Marta Degl'Innocenti

DO BANKING ARCHITECTURE AND EU REGIONAL POLICY MATTER FOR THE GROWTH OF SMEs?

FrancoAngeli

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INTRODUCTION

The 2007-2009 global financial crisis (GFC) has highlighted the fragility of the current banking system and has shifted the debate among policy makers towards the role of traditional and local banking for economic growth, and the access to credit of Small Medium-sized Enterprises (SMEs[1]). Banking-related discussions with a focus on SMEs are particularly timely as SMEs have had trouble in recovering from the GFC and are strongly dependent on bank financing. Moreover, in response to the recent Banking Recovery and Resolution Directive, some governments (for example in Italy and the Netherlands) have advocated the aggregation of cooperative banks in large groups. This phenomenon could affect SMEs' lending since small banks usually deal with this type of firms.

Overall, the persistent lack of profitability in the banking system has facilitated a consolidation process though merger and acquisition operations. Because of all these regulatory and industrial changes, the architecture of the banking system is changing as well.

Specifically, the consolidation process taking place in the banking sector and the increase in the size of banks could have implications for not only local development, but also for SMEs' access to credit. This can in turn weaken regional development and enlarge inequalities as nowadays SMEs represent the engine of the European industrial sector. They in fact account for almost all EU-28 non-financial business sector enterprises (almost 98%),

[1] Based on the definition provided by the European Commission (see https://ec.europa.eu/eurostat/web/structural-business-statistics/structural-business-statistics/sme), SMEs are defined as enterprises having: 1) less than 250 persons employed; 2) an annual turnover of up to € 50 million, or a balance sheet total of no more than EUR 43 million (Commission Recommendation of 6 May 2003).

two-thirds of total EU-28 employment (67%) and generate 57% of value added in the EU-28 non-financial business sector[2].

In light of these considerations, this book aims to revise the existing literature on the relationship between banking development and economic growth, and intends to analyse how the structure of the banking system determines the productivity and profitability of SMEs.

In particular, this book bridges the literature on the importance of the bank-firm relationship and the effect of the economic geography and evolution of the whole banking sector on the access to credit of SMEs. The *research questions* can be summarised as follows: (i) Does the banking development enhance local economic growth and reduce regional inequalities? (ii) How do small and innovative firms have access to lending? (iii) How and to what extent does the structure of the banking system facilitate the access to credit of SMEs? (iv) How and to what extent does the geography of banks affect the productivity of SMEs and consequently their distribution and growth? (v) Do SMEs need small banks? (vi) Are there any alternatives to the traditional banking channel at the local level? (vii) Do EU regional policies reduce economic dissimilarities? (viii) Do they exert a positive effect on SMEs? (ix) Are EU regional policy interventions complementary to the local banking system?

The first chapter of this study discusses the main regulatory changes in the European banking system. Then it revises the main literature on the importance of the financial and banking development for the local economic growth, regional inequalities and competitiveness. Specifically, this Chapter addresses the first research question.

The second chapter talks more in depth about the implications and importance of having a heterogeneous banking system for lending for SMEs. This chapter investigates the research questions (ii)-(vi). First, it discusses the structural changes and challenges to the European Banking system. Next, it revises the literature on the importance of relationship lending for small businesses' access to finance. The chapter focuses specifically on the role of small banks, who are more successful in meeting the credit needs of small businesses than large banks due to their access to better credit information, and their ability to better manage 'soft information' (collected via personal interaction and usually difficult to codify). It also revises the opposite view

[2] Data retrieved from https://www.smeacademy.eu/uploads/5/2/4/2/52422965/171217_annual_report_-_eu_smes_2016-2017.pdf, accessed on 11/03/2019.

(Berger and Udell, 2006) based on which a strong presence of small institutions may not be needed for general credit availability of SMEs: large banks can, in fact, lend to opaque SMEs via different transaction technologies due to “hard” collateral-based information (e.g., collateral guarantees). Chapter 2 examines all these issues and it further discusses the effect of banking competition on SMEs, the effect of financial turmoil on access to finance of SMEs and the influence of other players such as mutual guarantee schemes and developing banks on SMEs’ behaviour and strategies.

Chapter 3 discusses the importance of both government and European regional policies for the support of local economies and SMEs. These funds and policies represent a concrete alternative to support and incentivising growth in local economies, and especially SMEs, compared to the traditional banking sector. They may represent either a complementary or a supplementary source to the traditional capital market. This chapter focuses specifically on research questions (vii-viii).

Chapter 4 aims to investigate how and to what extent European regional policy complements the banking system in supporting SMEs. In doing so, it deals with the last research question (ix). A unique characteristic of this book is to empirically assess whether the structure of the banking system at the NUTS3 level can affect the productivity and performance of SMEs. In addition, this chapter verifies the impact of EU funds on SMEs’ performance and productivity. Finally, it assesses whether the effectiveness of EU funds depends on the banking structure and geography.

Lastly, the conclusion points out the future and ongoing challenges for the European banking system and SMEs.

I do believe that this book provides a useful first, in depth investigation of the relationship between banking structure, EU funds and SMEs’ performance and productivity. It also offers insight on the implication of regulatory reforms and changes to the banking structure on SMEs.

I gratefully acknowledge the Southampton Business School, UK for financial support received to support my research (Small Grant Application).

1. BANKING DEVELOPMENT AND ECONOMIC GROWTH

1.1. Introduction

This chapter provides an overview of the importance of the banking development for the economic growth with a focus on the SMEs' growth. It first discusses the main regulatory changes in the European banking system and their implications for the banking structure and development and recent trends. It then revises the literature on financial development and economic growth, income inequality, and innovation. Finally, it offers some suggestions for further research development.

This chapter addresses the following questions: Does the banking development enhance local economic growth and reduce regional inequalities? Specifically, this chapter investigates how and to what extent banking development and, more in general, financial development matters for the economic growth. The next sections of this chapter provide more insight on these issues. Section 1.2 offers an overview of the liberalization process, structural changes, and competitive dynamics in the European banking system. Section 1.3 briefly discusses how and to what extent financial development increases economic growth. Then, it shifts the focus to the financial development-income inequality nexus. The reason is that it is still widely debated which part of the population, the poorer and/or the wealthy one, benefits more from financial development. If financial development widens inequalities and creates benefit only for the rich, poor people are refrained from investing. This could have implications for the SMEs, which for the biggest part consist of sole proprietorship firms. Section 1.4 focuses on these issues and revises the literature on financial development and income inequalities.

Section 1.5 provides more insights on the impact of banking development on SME's growth and productivity, but also innovation. This latter part is justified by the fact that SMEs play a critical role in innovation as they tend to generate disruptive and break-through innovations because they do not have specific ties with existing technologies (Baumol, 2002, Arestis et al., 2001). Finally, Section 1.6 summarises and discusses limitations and possible further expansions of these streams of research.

1.2. An overview of the liberalization process and competitive dynamics in the European banking system

During the last decades, the European banking industry has experienced continuous transformations due to regulatory changes, technological advancements, the globalization of the economy, and economic integration. All these changes have affected the level of financial development in Europe. Furthermore, the financial sector in general has widely been limited both geographically and in scope by heavy regulations and controls.

With the liberalisation process in the late 80s the European banking system has changed profoundly. The liberalisation process significantly affected the banking system by facilitating consolidation and diversification strategies to exploit economies of scale and scope.

Since the introduction of the First Banking Co-ordination Directive in 1977 and because of the deregulation process, the EU has advanced several key policy initiatives in order to foster a Single European Market in banking and financial services (Degl'Innocenti et al., 2017b, Casu and Girardone, 2010). The scope was to improve the allocation of financial resources and to promote a more competitive and efficient financial system in Europe (Casu and Girardone, 2010).

The banking landscape further changed as the result of the enactment of the Second Banking Directive, which has allowed several financial firms to enter new markets, by either merging with /taking over existing banks or non-bank financial institutions, or as new players (Degl'Innocenti et al., 2014). Furthermore, with the liberalization of legal barriers to bank branching in 1990 and the elimination of geographic constraints on banking organizations, medium to large sized banks expanded their branching networks to new markets in order to exploit economies of scale and consolidate their local market share

(Degl'Innocenti et al., 2017a). On the one hand, banks increased their market power by being closer to borrowing firms. This allowed them to reduce asymmetry of information with borrowers. On the other hand, the increase in branch numbers have increased organizational costs and has put pressure on banks to improve their cost and profit efficiency (Berger and DeYoung, 2006). In general, there is a trade-off in the benefits of the proximity between firms and banks, versus the risks and costs that come with opening multiple branches in order to attain this proximity (Degl'Innocenti et al., 2017a).

Next, the Second Banking Co-ordination Directive was introduced, aimed at enhancing the competition level by the EU-wide recognition of single banking licences. After that, the 1992 Maastricht Treaty led to the creation of the European Union and the establishment of the Euro. Both the Single Market and the Economic and Monetary Union (EMU) in 1999 have contributed to a further liberalization of the European financial market (Casu et al., 2015). Overall, during the 1990s policy makers promoted the integration of banking and financial systems to enhance the competition, productivity, and efficiency of the financial sector throughout Europe (Casu et al., 2004).

But what does European banking look like exactly? Did the level of competition, performance and the traditional banking activities either increase or decrease over the last decade? The recent GFC has hit the European banking system hard and affected the performance and risk-profile of European banking system. In response to the GFC, there have been extraordinary policy interventions in terms of the range, speed, and scale of the measures that were adopted. Therefore, policy makers have widely debated the role of traditional and local banking for economic growth and financial stability. Large banks have in fact appeared to take on excessive risks and they have proved to be vulnerable to international shocks. In response to this[1], post-crisis reforms have tightened regulations on capital and liquidity in all major jurisdictions. The scope was to identify effective mechanisms of control and intervention to make the banking system more stable. In particular, European policy makers have established a strong approach to bank resolution to better align incentives towards risk. This is a consequence of the fact that the pre-

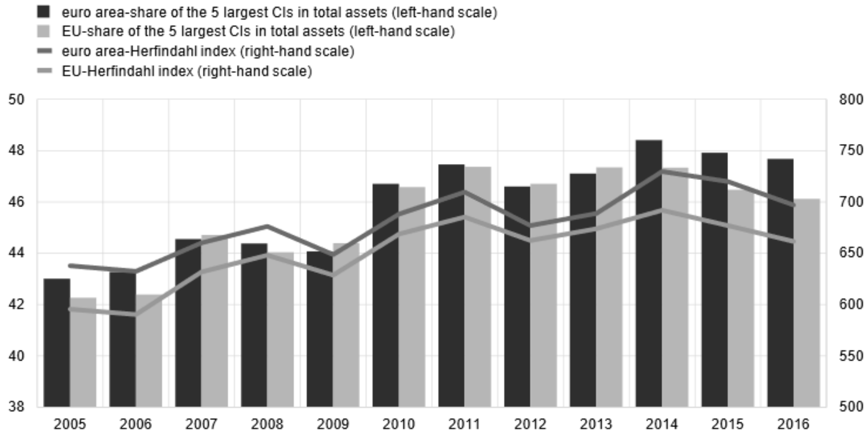
[1] "The implications of bail-in rules for bank activity and stability". Opening speech by Benoît Cœuré, Member of the Executive Board of the ECB at Conference on "Financing the recovery after the crisis- the roles of bank profitability, stability and regulation", Bocconi University, Milan, 30 September. Available at https://www.ecb.europa.eu/press/key/date/2013/html/sp130930.en.html.

crisis resolution mechanisms have encouraged both moral hazard and risk-taking behaviour of the too-big-to-fail institutions. Starting from the onset of the financial crisis, US and EU regulatory authorities or governments have in fact bailed-out several financial institutions with the scope to reduce the fragility of the banking system and to promptly restore confidence in the financial markets (Calabrese et al., 2017). However, these interventions are not free from criticism, as they are complex and highly costly for taxpayers.

The new Bank Recovery and Resolution Directive (BRRD) and the Single Resolution Mechanism (SRM) Regulation, operational from 1 January 2016, attempts to overcome all the issues raised by policy interventions during the GFC. Specifically, it has established new rules to rescue financial institutions through the bail-in tool. Bail-in enables the resolution authority to write down and/or convert into equity the claims of a broad range of creditors, according to a predefined creditor hierarchy. Furthermore, in response to these directives, some governments (Italy, for example) have advocated the aggregation of cooperative banks in a few groups or even a unique group under the control of a holding entity. The reasons behind the reform of cooperative banks are several: among them, the high amount of non-performing loans in the sector, the lack of an effective internal governance to promptly respond to crisis periods through recapitalization, and the limited possibility to diversify the source of risk. Cooperative banks are traditionally small and poorly diversified. This makes them vulnerable to shocks and crisis events. Because of their small size and business volume, it can be hard to justify the use of funds to bail out these types of banks. Even though the aggregation of cooperative banks can be beneficial for the stability of the system, their increase in size and aggregation in a unique group can however harm their local dimension activities and consequently local small businesses.

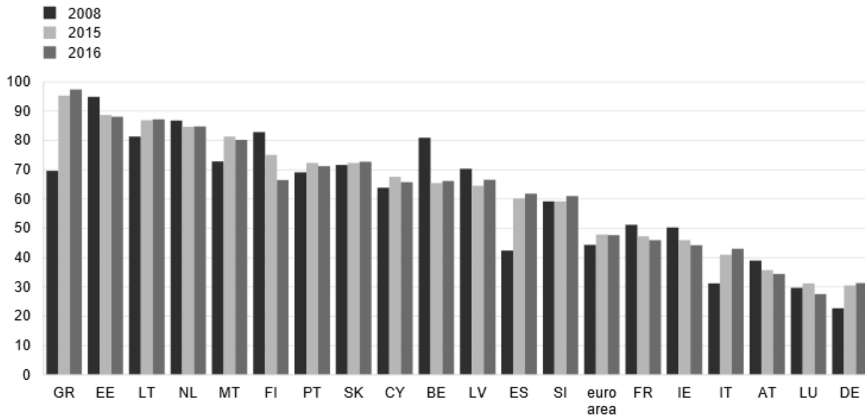
More in general, the European banking industry is moving towards higher levels of market concentration (Figure 1.1 and Figure 1.2). Figure 1.1 shows that the level of the concentration of banking markets, as measured by the share of total assets held by the five largest credit institutions or by the Herfindahl index (HHI), exhibits an increasing trend until 2014. After that the concentration index dropped down from 48.4% to 47.7%.

Figure 1.1 – Market concentration



Source: ECB (SFI and MFI BSI statistics) and ECB calculations. Figure retrieved from ECB Report on financial structures, October 2017, available at https://www.ecb.europa.eu/pub/pdf/other/reportonfinancialstructures201710.en.pdf.

Figure 1.2 – Share of the five largest credit institutions in total assets



Source: ECB (SFI statistics) and ECB calculations. Figure retrieved from ECB Report on financial structures, October 2017, available at https://www.ecb.europa.eu/pub/pdf/other/reportonfinancialstructures201710.en.pdf[2]. The Figure indicates the share of total assets held by the five largest credit institutions in each country.

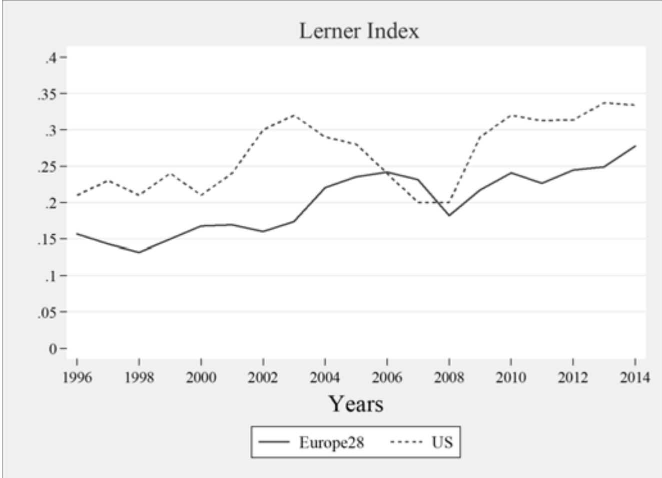
[2] Abbreviations: BE (Belgium), DE (Germany), EE (Estonia), ES (Spain), IE (Ireland), GR (Greece), ES (Spain), FI (Finland), FR (France), IT (Italy), CY (Cyprus), LV (Latvia), LT (Lithuania), LU (Luxembourg), MT (Malta), NL (Netherlands), AT (Austria), PL (Poland), PT (Portugal), SI (Slovenia), SK (Slovakia), FI (Finland), MT (Malta).

Figure 1.2 shows the level of banking concentration per country. In general, small countries exhibit the highest level of market concentration, while large countries are characterized by a banking system that is more fragmented and populated by savings and cooperative banks, such Germany and Italy.

Figure 1.3 compares the level of banking competition for the 28 European Union Membership States. Specifically, Figure 1.3 reports the trend for the Lerner Index, a measure of competition largely used in the banking literature (Forssbæck and Shehzad, 2014, Koetter et al., 2012). The Lerner Index measures the extent to which a bank can set a price above its marginal cost. An increase in the Lerner index indicates a deterioration of competition among financial intermediaries. Particularly, the Lerner index (LER) measures a firm's ability to charge prices above its marginal production cost ($LER = (P_{it} - MC_{it}) / P_{it}$), where P is the average selling price and MC is the marginal cost of production.

From Figure 1.3, it is clear that banks both in the US and Europe increased their monopoly market power from 1995 until the GFC. During the GFC, both US and European banks saw a consistent drop in their monopoly market power. Since 2010, however, banks on both sides of the Atlantic have managed to increase their monopoly market power again. Only US banks exhibit a reverse trend in the years 2013-2015.

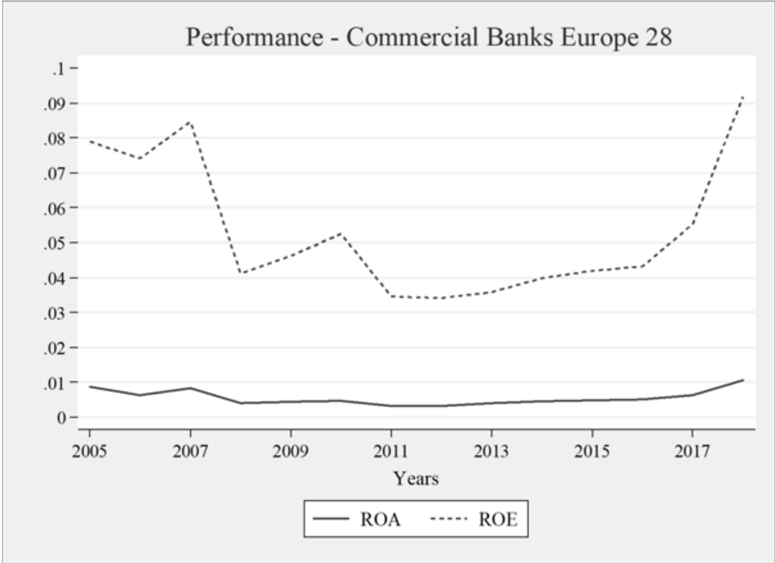
Figure 1.3 – Lerner Index: Europe 28 vs the US



Source: Own elaboration on the World Bank's data (July 2018 global financial development database). Notes: The Lerner Index is a measure of market power in the banking market. It compares output pricing and marginal costs (that is, markup). Data is winsorized at 5%

The consolidation process in the European banking system is also motivated by a low profitability that characterized the European banking system during the period after the financial crisis until 2017. After 2017, the performance of European banks displayed a reverse trend coming back to the pre-crisis levels (*Figure 1.4*).

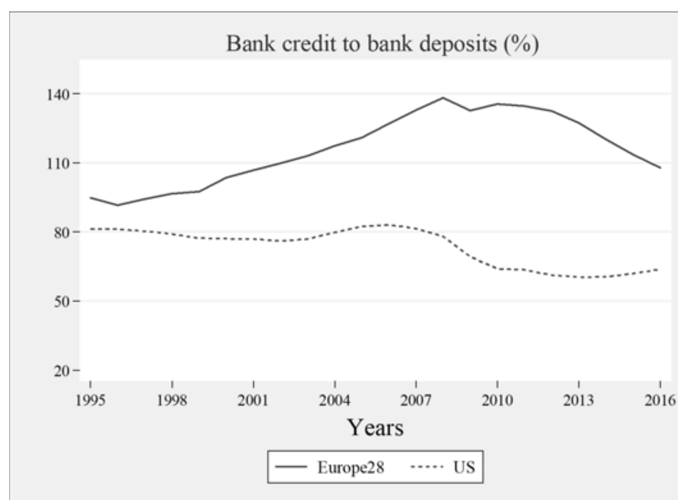
Figure 1.4 – Commercial Bank Profitability in Europe



Source: Own elaboration based on the data provided by Bank Focus di Bureau van Dijk. ROA is calculated as the average of Net Income/Total Assets, while ROE is calculated as the average of Net Income/Total Equity. Data is winsorized at 5%.

Another factor driving the consolidation process is the need to achieve cost containment, deleveraging, and restructuring. In addition, many European banks are still having issues with impaired assets, especially those that operate in countries with the deepest and longest recessions. Looking at this picture, it seems crucial for the European banking system to go through a restructuring period to preserve its own market share in the financial sector.

Figure 1.5 – Bank Credit to Bank Deposits (%): Europe 28 vs US

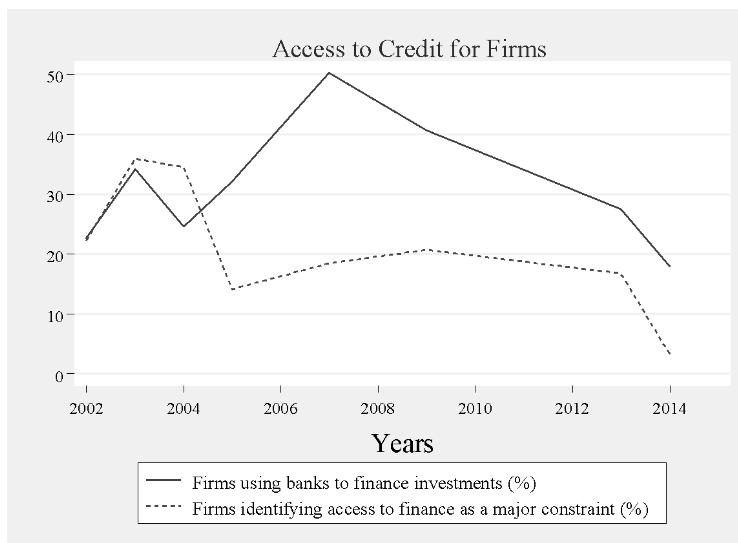


Source: Own elaboration on the World Bank's data (July 2018 global financial development database). Notes: The financial resources provided to the private sector by domestic money banks are reported as a share of total deposits. Domestic money banks comprise commercial banks and other financial institutions that accept transferable deposits, such as demand deposits. Total deposits include demand, time, and saving deposits in deposit money banks.

Figure 1.5 shows the trend for bank credit to bank deposits. This represents a measure of the traditional banking activities. This ratio has sharply increased in the 1990s and 2000s especially in Europe 28. Since the onset of the GFC, there has been a decreasing trend and this does not show an inverse pattern. Consistently, there has been a drop in the percentage of firms using banks to finance purchases of fixed assets. In addition, the number of firms identifying access/cost of finance as a major constraint after the GFC has remained stable until 2014 (Figure 1.6).

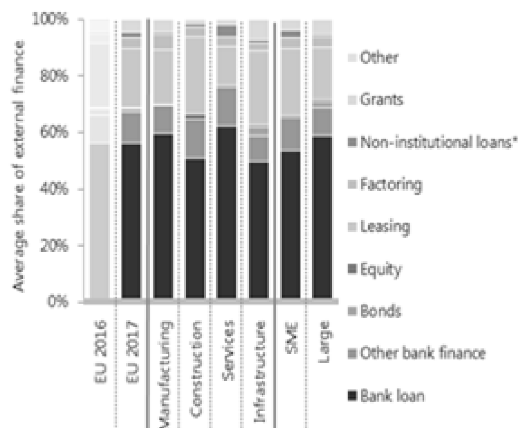
In this context, in terms of financial support, the bank loan still represents the main type of external finance for firms in Europe (Figure 1.7). This means that changes in the business model and structure of the banking sector are going to have an important impact on the industrial sector and more in general for economic growth.

Figure 1.6 – Access to Credit for Firms



Source: Own elaboration on the World Bank's data. Notes: Firms using banks to finance investments (%) is the percentage of firms using banks to finance purchases of fixed assets. Firms identifying access to finance as a major constraint (%) is the percentage of firms identifying access/cost of finance as a major or very severe obstacle.

Figure 1.7 – Types of external funds used for investment activities



Source: EIBIS17 and EIBIS16.
*Notes: Base: All firms who used external finance in the last financial year (excluding don't know/refused responses). Q. What proportion of your investment was financed by each of the following?*Loans from family, friends or business partners*