

SME Market Report

2019

SME Market Report 2019

Published April 2019 and released annually.¹

The Central Bank of Ireland's SME Market Report aims to provide a timely monitor of developments in the provision of credit to Irish Small and Medium Enterprises (SMEs) by financial intermediaries. The report draws on a range of internal and external data sources. The content is structured around key aspects of SME lending, covering developments in (1) the amount of credit, (2) credit demand, purpose and investment financing, (3) credit supply and cost and (4) loan performance.

Overview



(☐) €15.5 billion

Credit outstanding to non-financial, non-real estate SMEs in Q4 2018

Gross new lending declined 1.7 per cent in the year to 2018 Q4, driven by 'Manufacturing', 'Wholesale, Retail, Trade and Repairs' and 'Primary Industries', with increases elsewhere.



90.3%

New lending market share among the top three lenders in Q4 2018

Market share among the top three banks is high and concentration in the flow of new lending has stabilised since Q2 2016.



20%

Application rate for bank finance among SMEs in September 2018

Credit demand remains low compared to previous years. A large majority of Micro, Small and Medium firms finance investment from internal funds.



8.5%

Share of SMEs applying for credit for working capital in September 2018

Working capital remains the most common reason for credit applications among Micro and Small firms, whereas credit for growth & expansion is more common among Medium firms.

15%

SME bank finance rejection rates in September 2018

Rejection rates on loan/overdraft applications in Ireland have declined and converged to euro area averages. For micro firms, rejection rates for bank finance remain above those of larger firms.

5.7%

Interest rate for Non-financial Corporation loans of less than €0.25 million in January 2019

Interest rates on similar loans are on average 2.5 per cent in other parts of Europe.



The share of SME loans in default weighted by loan size, as of 2018 Q2

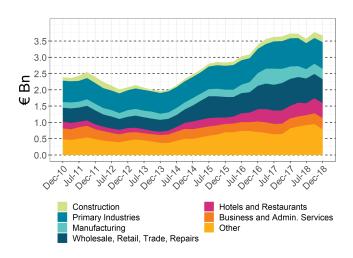
SME default rates have declined from 19.8 per cent in December 2017. SME transitions into default over the period December 2017 to June 2018 were 2 per cent.

Box 1 reviews developments in firm employment over the last decade illustrating that SMEs experienced larger declines in persons engaged than larger firms during the crisis. Box 2 compares SME default rates across Europe finding that the SME default rate for Ireland remains high in the EU context despite large declines.

¹Enquiries and comments relating to this document should be addressed to: Macro-Financial Division,

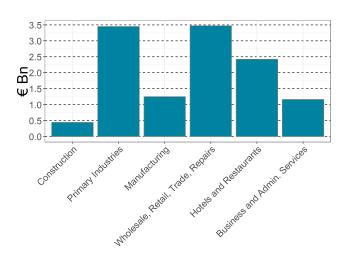
1 New and outstanding lending

Figure 1 | Gross new SME lending by sector (4 quarter rolling summation, by quarter), Q4 2010 -Q4 2018



Source: Central Bank of Ireland Credit, Money and Banking Statistics

Figure 2 | Credit outstanding to SMEs by sector, Q4 2018



Source: Central Bank of Ireland Credit, Money and Banking Statistics

Gross new SME lending for non-financial non-real estate sectors decreased slightly contracting in some sectors and growing in others.

Figure 1 presents annual gross new lending for six non-financial non-real estate sectors.2 Annual new lending decreased by 1.7 per cent in Q4 2018.³ Annual decreases occurred in some sectors. namely Manufacturing (-15.9 per cent), Wholesale, Retail, Trade and Repairs (-12.1 per cent) and Primary Industries (-4.5 per cent) with increases in Construction (34.5 per cent), Hotels and Restaurants (19.6 per cent) and Business and Administration (11 per cent).4

The largest amount of credit outstanding to SMEs is in the Wholesale, Retail, Trade and **Repairs and Primary Industries** sectors.

As of Q4 2018, total non-financial, non-real estate outstanding credit was €15.5 billion. Figure 2 presents the value of outstanding credit to SMEs for six key SME sectors. Outstanding credit was largest in the Wholesale, Retail, Trade and Repairs sector (€3.5 billion), above that of Primary Industries (€3.4 billion) or Hotels and Restaurants (€2.4 billion).

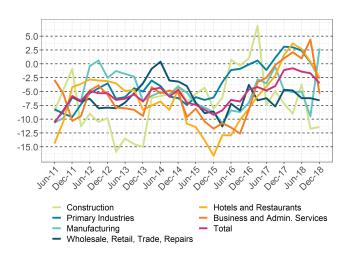
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²Gross new lending is defined as the "amount of new credit facilities drawn-down during the quarter by SME counterparties, i.e. where this credit facility was not part of the outstanding amount of credit advanced at the end of the previous quarter" excluding renegotiations. Construction is included to retain lending for economic activity in that sector but real estate is excluded to remove property development and investment.

³The equivalent annual decrease excluding construction was -3.2 per cent and without summation over 4 quarters becomes -11.3 per cent.

⁴Primary Industries is primarily composed of the sub sectors Agriculture, Forestry and Fishing.

Figure 3 | Annual net SME credit growth by sector, Q3 2011 - Q4 2018



Source: Central Bank of Ireland Credit, Money and Banking Statistics

Figure 4 | Gross new lending to NFCs (loans up to and including €1 million) as a proportion of domestic demand, Q1 2003 - Q3 2018



Source: ECB Monetary and Financial Statistics and Central Statistics Office

Annual net growth in SME credit has declined broadly with the exception of the Manufacturing sector.

Figure 3 presents annual growth rates for SME credit in six key sectors. As of Q4 2018, negative annual credit growth was recorded in most sectors and declined 3.5 per cent for total non-financial non-real estate lending.⁵ The largest decline by sector occurred in the Construction sector (-11.4 per cent). Positive annual growth in credit occurred only in the Manufacturing sector (2.8 per cent).

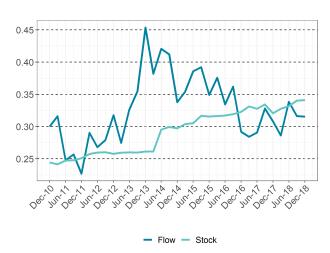
Gross new lending relative to domestic activity remains lower in Ireland than elsewhere in the euro area.

To understand gross new lending growth in the context of economic activity, Figure 4 presents the ratio of NFC lending to domestic demand. The latest ratio for Ireland (1.7 per cent in Q3 2018) remains below both EA1 countries (5.2 per cent) and EA2 countries (12.3 per cent). Other Member States with ratios less than 5 per cent include Austria (3.3 per cent), Finland (3.9 per cent), France (4.3 per cent) and Germany (4.6 per cent).6

⁵The equivalent annual net growth rate excluding construction is -3.2 per cent

⁶Ireland is compared to two groups of countries: EA1 countries which comprises of Austria, Belgium, Germany, Finland, The Netherlands and France, and EA2 countries which comprises of Portugal, Italy, Spain and Greece. In this data, EA1 excludes the Netherlands and EA2 countries excludes Greece due to missing data. Lending volumes are for 'new business' lending to NFCs. This data excludes revolving loans and overdrafts, convenience and extended credit card debt. 'New business' is defined as any new agreement between the customer and the credit institution. This agreement covers all financial contracts that specify, for the first time, the interest rate of the loan, including any renegotiation of existing loans. Lending flow data are for loans on amounts up to and including €1 million as a proxy of SME lending. Lending data for loans on amounts up to €0.25 million are not available pre-2010. Euro area (excluding Ireland) quarterly domestic demand data (final consumption expenditure and gross capital formation) are from Eurostat. Irish domestic

Figure 5 | Herfindahl-Hirschman index for non-financial, non-real estate SME lending, Q4 2010 - Q4 2018



Source: Central Bank of Ireland Credit, Money and Banking Statistics

Since Q2 2016, concentration in the flow of new lending has stabilised.

Figure 5 shows that concentration (the Herfindahl-Hirschman index) in the flow of new lending has stabilised since Q2 2016.7 The share of the three largest banks in new lending flows was 90.3 per cent in Q4 2018. Concentration in the stock of lending continues to increase.

demand data are from the Central Statistics Office using a modified measure of domestic demand defined as domestic demand less the effects of trade in aircraft by aircraft leasing companies and the imports of intellectual property. All data are at current market prices and are non-seasonally adjusted. Monthly new lending data are aggregated to quarterly for comparison.

⁷The Herfindahl-Hirschman index measures the concentration of lending 'stocks' (outstanding balance) and 'flows' (gross new lending) for non-financial, non-real estate SME lending of all resident credit institutions. The index is calculated as the sum of the squared market shares. Higher values indicate higher market concentration or lower levels of competition.

Box 1: Irish business demography in crisis and recovery⁸

The economic crisis and recovery has had a profound impact on the Irish SME landscape. In this box, we use enterprise statistics from the CSO to examine trends in employment patterns across enterprise size categories and business sectors through crisis and recovery.

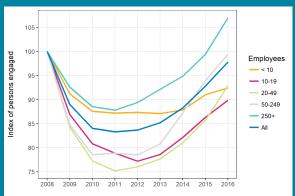
The CSO Business Demography dataset contains annual aggregate statistics on active enterprises in Ireland from 2008 to 2016. The data are based on administrative tax records collected by the Revenue Commissioners but excludes sector A - Agriculture, Forestry and Fishing. ⁹ The dataset includes the number of active enterprises, persons employed, and persons engaged by county, sector, firm size, and legal form.

The number of persons engaged by an enterprise is the primary metric we analyse. This is the sum of formal employees in receipt of a definite wage or salary plus proprietors, their partners, family members, etc. who work regularly in an enterprise, but are not paid a definite wage or salary. This is a more comprehensive measure of employment than a count of formal employees alone and is particularly important when assessing smaller enterprises.

Figure 6 shows indexed time series of persons engaged by enterprise size. The figure shows large declines in persons engaged across all size classes between 2008 and 2011, followed by a substantial recovery from 2012 to 2016. SMEs experienced the largest declines during the crisis period, with persons engaged in enterprises with between 10 and 249 employees declining by over 20 per cent in the three years to 2011. The decline for non-SMEs (greater than 249 employees) was less severe at approximately 12.5 per cent, and this is the only group that has had employment levels surpass pre-2008 levels during the recovery. An important caveat to Figure 6 is the potential for migration of enterprises between size classes over time.

Figure 6: Persons engaged by firm size





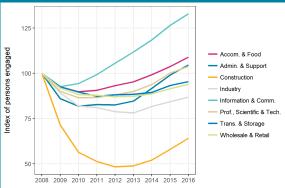


Figure 7 presents indexed time series of persons engaged by Irish SMEs in individual sectors of the business economy. Construction experienced a decline of approximately 50 per cent in persons engaged from 2008 to 2012 and remains substantially below 2008 levels. 10 Enterprises in the Information and Communication sector saw a decline in persons engaged in 2009, followed by large and consistent increases up to 2016. The three sectors Accommodation and Food, Administrative and Support Services, and Professional, Scientific, and Technical Activities all reached and exceeded their 2008 level by 2016. Industry (NACE sectors B-E), Wholesale and Retail Trade, and Transportation and Storage all experienced more modest recoveries from 2014 onwards.

⁸Box authors: Niall McGeever and Eoghan O'Brien.

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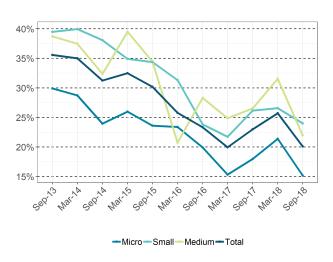
⁹These data relate to enterprises in the business economy (NACE sectors B to N, excluding the activities of holding companies K64.20) and align with the structure of Eurostat business enterprise statistics.

¹⁰The decline has also been documented in Conefrey, T. and McIndoe-Calder, T., (2018) "Where are

2 Credit demand, purpose and investment financing

2.1 Credit demand

Figure 8 | Application rate for bank finance, September 2013 - September 2018

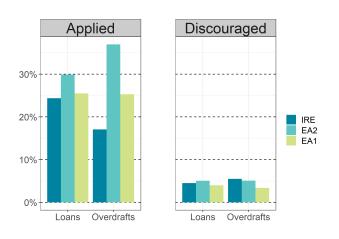


Source: Department of Finance SME Credit Demand Survey

Credit demand has trended down in recent years, across SME sizes.

Figure 8 presents the share of SMEs that applied for any bank finance facility in the Department of Finance SME Credit Demand Survey since September 2013.11 In the latest available survey covering the period April to September 2018, 20.1 per cent of SMEs applied for bank finance, down from 25.7 per cent of SMEs recorded in the previous survey. Demand for financing was most common among Small firms and lowest among Micro firms.

Figure 9 | Application and discouraged borrower | Loan application rates are similar rates for loans and overdrafts, September 2018



Source: ECB/EC Survey on the access to finance of enterprises

to euro area averages but rates for overdrafts are lower. Rates of discouragement for both are similar to euro area averages.

The ECB/EC Survey on the Access to Finance of Enterprises (SAFE) compares loan application rates in Ireland (24.3 per cent) to EA2 (29.9 per cent) and EA1 (25.5 per cent) countries. 12 Lower rates were observed for overdrafts in Ireland (17 per cent). SMEs in Ireland recorded comparable rates of discouraged borrowers (i.e. SMEs that did not apply because of fear of rejection) for loans (4.5 per cent) to both EA2 countries (5.1 per cent) and EA1 countries (4 per cent).

Ireland's Construction Workers?", Quarterly Bulletin 02, page 44-53, Central Bank of Ireland.

 $^{^{11}}$ The survey is conducted twice yearly: October to March (labelled 'March' in this report) and April to September (labelled 'September'). This nationally representative survey collects information on a range of economic and financial factors including firms' demand for credit, their success in applying for credit and their trading performance. 'Micro' firms have 1-9 employees and turnover or balance sheet value up to €2 million. 'Small' firms have 10-49 employees and turnover or balance sheet value up to €10 million. 'Medium' firms have 50-250 employees and turnover up to \in 50 million or a balance sheet value up to \in 43 million.

¹²The survey is conducted twice yearly. The most recent survey covers the period from April 2018 to

Figure 10 | No application for bank loan because The share of firms that did not of sufficient internal funds, September 2014 -September 2018



Source: ECB/EC Survey on the access to finance of enterprises

apply for a bank loan due to sufficient internal funding in Ireland is comparable to EA1 and above EA2.

Figure 10 shows the share of all SMEs reporting they did not apply for bank loans because of sufficient internal funding. As of September 2018, the share of firms reporting sufficient internal funding as the reason they did not apply for a bank loan in Ireland was 46 per cent, slightly below EA1 countries (49.2 per cent) but higher than EA2 countries (40.1 per cent).

2.2 Credit purpose

Figure 11 | Share of SMEs applying for credit by purpose, September 2013 - September 2018



Source: Department of Finance SME Credit Demand Survey

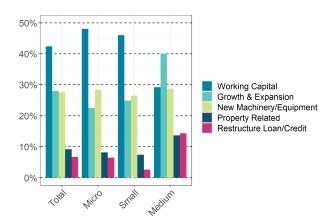
Working capital continues to be the most common reason for credit applications.

Figure 11 illustrates the share of SMEs applying for bank credit by purpose and over time. Working capital was the most common reason for borrowing with 8.5 per cent of firms applying for this type of credit, up from a low of 6.2 in March 2017 but below previous highs. Lower shares of SMEs applied for credit for Growth & Expansion (5.6 per cent) and New Machinery/Equipment (5.5 percent).13

September 2018. Ireland is compared to two groups of countries: EA1 countries which comprises of Austria, Belgium, Germany, Finland, The Netherlands and France, and EA2 countries which comprises of Portugal, Italy, Spain and Greece. Following the the approach taken in the ECB/EC SAFE reports, Figure 9 only includes SMEs which identify bank loans and overdrafts as relevant to their firm.

¹³Growth & Expansion includes new business ventures, acquisition of assets and expansion.

Figure 12 | Purpose of credit application by firm size, September 2018

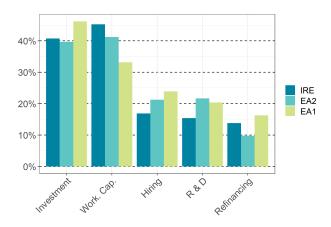


Medium firms most commonly apply for credit for growth & expansion.

Figure 12 illustrates the purpose of SME credit for those SMEs which applied in the latest survey round. Medium firms are notable for applying for a larger share of Growth & Expansion credit (40.1 per cent) than Working Capital (29.2 per cent). Working capital was especially common among Micro firms (48 per cent).

Source: Department of Finance SME Credit Demand Survey

Figure 13 | Purpose of financing, September 2018



Source: ECB/EC Survey on the access to finance of enterprises

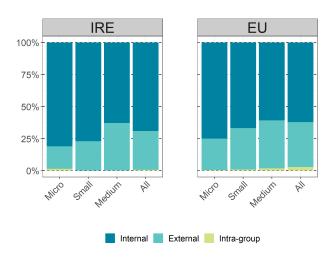
Irish SME borrowing for investment is slightly below EA1 and comparable to EA2 but Irish borrowing for working capital is higher than elsewhere.

For SMEs that used financing in the previous six months, Figure 13 describes the purpose of these funds. 14 While the largest share is accounted for by 'working capital' in Ireland and EA2 countries. 'fixed investment' was the main purpose in EA1 countries. The 'fixed investment' share of financing purposes in Ireland has increased since the last report (from 35.6 per cent to 40.7 per cent) and is now above the EA2 country average of 39.7 per cent but remains below the EA1 country average of 46.2 per cent. Financing for Hiring and R & D in Ireland is below EA2 and EA1 while refinancing in Ireland is higher than in EA2 countries but lower than in EA1 countries.

¹⁴In SAFE, financing refers to "external sources or from funds generated by your enterprise". Financing may be used for multiple purposes so that the total may exceed 100 per cent. Purpose is defined as follows; 'Investment' refers to investment in property, plant, machinery or equipment, 'Work. Cap' refers to inventory or working capital, 'Hiring' refers to hiring and training of employees, 'R & D' refers to developing and launching new products or services and 'Refinancing' refers to refinancing or paying off obligations. The

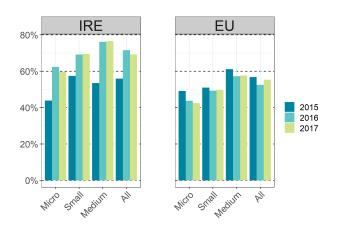
2.3 Investment financing

Figure 14 | Source of investment finance, 2017



Source: EIB Investment Survey

Figure 15 | Share of firms satisfied with relying on internal sources to finance investment firms which did not apply for external financing, 2015-17



Source: EIB Investment Survey

Internal funding of investment activity is more common in Ireland than the EU average, across all firm size classes.

The EIB Investment survey collects indicators to assess investment developments across the EU.¹⁵ Figure 14 demonstrates the share of internal, external and intra-group financing for investment activities in 2017. Irish Micro firms financed 81 per cent of investment activity internally (EU 74.9 per cent), Small firms financed 77 per cent (EU 62.8 per cent) and Medium firms financed 62.8 per cent (EU 60.7 per cent).16

More Irish firms - without applying for external finance - report being satisfied with relying on internal financing of investment than the EU average.

Of firms which did not apply for external financing, the share of firms satisfied with relying exclusively on internal sources of investment financing is shown in Figure 15.¹⁷ In 2017, shares of firms reported to be satisfied with internal sources of investment finance stood at 59.7 per cent of Irish Micro firms (42.5 per cent of EU), 69.5 per cent of Irish Small firms (49.7 per cent of EU) and 76.6 per cent of Irish Medium firms (57.7) per cent of EU).

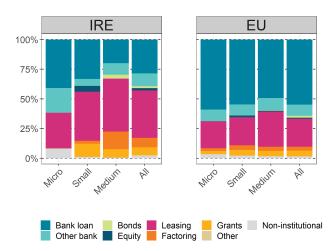
shares presented exclude SMEs who responded with 'don't know' or 'not applicable'.

¹⁵The EIB Investment survey is conducted annually with fieldwork occurring between July and November. Questions relate to the previous financial year such that field work occurring in 2018 refers to the 2017 financial year.

 $^{^{16}}$ Firm size classes in the EIB Investment Survey are defined in terms of the number of employees as follows: Micro (5-9 employees), Small (10-49 employees), Medium (50-249 employees), All (5+ employees, including large firms with 250+ employees).

 $^{^{17}}$ Survey respondents which did not apply for external financing for investment activities and responded that their main reason was that they were satisfied with using internal finance or didn't need the finance.

Figure 16 | Share of type of external finance used for investment activities, 2017



Source: EIB Investment Survey

Irish SMEs are more reliant on leasing and hire purchase for investment activities than the EU average but less reliant on bank loans and other bank credit.

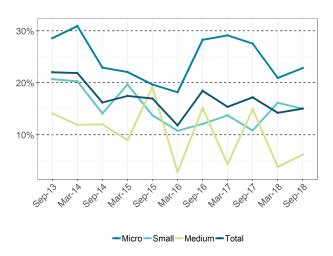
The types of external financing used for investment activities are illustrated in Figure 16.18 Bank loans consisted of 40.8 per cent of Irish Micro firm external finance for investment (59 per for the EU average), 33.2 per cent for Small firms (54.7 per cent EU average) and 19.9 per cent for Medium firms (49.3 per cent EU average). Leasing was the largest share of external investment finance among Irish Medium and Small firms at 44.6 per cent and 41.2 per cent respectively but not among Micro firms (30 per cent).

 $^{^{18}}$ Definitions of financing types are as follows: Bank loan (excluding subsidised bank loans, overdrafts and other credit lines), Other bank (other terms of bank finance including overdrafts and other credit lines), Bonds (newly issued bonds), Equity (newly issued equity including quoted or unquoted shares), Leasing (leasing or hire purchase), Factoring (factoring or invoice discounting), Grants (involving support from public sources), Non-institutional loans (loans from family, friends or business partners) and Other (external financing not represented by the other finance types).

3 Credit access and cost

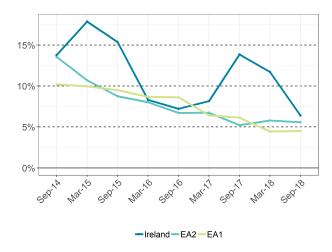
3.1 Credit access

Figure 17 | Bank finance rejection rates by firm size, September 2013 - September 2018



Source: Department of Finance SME Credit Demand Survey

Figure 18 | Rejection rates for loan and/or overdraft applications, September 2014 -September 2018



Following a steady decline from September 2013 to March 2016, bank finance rejection rates have tended to stabilise recently.

Micro firms have experienced higher rejection rates for financing, at 22.9 per cent in September 2018.¹⁹ In contrast, rejection rates among bank applications from Small and Medium firms remain lower at 15 and 6.2 per cent respectively. The rate of rejection of micro firm applications for bank finance remain higher than larger firms but are lower than in recent years.

Rejection rates on loan/overdraft applications in Ireland have declined and converged to euro area averages.

According to data from the SAFE survey, the latest rejection rate in Ireland (6.4 per cent in September 2018) was only slightly above the rate experienced in EA2 countries (5.6 per cent) and EA1 countries (4.5 per cent).²⁰

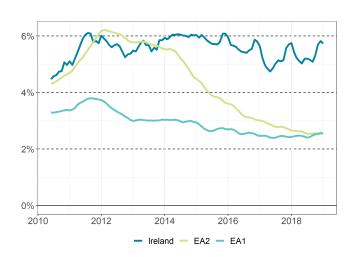
Source: ECB/EC Survey on the access to finance of enterprises

¹⁹Rejection rates are for those SMEs applying for credit and having received a decision in the last six months. These rates are for all finance types (loans, overdrafts, leasing, hire-purchasing and invoice discounting).

²⁰SMEs that applied for both a loan and an overdraft but received a rejection for either are treated as rejected for Figure 18. SMEs whose applications are 'still pending' or 'don't know' are excluded from calculations. Figures for Ireland within this European survey may differ from those reported in Figure 17 due to smaller sample size used in the SAFE survey, the sampling frame, and the definitions employed.

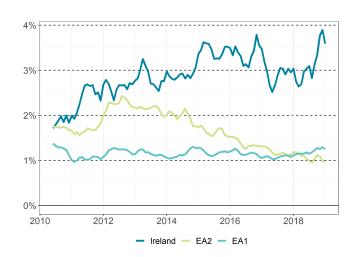
3.2 Cost of credit

Figure 19 | Interest rates on new NFC loans under €0.25 million (3-month moving average), euro area, June 2010 - January 2019



Source: ECB Monetary and Financial Statistics

Figure 20 | Difference between interest rates on small and large NFC loans (3-month moving average), June 2010 - January 2019



Source: ECB Monetary and Financial Statistics

Small NFC loan interest rates in Ireland are substantially above euro area averages.

Interest rates on new NFC loans below €0.25 million (our proxy for SME lending) in Ireland, EA1 countries and EA2 countries are shown in Figure 19.21 Interest rates for Irish small NFC loans have fluctuated over the last few years but remain substantially above euro area averages even as interest rates for EA2 fell to EA1 levels.²² The interest rate in Ireland in January 2019 was 5.7 per cent, versus 2.5 per cent in both EA1 and EA2 countries.

The interest rate gap between small and large NFC loans in Ireland is higher than elsewhere in the euro area.

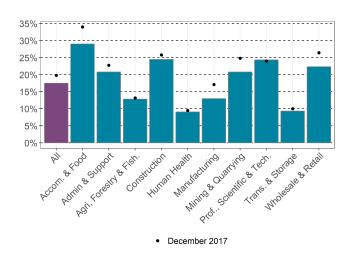
Figure 20 displays the difference in interest rates between small loans (below €0.25 million proxy for SMEs) and large loans (above €1 million - proxy for larger corporates). In January 2019, the interest rate gap for Ireland was 3.6 per cent and has increased from as low as 2.5 per cent in May 2017. The interest rate gap for Ireland continues to remain higher than both EA1 (1.3 per cent) and EA2 (1 per cent).

²¹Interest rates are for 'new business' lending to NFCs. This data excludes revolving loans and overdrafts, convenience and extended credit card debt. 'New business' is defined as any new agreement between the customer and the credit institution. This agreement covers all financial contracts that specify, for the first time, the interest rate of the loan, including any renegotiation of existing loans. Average interest rates are balance-weighted.

 $^{^{22}}$ This figure is created by first calculating the three-month moving average in each country. For the comparison country groupings (EA1 countries and EA2 countries), a direct unweighted average is then used. This figure excludes Greece and the Netherlands due to missing data.

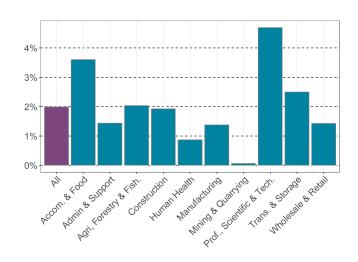
4 Loan performance

Figure 21 | SME default rates by sector, June **2018 and December 2017**



Source: Central Bank of Ireland Loan-Level Data

Figure 22 | SME percentage of performing loan balances entering default between December 2017 and June 2018 by sector



Source: Central Bank of Ireland Loan-Level Data

SME default rates are highest in the **Accommodation and Food sector** and the Construction sector.

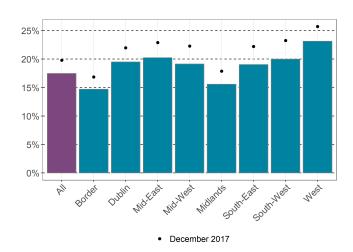
Figure 21 presents the share of outstanding SME balances in default (17.5 per cent overall in default) across the main economic sectors as of June 2018.23 The highest default rates were found in the Accommodation & Food (29 per cent) and Construction (24.5 per cent) sectors whereas the Human Health (9.1 per cent) and Transport & Storage (9.3 per cent) sectors recorded the lowest default rates. Default rates have declined across sectors with the exception of the Professional, Scientific, & Technical sector which increased only marginally from 24 per cent in December 2017 to 24.4 per cent in June 2018.

SME transitions into default are highest in the Professional, Scientific and Technical sector and the Accommodation and Food sector.

Figure 22 presents loan transition rates from a December 2017 performing balance into default by June 2018, across the main economic sectors. The overall transition rate was 2 per cent varying by sector from as high as 4.7 per cent in the Professional, Scientific and Technical sector and 3.6 per cent in Accommodation and Food sector to as low as 0.01 per cent in Mining & Quarrying and 0.9 per cent in the Human Health sector.

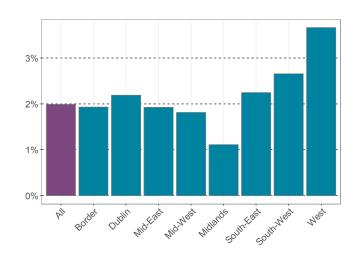
²³Loan-level data from Allied Irish Banks, Bank of Ireland, Permanent TSB and Ulster Bank are employed to describe loan performance. These data are collected every six months. The latest data are from June 2018.

Figure 23 | SME default rates by region, June **2018 and December 2017**



Source: Central Bank of Ireland Loan-Level Data

Figure 24 | SME percentage of performing loan balances entering default between December 2017 and June 2018 by region



Source: Central Bank of Ireland Loan-Level Data

SME default rates are highest in the West and Mid-East.

Figure 23 reports default rates across regions.²⁴ Variation of default rates across regions is less than across sectors. Default rates have declined broadly across regions. In the latest data (June 2018), default rates were highest in the West (23.1 per cent) and Mid-East (20.3 per cent) regions while the lowest default rates were found in the Border (14.7 per cent) and the Midlands (15.6 per cent).

SME transitions into default are highest in the West and South-West.

Figure 24 shows transition rates entering default by regions. Transition rates demonstrate variation by region. In the latest data, transition rates from December 2017 to June 2018 were highest in the West (3.7 per cent) and the South-West (2.7 per cent) while the Midlands (1.1 per cent) and the Mid-West (1.8 per cent) reported the lowest transition rates.

The finance types are predominantly comprised of loans, overdrafts, hire-purchasing and leasing. 'Default' is defined as loans greater than 90 days past due, or deemed unlikely to replay without giving up collateral in line with the European Banking Authority Implementing Technical Standards definition. Default and transition rates are presented for the main lending sectors. Estimates labelled 'All' are calculated using loan balances for all sectors with the exception of lending to borrowers engaged in property investment and development or in NACE Rev. 2 sectors K (Financial and Insurance Activities), O (Public Administration and Defence), P. (Education), R (Arts, Entertainment and Recreation), S (Other Service Activities), T (Activities of Households as Employers) and U (Activities of extraterritorial Organisations and Bodies).

²⁴Nomenclature of Territorial Units for Statistics (NUTS) regions - 'Border': Donegal, Sligo, Leitrim, Cavan, Monaghan; 'Mid-East': Wicklow, Kildare, Meath, Louth; 'Mid-West': Clare, Tipperary, Limerick,; 'Midlands': Laois, Longford, Offaly, Westmeath; 'South-East': Carlow, Kilkenny, Waterford, Wexford; 'South-West': Cork, Kerry, 'West': Galway, Mayo, Roscommon.

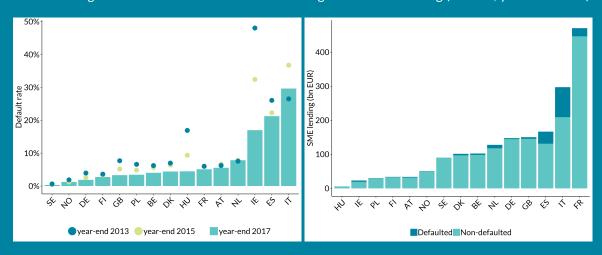
Box 2: SME Default: A European Comparison²⁵

Cross country comparisons of SME default rates provide a useful benchmark to assess loan performance. EBA data used for the purpose of stress tests provide consistent information on defaults rates across countries against which Irish SME portfolios may be assessed.

Figure 25 compares the aggregated SME default rate for Ireland to other EU countries. Default rates for a given EU country refer to all domestic lending by any of the banks in that country.²⁶ The Irish SME lending portfolio default rate reported in 2017 was the third highest compared to selected European countries, Italy being the highest. SME default rates are shown as points on Figure 25 from the stress tests.²⁷ Figure 26 shows SME exposures in EUR split by default and non-default. For Ireland, this includes lending by Bank of Ireland, Allied Irish Banks, KBC and Ulster Bank. SME lending in this context includes retail lending (loan size $< \in 1$ m), corporate lending (loans $> \in 1$ m) and any SME lending secured by real estate.

Figure 25: SME default rate

Figure 26: SME lending (bn EUR, year-end 2017)



Using data for the sample of 45 banks that took part in both the 2016 and 2018 stress tests, table 1 highlights the evolution of the default rate, coverage ratio on the default stock and share of SME lending over the two-year period.

The Irish lending portfolios' aggregate default rate reported in the 2018 exercise decreased significantly compared to the aggregate default ratio reported in 2016 (15.4 percentage points) but remains the third highest compared to selected European countries, Italy being the highest.²⁸ The default rate for Ireland has fallen from the highest in the sample in 2014 to the third highest in 2018. This is driven by a combination of factors including an improving economy, higher asset quality of new lending, restructuring and resolution of loans, and portfolio disposals. The coverage ratio (loan loss provisions expressed relative to the size of defaulted loans) on the default stock (50.2 per cent) is close to the average of the EU countries in the table, but this has decreased compared to 2016. Further, SME lending as a percentage of total lending slightly decreased since 2016 and now represents 16.9 per cent.

Table 1: Comparison of SME portfolios by country year-end 2017 and change vs. year-end 2015

Country	AT	BE	DE	DK	ES	FR	GB	IE	IT	NL	РО	SE
Default Rate YE'17	5.6%	4.0%	1.9%	4.4%	21.3%	5.1%	3.3%	17.0%	29.5%	7.9%	2.9%	0.3%
Δ [%p]	-1.3%	-1.6%	-0.7%	-2.0%	-0.2%	-1.8%	-1.9%	-15.4%	-7.6%	-0.0%	-1.5%	-0.1%
Coverage Ratio YE'17	53.8%	50.8%	47.8%	34.1%	47.9%	59.4%	33.3%	50.2%	69.3%	24.1%	67.4%	55.2%
Δ [%p]	-6.3%	8.3%	-1.7%	2.4%	-1.9%	8.0%	-2.6%	-13.1%	17.1%	-19.6%	-15.8%	6.2%
Share of Lending YE'17	24.7%	27.1%	12.3%	21.1%	21.0%	19.9%	7.3%	16.9%	27.5%	14.7%	18.8%	17.2%
Δ [%p]	0.5%	-0.7%	-0.3%	-0.4%	2.3%	2.6%	-0.8%	-1.7%	-7.1%	-1.2%	4.8%	-0.0%

²⁵Box authors: Paul Lyons and Frances Shaw. Email: paul.lyons@centralbank.ie

Appendix 1: Data Sources

- Central Bank of Ireland Credit, Money and Banking statistics, Q1 2010 to Q1 2018. This source contains outstanding lending and new lending by quarter and sector for all Irish credit institutions. See on the Central Bank of Ireland website for more details. Questions on Central Bank of Ireland Credit, Money and Banking Statistics may be directed to statistics@centralbank.ie.
- Central Bank of Ireland loan-level data, June 2017 June 2018. This dataset provides information on a wide range of loan characteristics including outstanding balances, sector of activity and loan repayment for the population of enterprise loans outstanding at Allied Irish Banks, Bank of Ireland, Permanent TSB and Ulster Bank. 'Default' is defined according to the European Banking Authority Implementing Technical Standard definition.
- Department of Finance SME Credit Demand Survey, September 2012 to September 2018. This nationally representative survey of 1,500 Irish SMEs is carried out on a six-monthly basis, and collects information on firms' demand for credit, success in applying for credit, trading performance and views on Government interventions in the SME credit market.
- European Central Bank (ECB) / European Commission (EC) Survey on the Access to Finance of Enterprises (SAFE), September 2014 to September 2018. The Irish component of this European survey contains information for 500 SMEs. The cross-country nature of the survey allows credit conditions faced by Irish SMEs to be placed in an international context.
- European Investment Bank (EIB) Investment Survey, 2015 to 2017. This annual EU-wide survey gathers qualitative and quantitative information on investment activities for SMEs and larger corporates, their financing requirements and the difficulties they face. The total EU sample size numbers 12,300 enterprises, 400 of which are the Irish sample.
- Monthly euro area interest rates and new lending data to non-financial corporations are based on the ECB's Monetary and Financial Statistics (MFI interest rates). These data are for loans other than revolving loans and overdrafts, convenience and extended credit card debt (at all maturities), and include renegotiations.

²⁶The default rate is defined as default stock divided by the sum of default and non-default stock.

²⁷Reference dates for figures are year-end 2013, 2015 and 2017 for stress tests 2014,2016 and 2018 respectively. IFRS9 accounting treatment was introduced for 2017 estimates, this replaces IAS 39. SME portfolios correspond to the EBA exposure classes: 3200 (Corporates - SME); 4110 (Retail - Secured by real estate property - SME); 4310 (Retail - Other - SME), 4500 (Retail - SME), 5100 (Secured by mortgages on immovable property - SME).

²⁸Share of lending is expressed as a share of total lending to retail and non-financial corporates (authors calculations).

Appendix 2: Classification of SMEs

For the purposes of the Central Bank of Ireland aggregate statistical series and the Department of Finance SME Credit Demand Survey, an SME counterparty is defined as any entity engaged in an economic activity, irrespective of legal form (i.e. corporation, partnership, sole-trader, etc.), which employs fewer than 250 persons and whose annual turnover does not exceed €50 million or whose annual balance sheet does not exceed €43 million. This is consistent with the SME definition in the Central Bank's SME Lending Regulation, the Credit Review Office and the European Commission, for the later see here.

In the SAFE survey, SMEs are defined solely by their employment size. Three categories of SME are analysed: Micro firms, with less than 10 employees, Small firms with 10 to 49 employees, while Medium firms are those with 50 to 249 employees. All firms with more than 250 employees are considered to be Large firms and are removed from the analysis.

The EIB Investment survey records firm size classes by the number of employees of the enterprise. SMEs are defined as Micro firms, with 5 to 9 employees, Small firms with 10 to 49 employees, and Medium firms with 50 to 249 employees. The survey also collects information on large firms with more than 250 employees. The category 'All' firms includes both large firms and SMEs.

The Central Bank of Ireland loan-level data do not contain the relevant information on borrowing firms to define SMEs in a similar fashion. All firms whose exposures are managed in retail and business banking units of the subject banks are modelled as SMEs, while all exposures managed in corporate banking divisions are considered to be Large firms and excluded from the analysis.

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