

# Financial Stability Notes

# The SME-lender relationship network in Ireland

Edward Gaffney and Niall McGeever

Vol. 2022, No. 14

# The SME-lender relationship network in Ireland

# Edward Gaffney and Niall McGeever

### Central Bank of Ireland

#### **Abstract**

In this *Note*, we examine the relationship between non-bank lenders and Irish small and medium enterprises (SMEs). We review the relevance of non-bank lending to financial stability. We then describe the SME-lender relationship network in Ireland. We find that 36 per cent of SME company borrowers owe money to a non-bank lender, with 15 per cent borrowing exclusively from non-banks and 21 per cent borrowing from both banks and non-banks. We also show that 71 per cent of borrowers have only one lender. Finally, we characterise the firms that rely on non-bank lenders for credit. We find that SMEs that borrow from non-banks are younger, less liquid, and have higher leverage than SMEs that borrow from banks.

## 1 Introduction

Non-bank lenders play a significant role in the financing of small Irish businesses. Prior work has estimated that approximately 30 per cent of new lending to non-real estate Irish small and medium enterprises (SMEs) between 2019 and 2021 was originated by non-banks. The real estate sector in particular stands out as a significant non-bank borrower, as 40 per cent of new loan balances to this sector were originated by non-banks (FSR 2022-I; Heffernan et al., 2021). SME survey data show that 25 per cent of new loan applications in late 2021 and early 2022 were made to non-bank lenders. Recent years have also seen a significant increase of non-bank lending in the residential mortgage market in Ireland (Gaffney et al., 2022).

In this Note, we describe the role of non-bank finance in the SME credit market in Ireland, focusing on the relationships between SMEs and bank/non-bank financial service providers. First, we discuss the relevance of non-bank finance to financial stability, in light of domestic and international evidence. Second, we document the structure of the SME-lender relationship network in Ireland. Lastly, we determine the characteristics of non-bank dependent borrowers.

Non-bank lending activity can benefit the real economy in a number of ways, but also brings with it financial stability risks. The benefits include improved access to finance for prospective borrowers that are not being adequately serviced by the banking sector, increased competition and product innovation that leads to better products on offer across the lending market, and the distribution of credit risk across different counterparties and geographies, leading to potential diversification benefits. The financial stability risks are associated with non-bank funding models and credit risk appetite during periods of easy financing conditions.

Turning to the SME-lender relationship network, we show that 36 per cent of Irish SME companies owe money to a non-bank lender. 15 per cent owe money exclusively to non-bank lenders with 21 per cent owing money to both banks and non-banks. Most borrowers have just one lender. 71 per cent of SME borrowers have a relationship with a single lender, with 14 per cent borrowing exclusively from a single non-bank lender.

<sup>&</sup>lt;sup>1</sup> See the March 2022 wave of the Department of Finance's Credit Demand Survey.

Lastly, we look at the charcteristics of companies that borrow from non-banks. Our results show that non-bank borrowers are more vulnerable to shocks, on average, than those that borrow exclusively from banks. We find that non-bank borrowers are less liquid and have higher leverage than bank borrowers. We also show that companies that borrow exclusively from non-banks are significantly younger than those that borrow only from banks. These findings provide suggestive evidence that non-bank borrowers have higher credit risk than bank borrowers.

The remainder of this Note is structured as follows. In Section 2, we discuss the financial stability implications of non-bank lending. In Section 3, we review the role of non-bank finance in Ireland to date. In Section 4, we describe the structure of the SME-lender relationship network in Ireland. In Section 5, we investigate the financial characteristics of non-bank borrowers. We conclude in Section 6.

#### The financial stability implications of non-bank lending 2

Non-bank lending activity can benefit the real economy in a number of ways. First, non-banks can improve accesss to finance to households and firms in situations where the banking sector has reduced credit supply to the economy due lower risk appetite, regulatory limits, or balance sheet impairment. O'Toole et al. (2015), for example, discuss alternative financing channels open to Irish SMEs in the context of post-GFC banking sector impairment. Gopal and Schnabl (2022) also demonstrate that non-bank lenders substantially increased their lending to small businesses in the United States following the 2008 financial crisis, offsetting a retrenchment of bank lending activity. In the absence of this substitution, the real economic effects of the financial crisis may have been substantially higher.

Second, non-bank lenders can promote competition on loan pricing and bring forward product innovation. This may be particularly relevant in jurisdictions where the number of bank lenders is small. In Ireland, there are three bank lenders to small businesses of any significant scale. The presence of non-bank lenders ensures that there is an alternative source of funding available to firms outside of the banking sector. This same dynamic holds in the residential mortgage market, where non-banks in recent years have provided competition on interest rates, cashback offerings, and longer interest rate fixation periods than those offered by banks.

Third, non-banks can potentially play a role in diversifying risk in the financial system across counterparties and geographies. In the event of of a significant systemic risk event, the dispersing of losses across multiple lenders operating in Ireland and abroad may reduce the probability of a financial crisis and severe associated real economy effects. This may be more satisfactory than if all losses were solely borne by a concentrated domestic banking sector.

Despite these benefits, the funding structure and lending activity of non-banks have the potential to heighten financial stability risks.<sup>2</sup> There are two primary channels through which this may happen. First, the funding of non-bank lenders is typically sourced from capital markets. This can generate pro-cyclical lending activity, where new lending volumes are very responsive to positive or negative market sentiment. This funding model can generate periods of excessive lending or extreme retrenchment, with real impacts on business investment and employment. Ben-David et al. (2021) and Fleckenstein et al. (2021) document striking volatility in non-banking funding during periods of market stress in the SME fintech and large corporate syndicated loan markets, respectively. Where non-bank lenders are reliant on cross-border funding, there may be further

<sup>&</sup>lt;sup>2</sup> See Gaffney et al. (2022) for further discussion of these risks in the Irish context.

pressure from investors retrenching from foreign markets during crises (Caballero and Simsek, 2020). The non-bank funding model contrasts with the relatively dependenable and deposit funding of banks, underpinned by institutions such as deposit guarantees and expectations of official support during liquidity crises.

Second, the risk appetite of non-bank lenders may be structurally higher than that of bank lenders or may grow excessively during periods of buoyant capital market conditions. Cheap funding and low yields on alternative investments may incentivise greater risk-taking through the origination of loans to businesses with weaker creditworthiness. Non-bank lenders to businesses are generally not subject to micro- or macro-prudential regulations that might temper their risk-taking during buoyant market conditions. This may result in relatively weak firms taking on more leverage than in a counterfactual world where only regulated entities originate loans. There is evidence of this dynamic in the international literature. Chernenko et al. (2022), for example, report that less profitable and more indebted companies are significantly more likely to borrow from non-banks. The adoption of weaker credit standards by non-banks may also incentivise banks to compete on this margin, to the extent possible within regulatory limits.

#### 3 Non-bank lending in Ireland

Non-bank lenders play a significant role in the financing of Irish SMEs.<sup>3</sup> Approximately 30 per cent of new loan balances to non-real estate borrowers were originated by non-bank lenders between 2019 and 2021 (FSR 2022-I; Heffernan et al., 2021). This calculation is made on the basis of data from the Central Credit Register, statistical returns made by banks to the Central Bank of Ireland, and corporate registry filings. Real estate stands out as the heaviest borrowing sector from nonbank lenders in euro amounts and as a share of sectoral borrowing, with 40 per cent of new lending to this sector coming from non-banks. Other major sectors with high non-bank shares include Wholesale & Retail and Profession and Administrative Services, while Accommodation & Food and Manufacturing have relatively light non-bank borrowings. Survey evidence also shows that a quarter of SME credit applications in the six months to March 2022 were made to non-banks.<sup>4</sup>

Peer-to-peer (P2P) lending platforms also operate in Ireland. This activity is not captured on the Central Credit Register and so has not been considered to date in estimates of the scale of non-bank lending to Irish businesses. P2P platforms allow individual investors to participate in loans to businesses that list themselves as in search of credit.<sup>5</sup> The scale of this lending activity appears modest relative to other non-bank lending involving more traditional products like leasing and invoice finance. We estimate that new lending to businesses facilitated by P2P platforms in Ireland was approximately €130m in 2021. We base this estimate on the public statements of LinkedFinance (€100m), Flender (€10m), GridFinance (€10m), and PropertyBridges (€10m)<sup>6</sup>. This compares to annual new SME lending of approximately €1.8bn by other non-bank lenders (FSR 2022-I; Heffernan et al., 2021). While they have grown over recent years, P2P platforms still represent a very small share of the business credit market in Ireland.

Households in Ireland have increased their levels of borrowing from non-bank lenders over recent years. Gaffney et al. (2022) study the role of non-bank lending in the residential mortgage market

<sup>&</sup>lt;sup>3</sup> See Cima et al. (2019) and Lane and Moloney (2018) for a wider discussion of non-bank activity in Ireland.

<sup>&</sup>lt;sup>4</sup> See the March 2022 wave of the Department of Finance's Credit Demand Survey.

<sup>&</sup>lt;sup>5</sup> P2P lending differs from crowdfunding in that investors are financial creditors, rather than shareholders.

<sup>6</sup> See the lending volumes released by LinkedFinance, Flender, Grid Finance, and Property Bridges.

in Ireland. They estimate that non-banks grew their market share of new lending from 3 per cent in 2018 to 13 per cent in 2021. They also find that the characteristics of bank and non-bank mortgage borrowers are rather similar. Interestingly, non-bank mortgage lenders have responded to the deterioration in captital market sentiment in 2022 by repricing their products quite quickly and in some cases significantly tightening credit standards. This demonstrates the speed at which capital market sentiment and tighter financing conditions can pass through to the retail product offering of non-bank lenders. Irish banks, given their access to stable and low-cost deposit funding, have been much slower to respond to market developments and monetary policy tightening.

It is also worth noting that non-bank lending is not a new phenomenon in Ireland, despite its very recent growth in the residential mortgage market. Non-banks have been engaged in business and consumer credit lending since the early twentieth century at the latest. It is difficult in the absence of comprehensive credit registry data to measure this lending activity over time, but we can get some sense of its scale from historical and academic sources. In 1946, for example, the Minister for Industry and Commerce stated that "hire-purchase facilities encourage commercial and industrial expansion, particularly by smaller concerns."8 Hoare (1969) lists 30 unique hire purchase finance companies active in Ireland and 19 "industrial bankers". Systematic studies of the business credit market emerged over time, particularly relating to agriculture. O'Neill (1967) uses farm-level survey data to estimate that non-bank hire purchase lenders tied to machinery and equipment purchase made up between 5 and 9 per cent of new agricultural lending by balance and 20 per cent by loan count between 1962 and 1966. A state-sponsored agricultural lender - the Agricultural Credit Corporation - is estimated to have provided between 5 and 13 per cent of new loan balances, with the remaining 77 to 90 per cent originated by commercial banks. Grant and MacNamara (1996) emphasise the continued relevance of agricultural non-bank lenders into the 1990s.

#### 4 The SME borrower-lender relationship network

In this section, we examine the structure of the SME borrower-lender relationship network in Ireland.

Small business borrowers are diverse in their legal form. We limit our analysis to companies registered under general company law (i.e., "the Companies Acts"). We are thus not taking into consideration sole traders, partnerships, or alternative corporation types such as Industrial and Provident Societies, Friendly Societies, or statutory companies.

Table 1 provides a count of company borrowers by the nature of their relationship with lenders. 63 per cent of borrowers owe money to banks exclusively, 21 per cent have borrowings from a mix of banks and non-banks, and 15 per cent owe money to non-banks only.<sup>10</sup>

Table 1: SME borrower count by borrower-lender relationship status

	Borrower count	Bank only	Mix	Non-bank only
All companies	95,872	60,734 (63.3%)	20,400 (21.3%)	14,698 (15.3%)

Source: Central Credit Register; Companies Registration Office

Notes: The number of Irish SME company borrowers by borrower-lender relationship status as of May 2022. "Companies" refer to corporations registered under the Companies Acts.

<sup>&</sup>lt;sup>7</sup> See coverage of non-bank interest rate rises and the tighter credit standards.

<sup>&</sup>lt;sup>8</sup> See the Oireachtas debate on the Hire-Purchase Bill 1946.

<sup>&</sup>lt;sup>9</sup> The range of values shown stem from differences in figures produced from aggregate credit data and farmlevel survey responses. See also Gilmore (1959) for early work on Irish farm finances.

<sup>&</sup>lt;sup>10</sup> Statistics on "banks" cover all banks, credit unions and non-bank subsidiaries of Irish-resident banks. Several banks are subsidiaries of non-bank parents, most notably vehicle manufacturers.

Small business borrowers in Ireland generally have one lending relationship. Table 2 presents the count of borrowers by the number of lender relationships they have and the nature of these relationships. 68,498 of company borrowers – or 71 per cent of the total – have a single lender. Single-lender borrowers are very likely to have this relationship with a bank, though approximately a fifth of borrowers have a single relationship with a non-bank lender.

Table 2: The SME borrower-lender relationship network

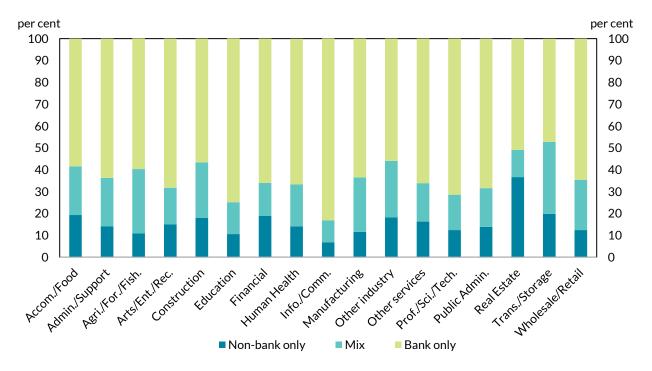
Relationships	Borrower count	% Bank only	% Mix	% Non-bank only
1	68,498	80.5		19.5
2	17,411	28.7	64.8	6.5
3	6,033	8.5	88.8	2.7
4	2,269	2.1	95.9	2.0
5+	1,661	0.2	98.3	1.6
-	95,872	63.3	21.3	15.3

Source: Central Credit Register

Notes: The number of Irish SME borrowers by their number of lending relationships and borrower-lender relationship status as of May 2022.

The reliance of firms on non-banks varies moderately across sector. Figure 1 shows the share of companies that borrow only from non-banks, from a mix of banks and non-banks, and only from banks by sector. Real estate stands out as the sector most reliant on non-bank funding, with 37 per cent of borrowers in this sector borrowing exclusively from non-banks. This is consistent with previously published figures showing that real estate as the sector with the largest amount of loan balances owed to non-banks (Heffernan et al., 2021). 18 to 20 per cent of companies in the Transportation & Storage, Accommodation & Food, Construction, and Other Industry (defined as NACE sectors B, D, and E) sectors borrow solely from non-banks. The remaining sectors have nonbank-only shares of 8 to 16 per cent, with Information & Communication, Agriculture, Forestry & Fishing, and Education having the lowest shares.

Figure 1: The share of SME company borrowers by relationship type and sector



Source: Central Credit Register; Companies Registration Office

The share of companies with any non-bank relationship is highest in the Transportation & Storage, Real Estate, Construction, and Other Industry sectors at between 40 to 50 per cent. However, there is a substantial share of companies with a mix of bank and non-bank lending in the Accommodation & Food, Agriculture, Forestry & Fishing, and Wholesale & Retail sectors. The Information & Communication, Education, Professional, Scientific & Technical, and Arts, Entertainment & Recreation sectors have the highest bank-only relationship shares at 68 to 83 per cent.

# 5 The financial characteristics of non-bank borrowers

Lastly, we determine the characteristics of non-bank borrowers. We do this by merging the credit data on company borrowers from the CCR with annual financial accounts data provided by Dun & Bradstreet. We link the two datasets using CRO identifier numbers and are thus able to observe balance sheet information on each company borrower.

Non-bank-only borrowers are generally similar in size to bank-only borrowers, but borrowers with a mix of bank and non-bank borrowings are substantially larger than either of these groups. Figure 2 shows the distribution of company size – defined as the natural log of total assets – for each group. The bank-only and non-bank-only distributions track each other closely, with a median company size of approximately  $\[ \le 250,000 \]$  (i.e.,  $\[ e^{12.43} \]$ ). However, the median size of borrowers with a mix of bank and non-bank lenders is more than double this at  $\[ \le 535,000 \]$ . This is driven by a positive and monotonic relationship between median company size and number of lending relationships and the fact that the mixed lender group is dominant among multi-lender borrowers (see Table 2).

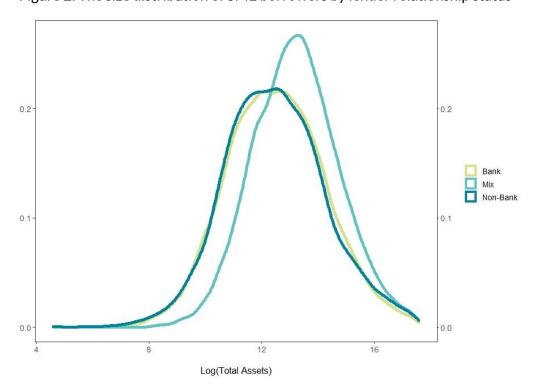


Figure 2: The size distribution of SME borrowers by lender relationship status

<sup>&</sup>lt;sup>11</sup> We take the natural log of total assets to accommodate the high level of skewness evident in company size distributions. See Cabral and Mata (2003).

Non-bank borrowers are younger than companies that borrow from banks. The median age (years since incorporation) of non-bank-only borrowers is 9.5. This compares with 13.8 years for bankonly borrowers and 13.5 for those with a mix of bank and non-bank borrowings.

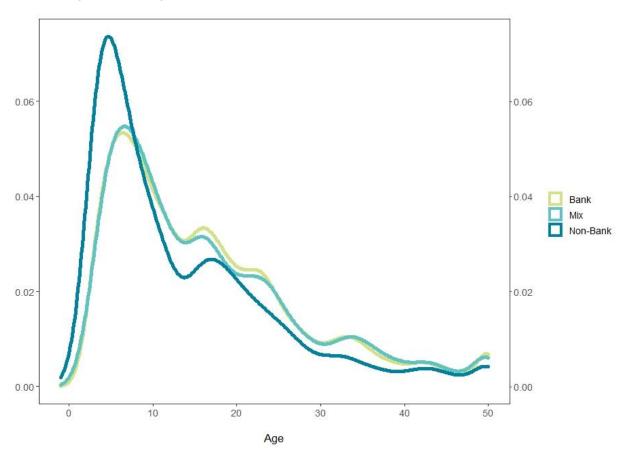


Figure 3: The age distribution of SME borrowers by lender relationship status

Non-bank borrowers are less liquid than bank borrowers. Figure 4 shows the distribution of liquidity ratios - defined as current assets over current liabilities - for each of our three lender relationship groups. The higher this ratio, the more likely firms will be able to meet their upcoming liabilities using liquid assets such as cash and cash equivalents or relatively liquid assets like stock or debtor repayments. Companies that borrow only from banks have a median liquidity ratio of 1.7, compared with 1.3 for those that borrow from non-banks. Borrowers with a mix of both financing types are more liquid than those relying on either.

Lastly, we show that non-bank borrowers have higher leverage than bank borrowers. Figure 5 presents the distribution of borrower leverage- defined as total liabilities over total assets - for our three lender relationship groups. The higher this ratio, the more indebted the borrower is and the lower the expected return to junior creditors becomes if the company were to be liquidated. Bank-only borrowers have a lower median leverage ratio of 0.51, compared with 0.62 for nonbank borrowers. This suggests that riskier borrowers are more likely to be in receipt of non-bank credit. Our results are consistent with the findings of Chernenko et al. (2022), who show that more indebted US companies are more likely to borrow from non-banks.

Figure 4: The liquidity distribution of SME borrowers by lender relationship status

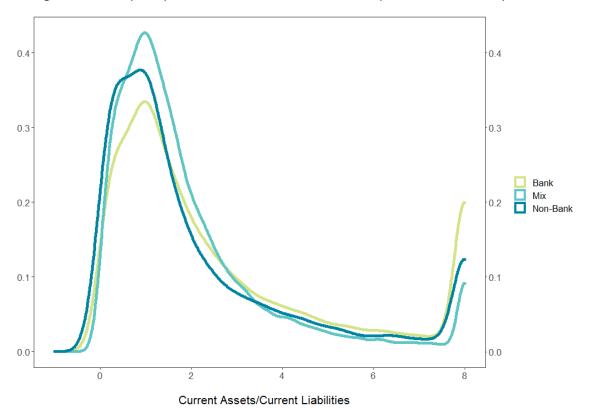
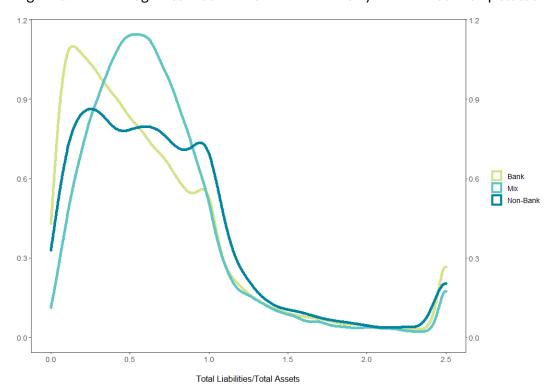


Figure 5: The leverage distribution of SME borrowers by lender relationship status



#### **Conclusion** 6

In this Note, we examine the role of non-bank finance in the SME credit market in Ireland. We describe the benefits that non-bank finance can provide to the real economy, and the financial stability risks that this activity can entail. We highlight two primary channels through which nonbank lending can raise financial stability risks. First, the funding structure of non-banks can be sensitive to capital market sentiment and result in pro-cyclical lending behaviour. This contrasts with relatively stable deposit funding of banks. Second, the less stringent regulation of non-bank lending to businesses means that the credit risk appetite of non-bank lenders is relatively unchecked. This has the potential to facilitate higher levels of lending to more marginal, less creditworthy borrowers during periods of easy financing conditions, such as those experienced globally in the years preceding 2022.

We make use of detail credit registry data to describe the SME-lender relationship network in Ireland. We show that 71 per cent of borrowers have a single lender relationship. We further show that 63 per cent of SME borrowers owe money to banks exclusively, 21 per cent have borrowings from a mix of banks and non-banks, and 15 per cent owe money to non-banks only.

Lastly, we find indicative evidence that non-bank borrowers are less creditworthy than bank borrowers. This is based on results showing that those companies that borrow from non-banks are younger, less liquid, and have higher leverage than those with a bank lending relationship.

## References

Ben-David, Itzhak, Mark J. Johnson, and René M. Stulz, 2021, Why did small business fintech lending dry up in March 2020?, working paper, The Ohio State University.

Caballero, Ricardo J. and Alp Simsek, 2020, A model of fickle capital flows and retrenchment, Journal of Political Economy 128, 2288-2328.

Cabral, Luís M.B., José Mata, 2003, On the evolution of the firm size distribution: Facts and theory, American Economic Review 93, 1075-1090.

Chernenko, Sergey, Isil Erel, and Robert Prilmeier, 2022, Why do firms borrow directly from nonbanks?, Review of Financial Studies 35, 4902-4947.

Cima, Simone, Neill Killeen, and Vasileios Madouros, 2019, Mapping market-based finance in Ireland, Financial Stability Note No. 17, Central Bank of Ireland.

Gaffney, Edward, Christina Hennessy, and Fergal McCann, 2022, Non-bank mortgage lending in Ireland: Recent developments and macroprudential considerations, Financial Stability Note 3, Central Bank of Ireland.

Gilmore, F.W., 1959, A survey of agricultural credit in Ireland, Stationery Office, Dublin.

Gopal, Manasa and Philipp Schnabl, 2022, The rise of finance companies and FinTech lenders in small business lending, Review of Financial Studies 35, 4859-4901.

Grant, Wyn and Anne MacNamara, 1996, The relationship between bankers and farmers: An analysis of Britain and Ireland, Journal of Rural Studies 12, 427-437.

Hoare, Thomas F., 1969, Nature and functions of an Irish money market, Journal of the statistical and social inquiry society of Ireland, 32 (2), 1-27.

Heffernan, Tiernan, Barra McCarthy, Rory McElligott, and Conall Scollard, 2021, The role of nonbank lenders in financing Irish SMEs, Behind the Data, Central Bank of Ireland.

Lane, Philip R. and Kitty Moloney, 2018, Market-based finance: Ireland as a host for international financial intermediation, Banque de France Financial Stability Review 22, 63-72.

O'Neill, F.K., 1967, A study of credit practices of a group of Irish farmers, Irish Journal of Agricultural Economics and Rural Sociology 1, 41-52.

O'Toole, Conor, Martina Lawless, and Derek Lambert, 2015, Non-bank financing in Ireland: A comparative perspective, Economic and Social Review 46, 133-161.

# **Appendix**

Table A1: Summary statistics of company characteristics by non-bank borrower status

	Liquidity							
_	p10	p25	Median	p75	p90	Mean		
Bank only	0.35	0.87	1.70	3.74	8.39	3.96		
Mix	0.35	0.76	1.36	2.38	4.26	2.22		
Non-bank only	0.23	0.63	1.29	2.87	6.39	3.10		
·			Lever	age				
_	p10	p25	Median	p75	p90	Mean		
Bank only	0.10	0.24	0.51	0.87	1.32	0.68		
Mix	0.22	0.38	0.60	0.85	1.17	0.70		
Non-bank only	0.14	0.31	0.63	0.98	1.38	0.76		
_	Size							
	p10	p25	Median	p75	p90	Mean		
Bank only	29,511	78,785	261,580	874,843	2,619,785	1,218,220		
Mix	79,375	190,845	535,571	1,478,525	4,007,289	1,752,398		
Non-bank only	30,172	75,453	244,000	815,222	2,694,548	1,319,411		
	Age							
	p10	p25	Median	p75	p90	Mean		
Bank only	4.7	7.5	13.8	22.5	33.4	16.7		
Mix	4.7	7.4	13.5	22.7	34.0	16.7		
Non-bank only	3.4	5.0	9.5	18.9	28.4	13.6		

T: +353 (0)1 224 6000 www.centralbank.ie publications@centralbank.ie Bosca PO 559, Baile Átha Cliath 1, Éire PO Box 559, Dublin 1, Ireland

