



ESRI Research Bulletin

Financing Constraints and Firms' Growth in the European Union: Has the Financial Crisis Made Them Worse?

Iulia Siedschlag (ESRI and TCD), Conor O'Toole (Central Bank of Ireland), Gavin Murphy (Department of Finance) and Brian O'Connell (Indecon)

The *Research Bulletin* provides short summaries of work published by ESRI staff and overviews of thematic areas covered by ESRI programmes of research. Bulletins are designed to be easily accessible to a wide readership.

This Bulletin summarises the findings from: Iulia Siedschlag, Conor O'Toole, Gavin Murphy, Brian O'Connell, *Access to External Financing and Firm Growth*, Background Study prepared for the European Competitiveness Report 2014 within the Framework Contract ENTR/2009/033.

<http://www.esri.ie/UserFiles/publications/BKMNEXT287.pdf>. The views expressed here are purely those of the authors and may not in any circumstances be regarded as stating an official position of the European Commission or the institutions with which the authors are currently affiliated.

Financing Constraints and Firms' Growth in the European Union: Has the Financial Crisis Made Them Worse?¹

*Iulia Siedschlag, Conor O'Toole, Gavin Murphy and Brian O'Connell

RESEARCH AND POLICY CONTEXT

Since the onset of the financial crisis, corporate investment has declined sharply. The largest falls in firms' investment from peak to trough have been in Greece, Latvia, Ireland, Estonia, Slovenia and Lithuania, the countries hardest hit by the financial crisis. While much of the declines in investment can be linked to poor macroeconomic conditions and a lack of profitable investment opportunities, financing constraints due to financial market imperfections may also have played a role.

This study, prepared for the *European Competitiveness Report 2014*,² provides empirical evidence on the nature and extent of financing constraints faced by specific types of firms and industries and how these constraints impact on their investment and growth. The novelty of this analysis is threefold: (i) it considers both supply-side and demand-side financial market imperfections and identifies the nature and extent of financing constraints for specific types of enterprises, industries and EU countries following the recent financial crisis; (ii) it uses an unified econometric framework to analyse the effects of financing constraints on investment, employment, productivity and exporting over and above demand and cyclical factors across different types of firms and industries; and (iii) it identifies the widely differing effects of the recent financial crisis on the responsiveness of investment, employment, productivity, and exporting to financial factors across different types of firms and industries.

¹ This Bulletin summarises the findings from: Iulia Siedschlag, Conor O'Toole, Gavin Murphy, Brian O'Connell, *Access to External Financing and Firm Growth*, Background Study prepared for the European Competitiveness Report 2014 within the Framework Contract ENTR/2009/033. <http://www.esri.ie/UserFiles/publications/BKMNEXT287.pdf>. The views expressed here are purely those of the authors and may not in any circumstances be regarded as stating an official position of the European Commission or the institutions with which the authors are currently affiliated.

* iulia.siedschlag@esri.ie; conor.otoole@centralbank.ie; gavin.murphy@finance.gov.ie; boconnell@indecon.ie

² *Helping Firms Grow*, European Competitiveness Report 2014, Luxembourg: Publications Office of the European Union, 2014. <http://dx.doi.org/10.2769/28020>.

RESEARCH FINDINGS

The analysis of the nature and extent of financing constraints was undertaken using data from the Survey on Access to Finance of Enterprises (SAFE) over the April-September 2011 and April-September 2013. The results indicate that firms in the EU, particularly small, young firms, do not have diverse financing sources and are very dependent on bank financing. Formal market financing, which includes equity, debt, or subordinated loans, is only relevant for more mature and larger firms which represent the minority of firms. Smaller and younger firms face greater perceived financing constraints and experience greater actual financing constraints compared with larger and older firms.³ These results hold over and above demand-related factors such as turnover, profitability and indicators of firms' financial standing. The evidence provided in this study highlights that financing constraints faced by firms were highest in Ireland, Greece and Spain, the countries with the most severe banking and sovereign debt crises.

The impact of external financing on firm growth was analysed using two firm-level data sets: *Amadeus* and *EFIGE*.⁴ The research results indicate that the recent financial crisis had different effects on the responsiveness of firm performance to financial factors across different types of firms and industries in the EU.

Firms' investment over the period analysed was highly sensitive to access to external financing with all types of firms facing binding financing constraints in the post-crisis period. Such liquidity constraints were, however, more severe for domestic small and medium-sized firms, micro-sized firms, and firms in the high-tech knowledge-intensive service industries.

The analysis finds that financial factors impacted significantly on employment growth, independently from other determinants such as firms' structural characteristics, output demand, as well as industry and country-specific cyclical factors. Long-term credit was important to the decision to hire new staff, particularly in the case of domestic small and medium sized-firms, and micro-sized firms.

The research results indicate that financing constraints have negatively affected productivity growth in all firms and industries. The financial crisis exacerbated this effect particularly for young firms and firms in the construction sector and in the high-tech manufacturing sector.

Firms which were less constrained financially were more likely to export, but financing constraints did not affect the extent of export sales of existing

³ A firm is defined as facing perceived financing constraints if access to finance was identified by firms' response as the most pressing business problem. Actual financing constraints are defined on the basis of firms' responses in relation to credit applications and rejections.

⁴ The *Amadeus* data set includes standardised annual company balance sheet and profit and loss accounts (consolidated and unconsolidated) from about 14 million companies in Europe. The *EFIGE* data set includes firm level information on structural firm characteristics, workforce, investment, technological innovation and R&D, internationalisation activities, finance, market and pricing. The information was collected with a survey of a representative sample of firms in Austria, France, Germany, Hungary, Italy, Spain and the United Kingdom.

exporters. The former effect was most important for young firms, domestic-owned and firms in the traditional industries.

POLICY IMPLICATIONS

The evidence provided in this study indicates that financial market imperfections, which were amplified during the recent financial crisis, have affected negatively the investment and growth of firms in the EU independently from the impact of demand conditions. These effects have been uneven across types of firms, industry and country groups. These different effects should be taken into account in the design and targeting of policy measures and instruments to reduce the challenges created by financial market imperfections. The evidence also suggests that complementary policy measures should target specific issues in relation to credit rationing and discouraged borrowers.

For example, policy measures should focus on domestic-owned, micro, small and young firms, providing them with information on the available schemes and supporting them in accessing equity and debt markets, thereby helping them to strengthen their capital structure.

To address information asymmetries from the supply-side, a standardised credit rating for small and medium-sized enterprises (SMEs) could be introduced providing a reference point for all banks. This would be similar in purpose to the standardised credit ratings issued for government, municipal and corporate debt.

The financial capabilities of SMEs, especially of micro, small and young firms, could be enhanced by policy measures such as training in how to prepare applications for bank loans.

While financial market imperfections provide the rationale for policy intervention, it is important to ensure that such intervention does not distort the competitive market mechanisms that allocate financial resources. This points to public intervention that ensures *financing additionality* and fosters self-sustainable private financing in the long run.