



STEG POLICY BRIEF

SMOOTHING FINANCIAL FRICTIONS FOR STRUCTURAL CHANGE

Savita Diggs and Joseph P. Kaboski

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Financial frictions restrict the ability of markets and institutions to allocate capital efficiently. This affects both savers and borrowers, among households and firms. Through a variety of mechanisms, this ultimately leads to slower economic growth. Credit rationing limits the extent to which firms can invest and grow. Restrictive lending inhibits potential new firms overcoming high entry costs. These inefficiencies feed through to households through fewer job opportunities and higher prices. Households are also directly impacted if they are unable to borrow or save, which could constrain opportunities for self-investment. This policy brief examines the challenges in designing policy to alleviate these frictions, especially related to data availability, and the key areas where research can contribute to policy solutions.

What are financial frictions?

When financial markets and institutions are underdeveloped, financial frictions limit the effectiveness with which capital is channelled to its most productive uses and lower the efficiency of the financial system. This reduces the overall productivity of the economy and slows economic growth. A primary goal of the financial system is to redirect capital from those with low investing marginal returns to those with high marginal returns. Concretely, this involves funnelling resources towards poor but productive firms and away from wealthy but unproductive firms. The more that wealth and productivity are misaligned, the greater the need for a strong financial system. Frictions in both credit and savings markets can inhibit this. Frictions to borrowing prevent firms from immediately accessing capital. Frictions in savings markets can prevent productive entrepreneurs, or potentially productive entrepreneurs, from saving up and increasing their capital over time. Moreover, frictions on either side lead to mismatches in savings and lending, impacting interest rates. Finally, lending interest rates tend to be higher than saving interest rates and financial frictions can exacerbate the wedge between the two. This is particularly intense in developing countries. For example, the lending rate minus the savings interest rate is 0.7% in Japan but 40% in Brazil. This makes borrowing extremely expensive and saving less desirable, which can limit the financial system's ability to direct resources to their most productive users.

Why do financial frictions matter?

Theoretically, financial development can positively impact economic growth in many ways. Savings increase credit availability and encourage capital accumulation. Use of credit encourages highly productive uses of capital, raising aggregate productivity and making large illiquid investments possible. Together, capital accumulation and productivity growth are two strong engines for economic growth and,

[†] This policy brief is based off the pathfinding paper, [Financial Frictions, Financial Market Development, and Macroeconomic Development](#), written by Joseph P. Kaboski.

ultimately, structural transformation. Security markets also present options for risk diversification which can stabilise growing economies.

One way in which financial frictions manifest is in credit rationing, which can be particularly harmful when it limits the capital available to firms and sectors with large fixed costs or entry costs. When large firms can't get credit, they can't grow as much. This can lower demand for labour and also lower wages. These circumstances may drive higher rates of self-employment, or what is often called "necessity entrepreneurship". This is a poor substitute for jobs as it is often low productivity, low paid, and faces high risk, yet it is highly prominent in developing countries.

Similarly, when financing is limited, high entry costs to large-scale sectors can be prohibitive. The most productive entrepreneurs may be prevented from entering and growing, and the sectors can become dominated by wealthy but unproductive firms. This can also depress the demand for labour and thus wages leading to excess entry into small-scale sectors with lower entry costs such as retail and individual family farms. Indivisible one-time costs for entry or for technological upgrades can be particularly challenging because costs are front-loaded relative to income and therefore extremely difficult to finance. Heavy industrial and large-scale services, such as hospitals, tend to be disproportionately impacted by financial frictions due to high entry and operation costs. Thus financial frictions can distort structural transformation away from these industries and can decrease competition within them.

Low productivity in the large-scale sectors can make their goods and services more expensive. Since investment goods are often produced in these large-scale sectors, high prices can further inhibit capital accumulation. This friction limits economic growth through yet another channel.

Another way financial frictions can harm an economy is through high costs of borrowing that hit firms unevenly. Variations in credit interest rates can cause capital misallocation, as some firms face much higher interest rates. In fact, high costs of borrowing can create even worse situations than circumstances of low access to credit. At a point in time, there is no difference between a firm with low capital due to a high interest rate and a firm with low capital due to rationed credit. However, over time, the former has more difficulty accumulating money and capital as its returns on capital cannot be reinvested and saved because they go to pay the high cost of credit owed to the lender. Hence, even when credit systems are present and are allocating funds to the most productive firms, high interest rates can prevent growth.

Financial frictions can also exacerbate or even cause cycles of poverty. At the micro level, these 'poverty traps' occur when households require additional funds or technology to be able to work out of poverty, but low access to money prohibits self-investment. Research results are mixed on whether and when such traps arise, and whether cash grants can help households escape these poverty traps over time. It is likely that variations in the underlying environments and populations of the studies are why study findings are contradictory. At the macro level, entire countries might get caught in poverty traps arising when initial wealth distributions negatively affect general wages and interest rates. High costs of entry for entrepreneurs can lead to a reduced demand for labour with a high supply of labour. This lowers wages, meaning people are unable to build up the initial assets required to create new businesses.

Why studying nation-wide financial frictions is difficult

A key challenge is to understand the importance of these frictions in the real world and to devise policies to overcome them. Many of the studies with consistent quantitative results on financial frictions and overall financial development are in the context of more developed countries or are cross-country analyses. Other research on financial frictions has been founded in microeconomic models which do not inform entire economies. Many important macroeconomic questions remain unanswered, especially in regards to developing countries.

Perhaps the biggest obstacle in researching financial frictions in developing countries is data availability. Ideally, data would consist of information on firm ability (potential) and wealth over several years. Firm-to-firm and firm-to-customer transactions would be included, as well as firm agreements and negotiations. Such data are often produced by systems tracking VAT taxes. Additionally, these data would cover the full spectrum of firm wealth, current productivity, and potential productivity. This allows analyses to produce rich understandings of the entire economy, rather than only one aspect, such as productive and wealthy firms. Combined, these aspects would allow for estimations and policy analyses.

At this time, these data do not exist. Data challenges are present in studying all countries, but they are most severe in developing countries, especially the smallest and poorest nations. The data we do have involve common data complications. For example, oftentimes there are long gaps between the years in which firm data are collected. This creates periods of unknowns which muddle analyses and make possible policy solutions less targeted. In other cases, only one year of data is available, which is not usually enough information to form solid policy recommendations. Additionally, data may not include representative coverage of all firms. To have a full understanding of the firm-side of an economy it is necessary to include businesses across sectors and wealth, both privately and publicly owned, and formal and informal firms. It is particularly difficult to include the wealthiest and poorest firms in datasets. Informal firms can also be troublesome, as it is hard to document businesses such as selling food out of one's home to neighbours. Data which do not include all firms may miss important nuances. At a country level, the financial market may appear to distribute credit well, but this could be concealing lower-level financial frictions, such as a particular region of the country that has significant barriers to credit access. This is why expansive firm-level data are ideal. Results differ based on changes to data, so it is important to consider how data are under-representative of various firm populations when crafting policy.

Policy opportunities in developing country financial markets

There exist several areas in this topic which clearly require additional exploration, for despite data difficulties, research is still the basis of policy reform.

First, while the consequences of financial underdevelopment have been explored, there has been relatively little quantitative work on how to promote financial development, defined in concrete terms. A foundational aspect of this is determining a better sense of how important savings, credit, and insurance are to economic outcomes. Other elements to understand include optimal bank regulation, policy for

foreign banks and international trade, bankruptcy law, and tax policies. These are essential because if access to foreign banks, for example, is a central part of economic growth in developing countries, policy reform can foster access in areas that may benefit the most. Additionally, governments survive on taxes, but pulling money out from normal financial flows could interrupt growth, so balancing these two areas must be rigorously studied. Policy must also take into account that oftentimes, informal alternatives to financial development already exist. For example, family businesses are common in developing countries. Families can foster informal internal capital markets that substitute for underdeveloped formal financial markets. However, dynastic firms can also lead to underperformance and crony financial relationships which can undermine the stability of the financial system. This again reinforces the necessity for policies on financial management and how best to promote financial development.

Second, more research is needed on determining alternatives to financial development when policy-based fostering of financial development is not possible. There exists a theory that financial underdevelopment is due to law, which tends to be a much slower change compared to policy reform. Therefore, studying second-best options to quickly alleviate the harm of financial frictions is paramount. The overarching goal is to efficiently connect financial resources with the most productive firms, leading to economic growth. One option is a set of policies to protect firm growth by more readily allowing businesses to accumulate profits which can then be used for future investments. In principle, this could be achieved through several avenues including well-targeted anti-competitive practices to increase prices and the imposition of tariffs on imported substitutes. Direct state-subsidised lending is also a possibility, although mismanaged banks and corruption can limit its impact. In the past, foreign direct investment has had mixed positive and negative impacts on domestic economies, depending on the particular circumstances.

Lastly, financial participation is also greatly understudied. One aspect of this is who is included in financial market access while the other is who chooses to participate in financial systems. In other words, in many areas it appears that the lack of formal financial services is not simply a question of access but also of demand. This is in relation to both traditional savings accounts as well as new technologies such as mobile banking and digital transfers. Transaction costs, trust, financial literacy, and risk behaviour are all involved in demand decisions for financial services. Naturally, these aspects vary significantly across geographic areas and cultures making it difficult to extrapolate how findings from one context could apply in a different context. It may be that certain forms of financial services meet the needs of some particular populations but not others. Targeting financial services within households may also be important; women tend to spend more on children than men do, and may have different levels of financial and community access in areas focused on growth. These aspects of financial inclusions impact the distribution of income and the security of consumption needs being met, within households and within countries.

Overall, national economic growth and structural transformation can be significantly burdened by financial frictions. This is particularly prevalent in developing countries where policies for financial market wellbeing are either missing or need research-based reform. Studying situations of unproductive firms is difficult due to data limitations. Regardless, it is essential to determine policy solutions for issues of financial development and inclusion, resources misallocation, and ultimately slow economic growth.