Finance mismatch

“Finance mismatch” occurs when the supply of finance does not meet demand. One of the main reasons for this capital market imperfection is information asymmetries between lenders/investors and borrowers which lead to adverse selection and moral hazard. Finance mismatch may particularly affect innovative projects because the outcome of an innovation investment is generally more uncertain than the outcomes of other kinds of investments. Also, since the returns on innovation investments are not perfectly appropriable, firms may be more reluctant to disclose information on innovative projects than on other types of projects. This will render negotiations with potential funders more difficult. Public policy can reduce finance mismatch in the context of innovation by facilitating access to finance (e.g. through direct funding of firms’ R&D, debt and risk sharing schemes, and fiscal measures), but also by reducing the degree of moral hazard and asymmetric information (e.g. through regulation on information disclosure).

What is meant by “finance mismatch”?

“Finance mismatch” occurs when the demand for finance is not met by supply or vice versa. In a context of innovation it refers to potentially profitable innovation projects that might not receive access to external sources of finance.

What are the main reasons for finance mismatch?

“Finance mismatch” arises due to market imperfections. One of the main reasons for capital market imperfections is the risk arising from **information asymmetries** between lenders/investors and borrowers. Lenders are not easily able to separate potentially successful businesses from less successful ones, and therefore may provide less funding than the company needs and require a higher interest rate. This, in turn, can drive out lower-risk borrowers and create a greater share of higher risk firms in the pool of borrowers (**adverse selection**). In this context, lenders/investors can decide to maximise their return by setting an interest rate that would leave many potential borrowers without credit (Stiglitz and Weiss, 1981).

Another issues is that lenders might fear that once they have provided funds, borrowing firms will take excessive risks or misuse funds (**moral hazard**). One way for lenders to overcome the problems associated with information asymmetries is by requiring collateral. However, providing collateral might not be possible for some firms, such as young innovative firms, especially if their main assets are intangible. Therefore, these firms are likely to be more credit-constrained, despite of the fact that their projects might have high quality and growth potential.

What is specific to innovation?

Financing innovation may be particularly difficult since:

- The outcome of an innovation process is **uncertain** and the returns on innovation investments are **not perfectly appropriable**. These may jeopardize the capacity of firms to pay back lenders and increase investors’ risks.
- Assessing the risks of innovative projects might be more difficult and more costly than assessing the risks of other kinds of projects. It may require expert and specific knowledge (e.g. technical or scientific knowledge), which raises **assessment costs** and can contribute to increase both information asymmetry and moral hazard problems.
- Innovation investments, such as R&D investments, are often **intangible** and **idiosyncratic**. A large share of R&D spending is typically dedicated to wages and salaries of [illegible] cannot be used as collateral. This lack of collateral further increases the difficulty of obtaining debt financing.

- Businesses may also be **more reluctant to disclose information** on innovative projects due to the fear of imitators. This, in turn, increases information asymmetry with lenders/investors.

Entrepreneurs may be particularly affected by restricted access to external finance, since they typically lack collaterals and a track record showing to creditors their ability to conduct innovative projects and their trustworthiness. The probability of survival is also lower for new ventures than for longer-established firms, which increases the risk for lenders/investors.

What policies can address challenges posed by “finance mismatch”?

In a context of “finance mismatch”, public policies can facilitate access to finance through a wide range of instruments, such as direct funding of firms’ R&D (see Direct funding of firms’ R&D [1]), debt and risk sharing schemes (see Debt and risk sharing schemes [2]), and fiscal measures (see Fiscal measures [3]). Public policy can also try to reduce finance mismatch by lessening the degree of moral hazard and asymmetric information (e.g. through regulation on information disclosure).

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