Irish SME Investment in Economic Recovery

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Abstract

Following dramatic declines during the crisis, capital investment expenditure is increasing rapidly in Ireland. However, little is known about SME investment levels, the extent to which this is driven by improved economic conditions, and how their investment is financed. Using cross-sectional survey data, we find that the share of SMEs investing has increased steadily since 2012, and currently about a third of SMEs are investing in each six month period. Larger firms, exporters and innovators are more likely to invest. However, over the last three years, the share of smaller, domestically-focused enterprises investing has increased at a faster rate. We find a strong link between regional unemployment rates and SME investment. However, this relationship only holds for more domestically-orientated firms. As the unemployment rate has decreased, these findings provide some evidence to link macroeconomic improvements to the observed pick-up in investment activity of SMEs. Finally, we explore the funding mix for new SME investments. Internal funding/retained earnings account for the highest share, with bank financing and leasing together accounting for less than twenty per cent.

Keywords

SME; Investment; Economic Recovery.

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1. Introduction

Between 2008 and 2012, investment declines in Ireland were among the highest in the EU. This was mainly driven by the rapid slowdown in GDP and over-investment in the pre-crisis period (Lydon and Scally, 2014). More recently, however, a significant turnaround is apparent, and investment growth is now a cornerstone of the broader economic recovery – latest Central Bank of Ireland estimates are for building and construction and non-aircraft machinery and equipment investment to grow at over 8 per cent this year and next.[1] This growth is noteworthy, particularly given that it is occurring in a period of continued reductions in outstanding credit to non-financial corporations.[2]

Within this context, this article builds on previous research on business investment in Ireland (Lydon and Scally, 2014) and explores what role Small and Medium-sized enterprises (SMEs) have played in this investment recovery. For example, SMEs, being smaller and more domestically-orientated, may have responded differently to recent economic improvements. Furthermore, given their high share of enterprises and employment,[3] an in-depth analysis of SME investment behaviour is beneficial to understand the growth prospects of this important component of overall business activity. We address three distinct questions: 1) how has SME investment evolved since the recovery and what groups of SMEs are investing? 2) What are the firm determinants of SME investment and how has investment been affected by the broader recovery? and 3) how has SME investment been financed during the recovery?

To answer these questions, we use cross-sectional survey data from the Department of Finance SME Credit Demand Survey. We find that approximately one-in-three SMEs invest in any six-month period. Larger firms, exporters and innovators are more likely to invest. However, over the last three years, the share of smaller, domestically-focused enterprises (construction and hotels and restaurants) investing has increased at a faster rate. This potentially reflects the increases in domestic household spending. Younger firms, controlling for other firm characteristics, invest more. Improvements in profitability and turnover are also shown to be important drivers of investment.

Linking to the broader recovery, we find that SME investment is sensitive to developments in regional economic conditions, as measured by the unemployment rate. We also find that smaller, younger, non-exporting firms, in sectors reliant on local household spending, are the most responsive to domestic conditions. As the unemployment rate has decreased, these findings provide some clues which link the macroeconomic picture to the observed pick-up in investment activity of domestically-oriented SMEs. On the financing of investment, we find that the majority of new SME investment is paid for by internal funds, with bank financing accounting for about ten per cent of investment expenditures.

The rest of this paper is structured as follows: Section 2 presents the data and summary statistics. Section 3 presents the more detailed econometric results. Section 4 considers the financing of investment and section 5 concludes.

2 Data Description and Initial Explorations

In this study, we employ data from the *RED C SME Credit Demand Survey*. The survey is conducted every six months by the Irish Department of Finance (latest wave ending in September 2015) and approximately 1,500 telephone interviews are conducted in each

1 See Central Bank of Ireland Quarterly Bulletin Q1 2016.

2 See Central Bank of Ireland, SME Market Report, H1 2016.

3 The CSO estimates that SMEs accounted for 99.7 per cent of all enterprises and 68 per cent of all persons employed in the business economy in Ireland (CSO, 2012).

4 Micro firms are classified as having 1-9 employees and turnover of less than €2 million (or balance sheet value less than €2 million). Small firms are classified as having 10-49 employees and turnover of less than €10 million (or balance sheet value less than €10 million). Medium firms are classified as having 50-250 employees and turnover of less than €50 million (or balance sheet value less than €43 million).

Table 1: Share of Firms Investing and Median Investment, by Firm Characteristic

	Investment Frequency	Median Investment
Manufacturing	41.50%	100,000
Wholesale/Retail	20.50%	50,000
Hotels/Restaurants	30.10%	50,000
Services	29.90%	30,000
Construction	24.70%	50,000
Other Sectors	26.70%	100,000
Non-Exporter	22.70%	35,000
Exporter	46.60%	100,000
Non-ICT	27.40%	50,000
ICT	33.20%	40,000
Non-Innovator	23.90%	50,000
Innovator[6]	38.10%	50,000
Age: <=5	29.60%	25,000
Age: >5 & <=10	26.70%	30,000
Age: >10 & <=20	27.30%	50,000
Age: >20 & <=30	28.40%	50,000
Age: >30	30.60%	80,000
Turnover Unchanged	24.50%	40,000
Turnover Increased	37.20%	60,000
Turnover Decreased	19.30%	50,000
Broke Even	19.80%	40,000
Made a Profit	35.90%	60,000
Made a Loss	21.10%	40,000
Micro	12.30%	10,500
Small	28.90%	40,000
Medium	53.90%	100,000

Source: Own calculations using DOF RED-C data.

Note: Calculated for seven six-month survey waves between April 2012 and September 2015.

wave. The sample is representative across the three SME size categories (Micro, Small and Medium) and also for the 16 main business sectors in Ireland.[4] The survey collects extensive information on SME demographics, financial performance, debt levels, and bank/non-bank finance applications. Information on whether SMEs acquired fixed assets has been collected in the last seven survey waves and data on the size of investment are available for the past six. Furthermore, SMEs are asked about the source of finance for their investments.

SMEs are by nature a heterogeneous collection of businesses. To explore the differences in investment activity across groups of SMEs, Table 1 presents the investment frequency (share of firms investing) and the median investment for various SME characteristics.[5] The six-monthly investment frequency increases significantly with firm size, increasing from 12 per cent for Micro firms to 54 per cent for Medium firms. This is perhaps expected given that larger firms, with a greater absolute value of their capital stock, will have more frequent asset disposals and replacement. By sector, the investment frequency is highest for

5 Latest seven survey waves combined, covering the period April 2012 through September 2015.

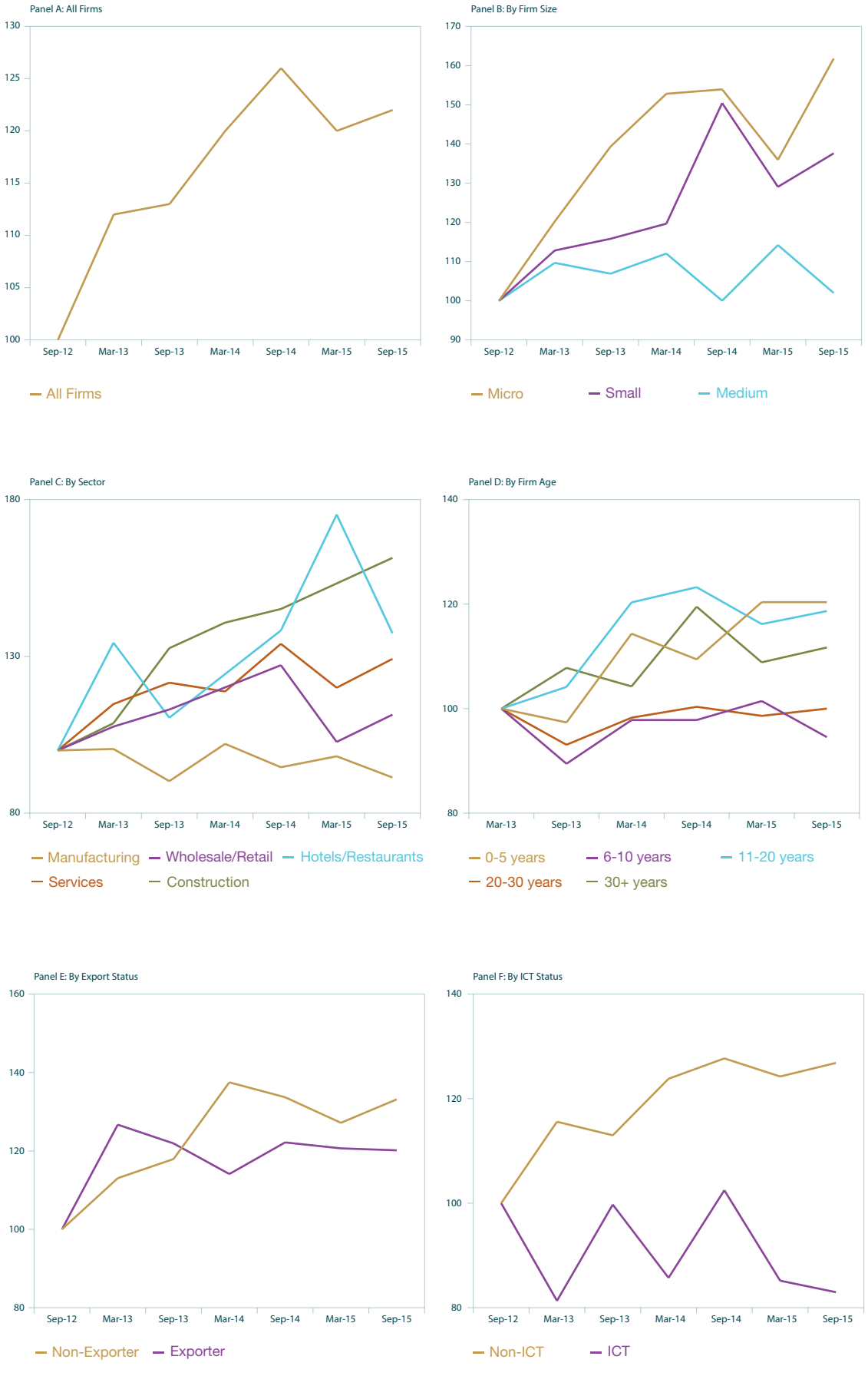
6 In this survey, an innovator is defined as a firm that undertakes any of the following: brings in a new product or process, introduces new marketing concepts/strategy or new business practices/methods of organising work/external relations, introduces new/improved services, new improved methods of production, distribution or support activity, or new/improved goods.

Manufacturing firms (42 per cent), followed by Hotels/Restaurants and Services sectors (both about 30 per cent). Exporters and innovators are also more likely to invest – the investment frequency of such firms is 47 and 38 per cent, compared to 23 and 24 per cent for non-exporters and non-innovators respectively. Table 1 documents that the recent financial performance of the firm appears to matter for investment decisions – SMEs that experienced increased turnover in the previous six months have an investment frequency of 37 per cent, compared to 19 per cent for those with declining turnover. Similar findings are observed for profitability.

A key focus of this paper is to document how SME investment has developed over time and across firms since the recovery in Ireland began. To review these trends, we develop indices of the frequency of investment and the level of investment for different groups of enterprises. Figure 1 (presenting the frequency of investment) and Figure 2 (presenting the level of investment) shows how a selection of these indicators has developed through time. Overall, the investment frequency has increased, and is up 22 per cent since September 2012 (24 per cent to 29 per cent).

Panel B of Figure 1 shows that growth is highest for Micro (up 62 per cent) and Small firms (up 38 per cent), with little change for Medium firms over the period. By sector, growth in the frequency of investment has been strongest in the Construction and Hotels/Restaurants (Panel C), which is no doubt driven by strong improvements in the domestic economy during this time. In this regard, we also observe higher investment frequency growth for non-exporters (Panel E), although exporters have a higher share of investing firms overall (Table 1). Similarly, non-ICT firms, who tend to be more domestically-orientated, show stronger growth in the number of investing firms over the period (Panel F).

Chart 1: Share of Firms Investing, by Firm Characteristic (Index: 100 = September 2012)

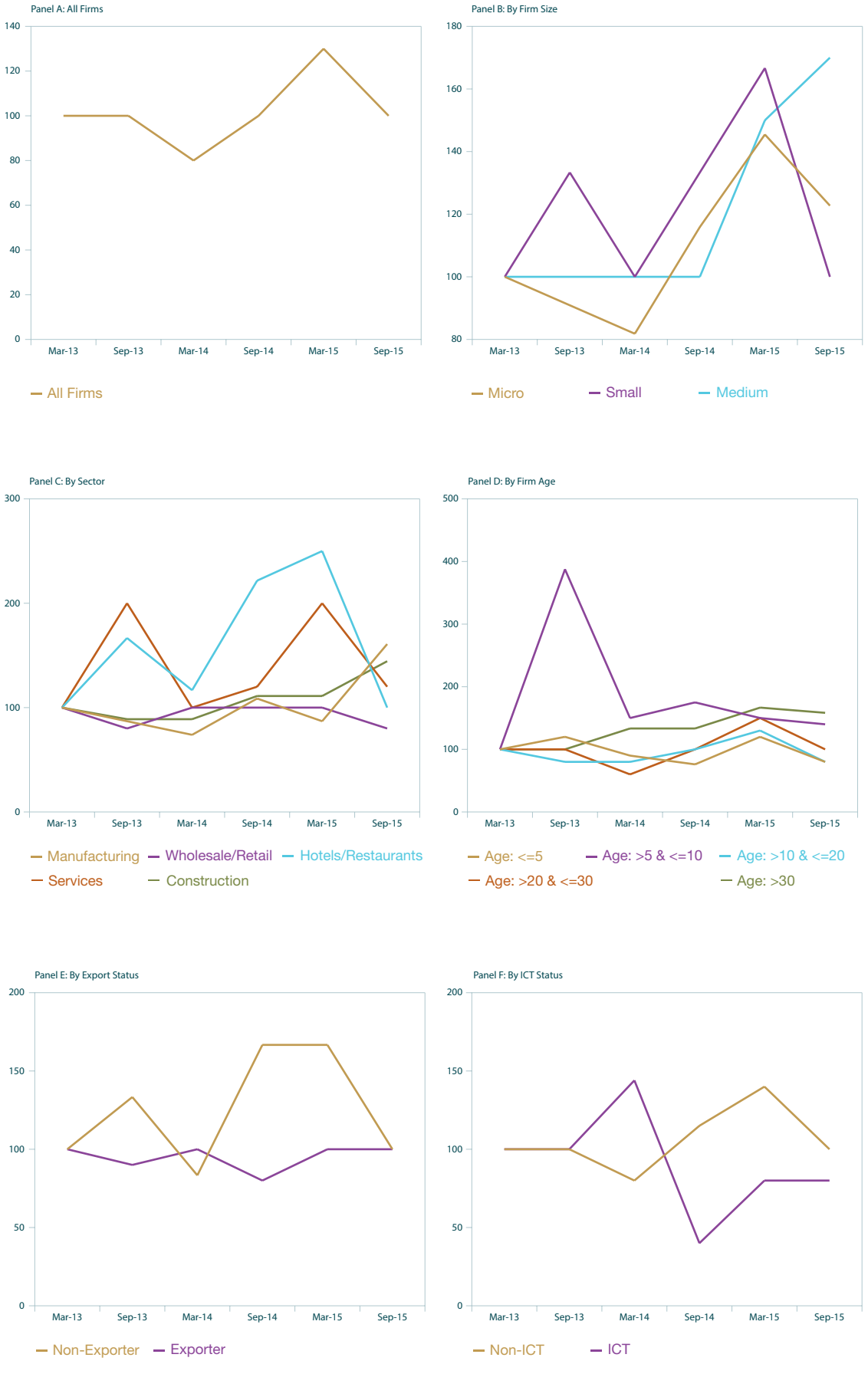


Source: Own calculations using DOF RED-C data.

In terms of levels, the six-monthly median investment (Table 1) is highest for Manufacturing (€100,000) and lowest for Services (€30,000), which is in line with the expected capital intensity levels of these sectors. Also evident is the large difference between exporters (€100,000) and non-exporters (€35,000). Furthermore, investment levels are significantly higher for older and larger SMEs: the median investment increases from €10,500 for Micro firms to €100,000 for Medium firms, and from €25,000 for the youngest age cohort to €80,000 for the oldest. Similar to investment frequencies, the recent economic performance appears to be an important driver, with levels highest for firms that made a profit or experienced increased turnover in the previous six months.

Over time (Figure 2), the median investment increased up until March 2015, but then declined again in the latest survey (Panel A). Despite large differences in investment by SME size (Table 1), the trends across the categories are quite similar up until March 2015 (Figure 2, Panel B), but then increase for Medium firms and decline for Micro/Small firms. By sector, significant variation is observed – Hotels/ Restaurants and Services both show strong growth up until March 2015 but then decline, and only Manufacturing and Construction firms show consistent growth over the period. While exporter investment is steady, non-exporters show strong growth up until March 2015, which is again followed by a decline in the latest survey.

Chart 2: Median Investment, by Firm Characteristic (Index: 100 = March 2013)



Source: Own calculations using DOF RED-C data.

3. Modelling the Drivers of SME Investment in Ireland

Exploring firm-level determinants

To provide a more structured evaluation of what has been driving SME investment in Ireland, we undertake a simple cross-sectional analysis of the determinants of investment. We use a standard logit model to explore what SME characteristics are correlated with the probability of investment and a tobit model to explore what factors affect the level of investment.[7]

As explanatory variables, we include the following: dummy variables for sector (Manufacturing, Services, Hotels/Restaurants, Construction, Other), controls for whether the firm is an exporter, an innovator (introduced new or improved goods or services) or operating in the computer software/hardware industry ("ICT"), controls for firm age in years (0-5, 6-10, 11-20, 21-30, 30+), indicators for turnover changes (turnover increased, turnover decreased or remained unchanged), indicators for profitability (made a profit, made a loss or broke even) and indicators for firm size (Micro, Small or Medium). We also include a full range of regional-time indicators to capture common macroeconomic developments that impact the firm within their local area or over time. This suite of control variables should capture the sectoral and structural determinants of investment activity by SMEs as well as linking the firm's economic fundamentals to their investment choices.

Table 2 presents the results of the logit (Model 1) and tobit (Model 2) specifications as marginal effects. Similar to the descriptive statistics above, it is evident that the size of the firm significantly and consistently increases the probability of investing, with Small and Medium firms 14 and 34 percentage points more likely to invest than Micro firms. The magnitudes of these size effects are large relative to the mean investment rate (28 per cent). Results from the tobit regression demonstrate that larger firms also invest higher amounts. Again, these results are statistically significant, with magnitudes consistently increasing for larger SMEs. For example, Small firms invest about five times more than Micro firms, while Medium firms invest about 40 times more.[8]

On the economic fundamental variables capturing the recent financial situation and outlook of the firm, SMEs that experienced increased turnover in the last six months are 5.9 percentage points more likely to invest than firms with unchanged turnover. Similarly, firms that report positive profits are 7.1 percentage points more likely to invest than firms that break even. These variables are also significant for investment levels (tobit results) – firms with increased turnover and profits invest 83 and 114 per cent more respectively.

A number of other SME characteristics are significantly correlated with SME investment. Young firms (zero-five years) are approximately 5 percentage points more likely to invest and spend around 40 per cent more than the older categories. As noted, we also include variables for exporting SMEs, innovative SMEs (firms that introduced new or improved goods or services) and firms that operate in ICT. We find that being an exporter and innovator increases the probability of investment by 12 and 10 percentage points respectively. Such firms also invest 223 and 177 per cent more in level terms. We find some evidence that firms in the ICT sector invest less than those in non-ICT sectors, although the result is only statistically significant at the 10 per cent level. This is potentially driven by the fact that our investment data only capture fixed assets and do not cover intangibles. Finally, we include a number of sector controls. Although the majority of these are statistically insignificant, it is evident that the Wholesale/Retail and Hotel/Restaurant sectors invest less than the reference group (Manufacturing).

7 The tobit approach accounts for the censoring of the investment level variable which is zero for non-investing firms (see Gerlach-Kristen et al. (2015) for an overview of the methodologies employed for estimating investment for SMEs). We use this model as there is a high proportion of zero observations in our data (i.e. SMEs that did not invest – 72 per cent of our sample) which would bias more standard econometric techniques (Ordinary Least Squares).

8 These proportional effects are calculated as the exponent of the tobit coefficients in Table 1. For example, the coefficient for "Exporter" of 1.173 gives a ratio of 3.232 (ratio of exporter investment to non-exporter investment) which is equivalent to a percentage increase of 223 per cent.

Table 2: Red-C Regression Results

	Model 1		Model 2	
	Logit MFX	SE	Tobit MFX	SE
Manufacturing	*Reference Category*			
Wholesale/Retail	-0.054***	0.015	-0.607***	0.150
Hotels/Restaurants	-0.041**	0.018	-0.508***	0.186
Services	0.009	0.015	0.039	0.153
Construction	0.012	0.021	0.146	0.212
Other Sectors	0.027	0.038	0.300	0.399
Exporter	0.121***	0.013	1.173***	0.122
ICT	-0.026*	0.014	-0.262*	0.145
Innovator	0.099***	0.010	1.018***	0.097
Age: <=5	*Reference Category*			
Age: >5 & <=10	-0.053**	0.021	-0.553***	0.210
Age: >10 & <=20	-0.053***	0.019	-0.588***	0.192
Age: >20 & <=30	-0.054***	0.020	-0.563***	0.199
Age: >30	-0.046**	0.019	-0.441**	0.195
Turnover Unchanged	*Reference Category*			
Turnover Increased	0.059***	0.010	0.602***	0.104
Turnover Decreased	-0.013	0.013	-0.210*	0.128
Broke Even	*Reference Category*			
Made a Profit	0.071***	0.011	0.763***	0.108
Made a Loss	0.010	0.014	0.074	0.146
Micro	*Reference Category*			
Small	0.140***	0.010	1.618***	0.099
Medium	0.344***	0.014	3.648***	0.129
Region * Survey Wave FE	Yes		Yes	
Observations	8735		8574	

Note: The dependent variable in the logit model is the categorical dummy variable indicating whether the SME invested. In the logit results, MFX indicate the change in the probability of investing for each independent variable. In the tobit model, MFX in the tobit model shows the effects of each independent variable on the mean of investment, conditional on investment being larger than zero:

$$\frac{(\partial E(y|x,y>0))}{\partial x.}$$

In the tobit model, the dependent variable is the amount invested in natural logarithms (firms with zero investment remain at zero). Statistical significance levels given by *** (p<0.01), ** (p<0.05) and *(p<0.10).

Does regional unemployment affect SME investment?

The previous section establishes significant differences in the probability and level of investment across groups of SMEs. With the Irish economy recovering strongly, and aggregate investment rising, we now explore which SMEs are responding to the improving outlook by increasing investment. To answer this question, we need to add a measure of the domestic economy's performance to the SME investment models presented in Table 2. While our survey covers too short a time frame to include a country-wide, time-varying indictor (six waves), we can exploit regional and county-level variation in economic indicators over time which can provide some clues as to how the macroeconomic picture is affecting SMEs.

To test this channel, we include the quarterly unemployment rate at the NUTS 3 regional level in our baseline models.[9] As many SMEs are domestically oriented and often heavily reliant on local markets, including the unemployment rate at this geographic breakdown seems reasonable. It would have been preferable to include the unemployment

9 The unemployment rate data are sourced from the CSO QNHS.

Table 3: Impact of Regional Unemployment on SME Investment

	Logit MFX	SE	Tobit MFX	SE
Model 1:				
Overall (Unemployment Rate)	-0.013**	0.006	-0.135**	0.063
Model 2:				
Manufacturing	-0.005	0.007	-0.064	0.075
Wholesale/Retail	-0.014**	0.006	-0.132**	0.065
Hotels/Restaurants	-0.016**	0.007	-0.181**	0.076
Services	-0.019***	0.007	-0.175**	0.073
Construction	-0.014	0.009	-0.146*	0.088
Other Sectors	-0.001	0.012	-0.099	0.140
Model 3:				
Non-Exporter	-0.014**	0.006	-0.146**	0.061
Exporter	-0.009	0.008	-0.092	0.079
Model 4:				
Less than 5 years	-0.019**	0.009	-0.247***	0.093
5 to 10 years	-0.017**	0.008	-0.180**	0.078
10 to 20 years	-0.015**	0.007	-0.152**	0.068
20 to 30 years	-0.004	0.007	-0.025	0.070
30 + years	-0.014**	0.007	-0.156**	0.070
Model 5:				
Micro	-0.010**	0.005	-0.096*	0.051
Small	-0.018**	0.007	-0.165**	0.069
Medium	-0.010	0.009	-0.131	0.094
Time-varying county controls	Yes		Yes	
Firm controls	Yes		Yes	
Region FE	Yes		Yes	
Time FE	Yes		Yes	
N	8715		8550	

Note: Statistical significance levels given by *** (p<0.01), ** (p<0.05) and *(p<0.10).

rate at a more disaggregated level which gets closer to local markets for SMEs but these data were not available to us. The unemployment rate is also a good proxy for consumer spending power in the local economy and is more likely to capture the economic situation experienced by SMEs than a GDP measure which is potentially affected by multinational activity. The fall in the unemployment rate is also one of the more striking features of the Irish recovery. Operationally, the quarterly unemployment rate for the period prior to the start of each survey wave is included in the model to avoid simultaneity.

In addition to the unemployment rate, we include all firm controls included in Table 2, as well as regional-specific fixed effects to control for differences in the investment indicators across regions and time-specific fixed effects to capture all pure time-varying factors. We also include two additional time/county-varying financial factors: the interest rate on new lending at the county-time level, and the share of SMEs who were either partially or fully rejected for credit.[10] As these factors have geographic and time variation that is more disaggregated than the unemployment rate (county rather than regional), they should ensure that our unemployment effect is purged of any differences in the cost or access to credit across counties over time. These last

10 The county interest rate data are calculated from the Central Bank of Irelands' loan-level dataset for SMEs and the share of credit constrained enterprises per county is calculated from the DOF Red C data.

two variables are also entered as lags to avoid simultaneity.

As in Table 2, we include indicators of firm profitability and turnover increases, and identify these as important drivers of investment. Therefore, any impact of the regional unemployment rate is over and above the firms' own profitability. Our interpretation of the impact of the unemployment rate is therefore how responsive the enterprise is to improvements in their regional economy over any positive experience they are seeing in their own day-to-day business.

It may also be the case that different groups of enterprises are more likely to respond to improvements in the domestic economy. For example, young firms, smaller firms and non-exporting firms are more reliant on local Irish markets to sell their goods and services. To test this possibility, we interact the unemployment variable with sector, firm age, export status and firm size, and include these interactions (separately). In Table 3, we first present the overall marginal effect for unemployment (Model 1), followed by the interacted marginal effects (Models 2 through 5).

We find a negative and statistically significant effect of the unemployment rate on both the probability of investing and the investment level i.e. a higher unemployment rate in the SMEs' region in a given time period leads to a lower probability, and level, of investment. This clearly highlights the sensitivity of SME investment to developments in their regional economy. Furthermore, it provides some clues towards a link between the broader macroeconomic recovery, which has been characterised by significant unemployment declines, and SME investment. The magnitudes of the effects are also economically meaningful. A one percentage point decrease in the unemployment rate would increase the investment rate by 1.3 percentage points. The directionality of the finding is equivalent for the level model (tobit).

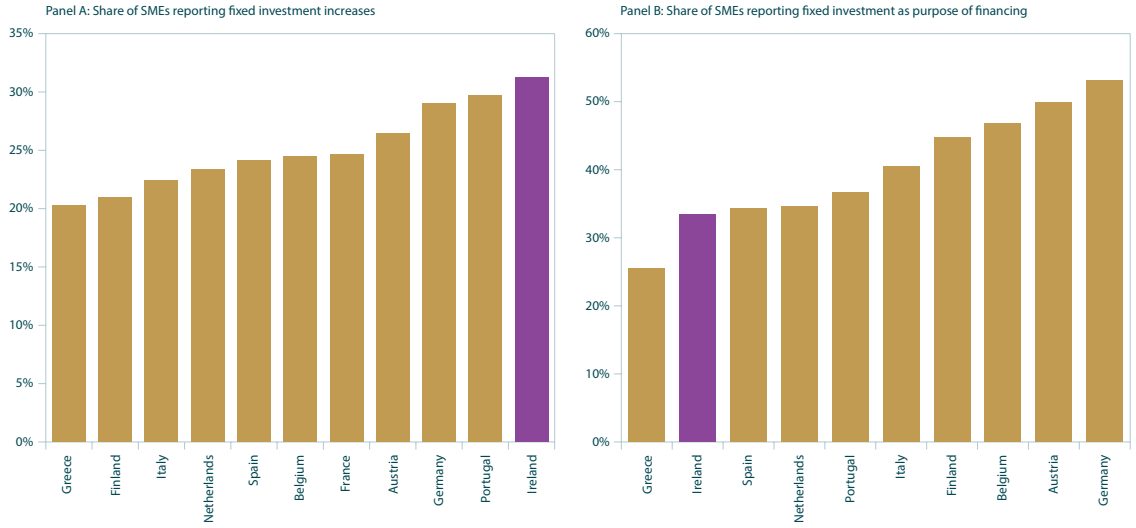
We also find clear differences across groups of enterprises and industries. At the 5 per cent level, we find a significant impact of the unemployment rate on the probability and level of SME investment in the Wholesale/ Retail, Hotels/Restaurants, and Services sectors, but not in the Manufacturing or Construction sectors. These significant sectors are generally those which are more reliant on local household consumption and are domestically non-traded in nature. Similarly, we also find that non-exporting firms respond to the unemployment rate, whereas exporting firms do not. As exporters are more tied to developments in international markets, it is unsurprising that they are less responsive to regional macroeconomic conditions, and are more affected by market fundamentals in the jurisdictions they are active. We also explore differences across firm age and firm size. Results show that the youngest firms have the highest sensitivity of investment to regional unemployment. Furthermore, while Micro and Small firms react to regional unemployment rates, no effect is observed for Medium firms. These findings point to the importance of local markets for small and emerging enterprises.

4. How is SME Investment Financed?

The empirical evidence presented in Section 2 clearly shows an increase in SME investment in line with the broader economic recovery. However, one particularly well documented challenge for investing firms since the crisis has been access to finance, especially through banks (Gerlach-Kristen et al., 2015; Holton and McCann, 2012).[11] Indeed, Lawless et al. (2013) document a very large shift towards the use

11 Faced with evidence of financing constraints for enterprises, the Irish government responded in a number of ways, the most high profile of which being The *Strategic Banking Corporation of Ireland* (SBCI). In the first nine months of operation (March to December 2015), the SBCI channelled almost €172 million (4,600 loans) through the Irish banks, 84% of which were for investment purposes. Furthermore, The *Credit Guarantee* Scheme, which provides 75 per cent cover on SME loans in the event of default, sanctioned about €20 million worth of facilities in 2015, and applications are increasing significantly year-on-year. For smaller SMEs, *Microfinance Ireland* directly provides loans up to the value of €25,000, and about €10 million has been approved since launch in October 2012..

Chart 3: Comparison of Irish SMEs and Eurozone Counterparts



Source: Own calculations using EC/ECB SAFE survey.

Note: Calculated using the latest three survey waves. Survey weights are employed in calculation. Firms that responded with 'Don't Know/Not Applicable' are removed before calculation. In Panel B, financing relates to 'external sources and from funds generated by your enterprise'.

of internal funds and away from the banking sector. They show that, for firms who invested in 2005, just over 60 per cent used internal funds, while 38 per cent used borrowings (both bank and non-bank). In 2012, after the crisis, nearly 80 per cent used internal funds and fewer than 18 per cent used borrowings. This shift to the use of internal funds is also evident in a pan-European context – using ECB SAFE survey data, Figure 3 highlights that Irish SMEs are the most likely to report increases in fixed investment but have a low share reporting fixed investment as the purpose of their demand for finance.

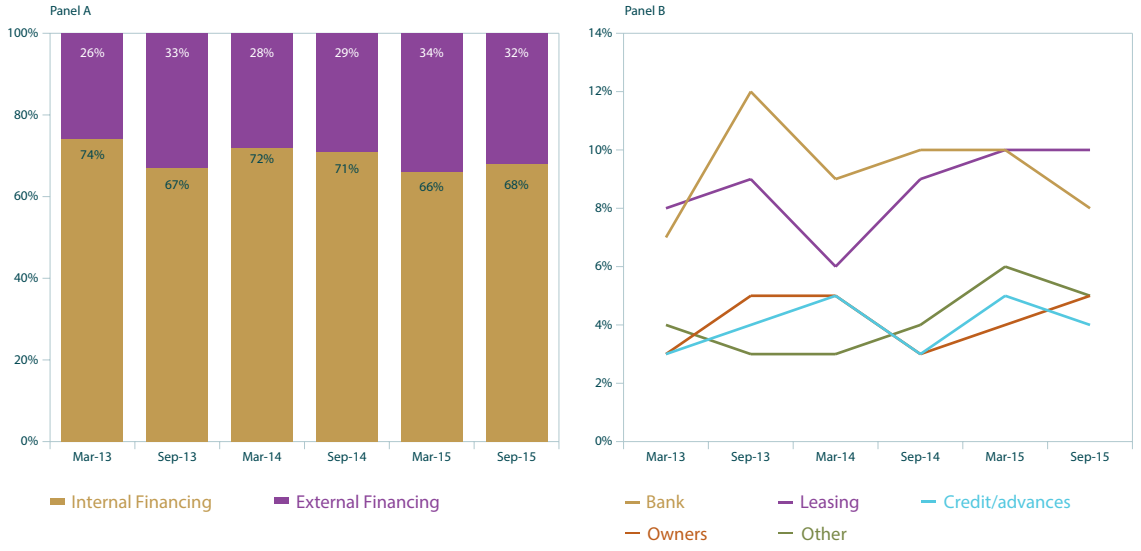
Given the increases in investment, our interest lies in identifying whether there are changes in financing patterns for SMEs through the recovery period. In this context, we review how investment has been financed in Ireland over the last six survey waves. Panel A of Figure 4 displays the internal/external funding mix. Similar to previous research, it is evident that the majority of investment is financed through internal funds, with an average of 70 per cent over the six survey waves. The average internal funding share has declined slightly, from 74 per cent to 68 per cent.

Panel B disaggregates the external financing sources into the various types. Bank lending and leasing are the two largest external components, with sample means of 9.1 per cent and 8.6 per cent respectively, and it is noteworthy that there has been no discernible increase in the share of bank funding or leasing during the recovery period. The rest of investment is financed by owner's contribution (4.3 per cent) and credit/advances from customers (3.9 per cent) and other sources.[12] These shares have also been reasonably stable over the last six survey waves.

For larger investments, it may not always be possible to rely solely on internal financing sources. To explore this possibility, Figure 5

12 A detailed overview of non-bank financing in Ireland is provided in O'Toole et al. (2015).

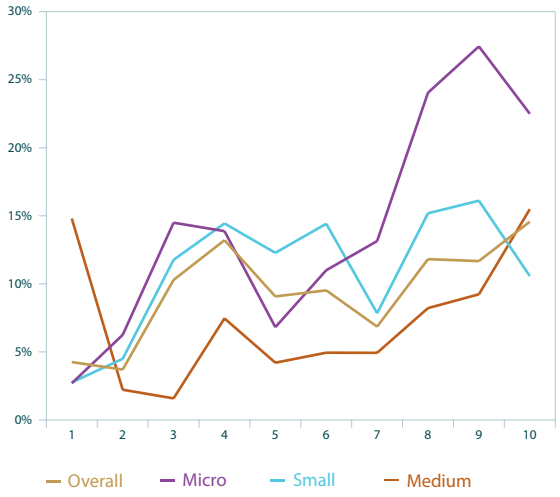
Chart 4: SME Financing Shares



Source: Authors calculations using Red C data.

Note: Calculated using the latest three survey waves. Survey weights are employed in calculation. Firms that responded with 'Don't Know/Not Applicable' are removed before calculation. In Panel B, financing relates to 'external sources and from funds generated by your enterprise'.

Chart 5: Mean share of bank financing by investment decile (all waves combined)



Source: Authors calculations using Red C data.

presents the average share of bank financing across the deciles of investment. However, overall (all firms), an increasing share of bank financing is only observed up until the fourth decile. Even for the largest investments (top decile), the bank funding share does not exceed 15 per cent. Only Micro firms show a more consistent upward trend. This is perhaps expected given that these firms are less likely to have internal cash reserves.

While there does not appear to be a trend towards increased external financing, there may be differences in the funding mix across groups of firms. For example, smaller firms may have less access to bank financing as they are more opaque and have fewer assets to collateralise new lending (Lawless et al., 2014). These predictions are observed in Table 4, where the breakdown of external financing sources is presented by SME size. It is evident that Micro firms have lower shares of bank financing and leasing, but higher shares of owner's equity, trade credit and loans from friends/family.

Table 4: Mean Share of External Investment Financing (all waves combined)

	Micro	Small	Medium
Owner's Equity	22.71%	11.40%	13.21%
Equity Shares	1.22%	0.72%	0.00%
Debt Issued	0.77%	0.63%	1.33%
Banks	25.86%	32.84%	30.12%
Non-Bank	3.51%	5.42%	6.80%
Trade Credit	15.73%	11.64%	12.95%
Leasing	16.26%	31.68%	31.37%
Friends/Family	5.22%	1.70%	0.49%
Other	8.71%	3.98%	3.73%

Note: Statistical significance levels given by *** ($p<0.01$), ** ($p<0.05$) and *($p<0.10$).

5. Conclusions

This article explores what role Small and Medium-sized enterprises (SMEs) played in the investment recovery. We find that the share of SMEs investing has increased steadily since 2012, and currently about a third of SMEs are investing on a six-monthly basis. The likelihood and level of investment increases with firm size, and is also higher for exporting and innovative SMEs. Younger firms, controlling for other firm characteristics, invest more. We also find that improvements in profitability and turnover are important drivers of investment. Complementary to this latter finding, we show that SME investment responds to regional economic conditions, as measured by the unemployment rate. These effects are over and above any influences of improved profitability and turnover. Therefore, some of the recent increase in SME investment is likely the result of an improved domestic economy. We also find that smaller, younger, non-exporting firms, who are likely more reliant on local household spending, respond most to domestic conditions. Finally, we explore the funding mix of new investments. Investment is mainly financed through internal funds, and there is no evident increase in the external financing share since early 2013. In general, the largest share of external funding is provided by banks or leasing arrangements, which together account for about 20 per cent of total investment cost.

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