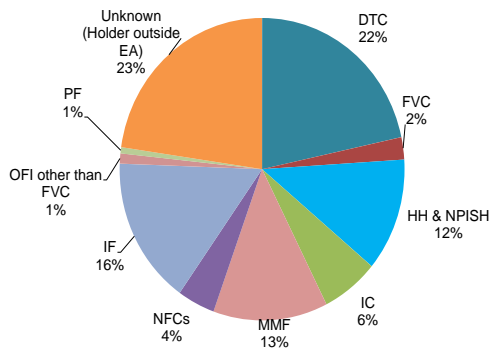
<sup>14</sup>In volume terms, this equated to approximately 50 per cent of the total at end-2014. Incidence of unmatched securities may arise for a number of reasons including, (i) the applicable standard identification number for a given bond (i.e. ISIN, CUSIP, etc.) was not reported to the authors such that we could not identify this bond on the Securities Holdings Statistics Database (SHSDB); and (ii) the bond was held by a non-EA entity whose holdings are not captured on the SHSDB.

<sup>15</sup>The available data does not allow us to comment definitively as to whether these were the original investors in all cases or whether said securities were subsequently traded on a secondary market.



EA households and non-profit entities (HH & NPISH) held 12 per cent whilst credit institutions (DTC) held 22 per cent. Non-EA investors, not identifiable by sector, held a significant proportion at 23 per cent (Figure 7).

Figure 7: Estimated Profile of Private Placement Bond Holders by Sector, Q4 2014



Source: Securities holdings statistics database

Notes:(i) Results relate only to a matched sample of debt securities (with an ISIN) and are presented for indicative purposes only. (ii) Direct reporting of holdings by the Insurance Corporations (IC) and Pension Funds (PF) sectors was not mandatory as at Q4 2014. (iii) OFIs are Other Financial Intermediaries and FVCs are Financial Vehicle Corporations.

EA holders accounted for €13.9 billion of the total amount outstanding at end-2014 (or 71 per cent). German and French residents were estimated to have held the largest proportion outstanding at 31 per cent and 19 per cent, respectively. Other significant holders included UK (9 per cent), US (6 per cent), Ireland (5 per cent) and Belgium (4 per cent). The rest of the world (excluding the EA, US, UK and Japan) accounted for 10 per cent (Figure 8).

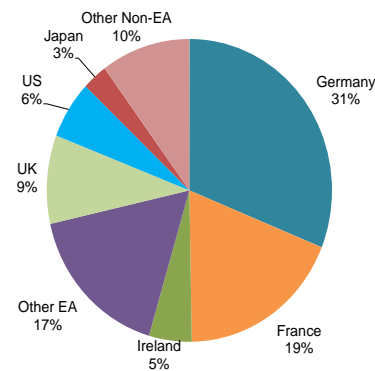
A number of issues may complicate the interpretation of the estimated holdings attributable to German-residents by late-2014.

<sup>16</sup>Indeed, recent reports indicate that FMS Wertmanagement has been undertaking buybacks for bonds issued by Depfa Bank plc. over recent years (Hancock, 2016).

Firstly, the financial support measures established by the German authorities during the financial crisis may play a role here as a large portion of the balance sheet liabilities of Irish-resident banking subsidiaries within the German HRE Group were transferred to a German-resident resolution vehicle in 2010 (Coates et al, 2015).

Secondly, an analysis of the sample of securities used here suggests that a significant proportion of those securities originally issued to US investors by the aforementioned Irish-resident banking subsidiaries were actually held by German-residents by 2014<sup>16</sup>.

Figure 8: Estimated Profile of Private Placement Bond Holders by Country, Q4 2014



Source: Securities holdings statistics database

Note:(i) Results relate only to a matched sample of debt securities (with an ISIN) and are presented for indicative purposes only.

### 4.3 Estimated Costs and Maturities of Funding

Finally, we sought to better understand the characteristics of individual securities covered here. By comparing the privately placed instruments to the common ESCB database of securities issuance<sup>17</sup>, we endeavoured to further identify a number of instrument-specific characteristics and any notable variations between private and publicly-issued bonds.

The private placements considered here were less likely to have a fixed coupon<sup>18</sup> (20 per cent) than those public bonds issued by Irish-resident credit institutions (41 per cent). Based upon the matched private placement instruments, these are more likely to have a floating rate (49 per cent) or zero rate (18 per cent) coupon than are the comparable public bonds. Furthermore, private placements are more likely to have an annual coupon frequency (42 per cent) than public bonds (36 per cent).

In the case of both private and public instruments, a significant majority of these securities were long-term issues, albeit that short-term instruments were still more prevalent among private placement bonds (10 per cent) than the comparable public bonds (2 per cent). Private placements, however, are estimated to have a longer average original maturity<sup>19</sup> (13 years).

Our findings indicate that the weighted average coupon rate for private placements was lower than for other issuance for the sur-

veyed credit institutions, albeit that the private placement instruments were slightly more likely to have been issued post-2013 and to include short-term securities.

## 5 Conclusions

This Letter provides information on a significant source of funding for Irish banks and therefore addresses a gap in the published statistics. Private placements are a sub-set of total bond issuance. These debt securities (or bonds) are arranged privately between an issuer and an investor. This research confirms privately placed instruments role in the wholesale funding profile of Irish-resident banks over the survey period 2005 to 2014.

We estimate that private placement activity peaked in 2007 at approximately €121 billion (or 14 per cent) of total balance sheet liabilities<sup>20</sup>. This had fallen to €29 billion by end-2014. Domestic market and IFSC banks had comparable levels of these instruments in 2007. By 2014, however, the latter institutions were the predominant players.

It is estimated that up to 62 per cent of these particular instruments were held by other financial sector entities at end-2014; investment funds and money-market funds were the prevalent holders. In geographical terms, German and French residents are estimated to be the largest EA holders, but interestingly, non-EA holders held more than one-quarter of the total.

<sup>17</sup>This common database, jointly administered by the ESCB, contains information on securities with an ISIN (a unique securities identifier). With a small number of exceptions, we were able to match those private placement bonds with an ISIN (and an amount outstanding at end-2014) to this database. We examined public bonds issued by the same credit institutions covered by this research using this database also in order to draw out any comparisons.

<sup>18</sup>This differs to previous findings with regard to the non-financial corporations (NFC) sector.

<sup>19</sup>This is notwithstanding the incidence of early redemptions.

<sup>20</sup>This is a proxy for the overall banking system in Ireland and the results relate specifically to those surveyed banks which confirmed that they availed of this source of wholesale funds.

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