How do firms finance their investment?

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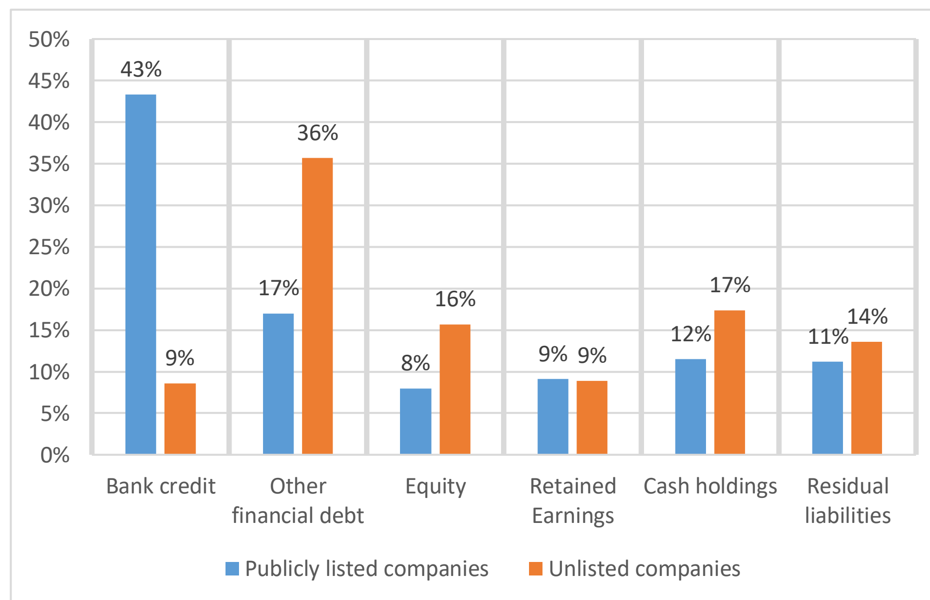
We analyse how French firms financed their investment over the 1992-2016 period. We show that the funding mix varied significantly according to the size of the firms, whether or not they were listed on the stock exchange and the nature of the investments undertaken. These results suggest that the Capital Market Union could foster business investment by developing equity financing.

Chart 1: Breakdown of investment financing by listed and unlisted companies (% of total financing)



Source: Lé and Vinas (forthcoming)

Data: Banque de France and author's calculations

Note: The category "Other financial debt" includes bonds (convertible and non-convertible), non-bank loans, deposits (e.g. from shareholders) and other debt.

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The low productivity growth of recent years can only be reversed by sustained investment, especially in intangible assets, in order to foster innovation. It is therefore important to better understand how investment is financed in general, and intangible investment in particular.

In a recent paper, Lé and Vinas (forthcoming) study the financing of business investment using accounting and financial data from the balance sheets of some 177,000 firms between 1992 and 2016. The method used consists in analysing the systematic changes in investing

firms' liabilities. Using this method, we can estimate how companies finance one euro of investment using a combination of different funding sources.

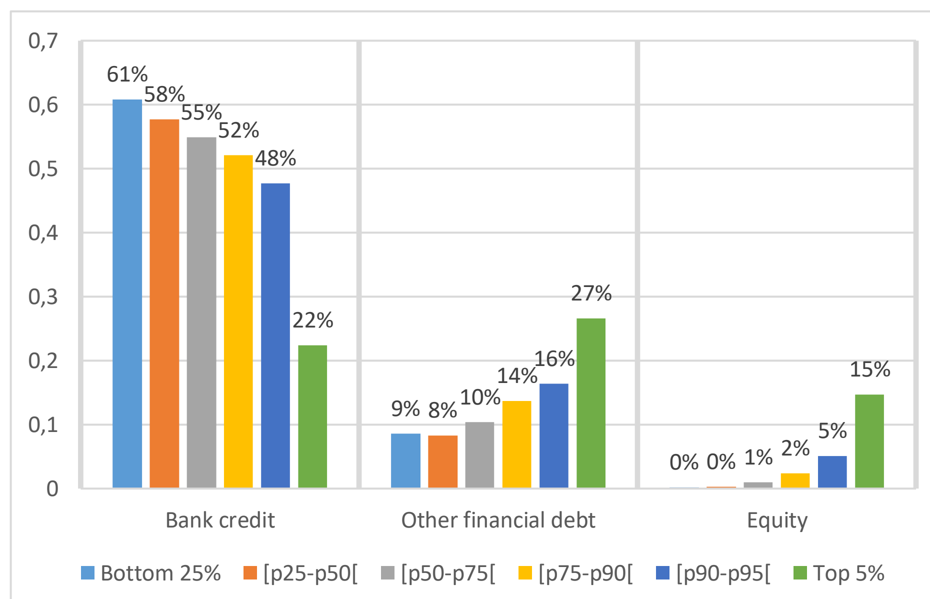
On average, 34% of an additional euro of investment is financed by bank credit, 21% by other financial debt (e.g. bonds), while equity, retained earnings and cash holdings each contribute around 10%. The remaining 10% or so comprises residual liabilities, i.e. mainly tax and social security contributions. Thus, the small share of bank credit in firms' balance sheets (11% of total liabilities on average) contrasts with the crucial role of bank credit in the financing of investment, highlighted by these estimates.

Investment financing varies significantly according to the size and listing status of companies

The above estimates take into account all firms indifferently. However, the ways in which investment is financed may vary significantly according to the specific characteristics of the firms. In particular, listed companies are generally expected to have greater access to equity and bond financing. We investigate this assumption by examining how the contribution of each financial resource varies depending on whether or not the firm is publicly listed.

It appears that listed and unlisted companies have a different mix of funding sources for investment (see Chart 1): whereas unlisted firms largely finance their investments through bank credit (43%), bank credit plays only a marginal role in the financing of investment by listed companies (9%). In contrast, we find a much greater use of equity and bond financing among listed companies. While unlisted companies finance only 8% and 17% of their investments with equity and bonds respectively, listed companies finance almost 16% of their investments with new equity and up to 36% with bonds.

Chart 2: Breakdown of investment financing by turnover quantile (% of total financing)



Source: Lé and Vinas (forthcoming)

Data: Banque de France and author's calculations

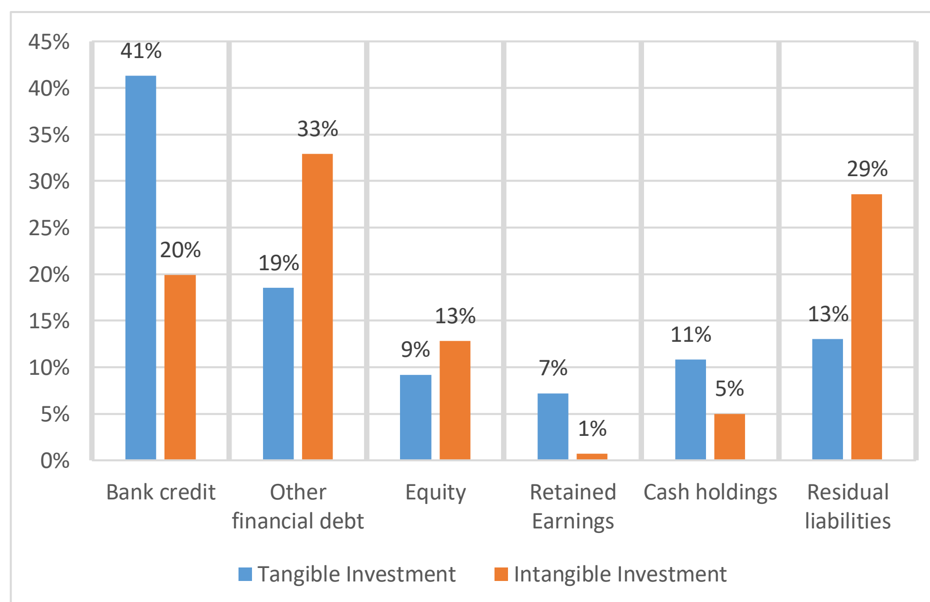
Nevertheless, given that publicly listed companies are much larger than unlisted companies, we cannot rule out the possibility that the way in which companies finance their investment varies first and foremost according to their size. For instance, when the population of companies is broken down by turnover quantile (see Chart 2), the contribution of equity to the financing of investment increases significantly with size: from negligible for the smallest 25% of companies, the contribution of equity rises to almost 15% when it comes to the largest 5% of firms. We observe the same increasing correlation for bond issues. Conversely, we note that the contribution of bank credit to the financing of investment decreases fairly mechanically with the size of the firm, particularly for the largest 5%.

Lastly, when we cross-reference these two aspects in order to measure the role of size and listing status separately, we find that the contribution of equity to the financing of investment by the largest companies is largely unchanged both for listed (17%) and unlisted (13%) companies. Meanwhile, investment financing by bond issuance is significantly greater for listed companies (37%) than for unlisted companies (21%) and vice versa for financing by bank credit (6% for listed companies compared to 32% for unlisted companies).

Specific features of innovation financing

It is widely acknowledged that equity financing is essential for the financing of innovation, in particular because of the specific characteristics of intangible investment (lack of pledgeability, low redeployability, i.e. it is difficult for another firm to reuse this type of investment). But our results reveal a more complex picture (see Chart 3). We observe in particular how much the contribution of other financial debt (and in parallel that of bank credit) varies significantly depending on whether we consider tangible (19%) or intangible (33%) investment.

Chart 3: Breakdown of investment financing by type of investment



Source: Lé and Vinas (forthcoming)

Data: Banque de France and author's calculations

In other words, in France, the specific features of innovation financing, measured in terms of the financing of intangible investment (despite the difficulties in measuring this investment), currently stem more from the characteristics of financial instruments (market debt vs. bank debt) than from their nature (debt vs. equity).

How to stimulate investment going forward?

An insufficient level of business investment was observed in the aftermath of the 2008 financial crisis (Fay et al. 2017) particularly in connection with low productivity growth. Some countries - France, Germany, Italy and Spain, to name a few - took almost a decade to return to their pre-crisis levels of investment (Banerjee, Kearns and Lombardi, 2015).

Many studies have documented the impact of financial factors on the level of investment. Other studies have highlighted the mechanisms that were identified before the 2008 crisis, such as the decrease in the degree of competition (Gutiérrez and Philippon 2017) and the rise of intangible assets (Alexander and Eberly 2018).

Our analysis (described in detail in Lé and Vinas (forthcoming) of the financing of French firms' investment over the period 1992-2016 shows that the mix of financial resources varies significantly depending on company size and whether or not the firm is listed. Compared to their American peers, however, French companies are characterised by a lower use of equity to finance their capital expenditure and a greater share of bank debt (Gatchev, Spindt, and Tarhan 2009). Against this backdrop, building on the work underway on the EU's Capital Market Union (CMU) initiative since 2015, which aims to mobilise private capital and encourage cross-border investment by removing regulatory barriers, is likely to further develop equity financing and venture capital.