



Financial development, institutions and banks



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ABSTRACT

This paper presents a framework for understanding the interactions between political and legal institutions, property rights protection, and their implications for financial development. Whereas the literature has answered questions on why some countries lag behind in terms of financial and economic development, the current study suggests how to get around some institutional attributes to spearhead financial intermediation and economic growth through a set of institutional, information, and banking reforms. It finds little support that common law legal heritage is more suitable than French civil law for some key features of financial development. It concludes that types of institutional and market reforms are more relevant to financial intermediation than legal systems. It proposes some ways forward to increase financial intermediation; and expects, over the long run, the proposed approach to financial development to be beneficial for a number of developing countries.

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1. Introduction

Both the law and finance and the financial development threads of literature underscore that trends in financial intermediation have been diverging for some time and the likely cause is the quality of the institutions across countries. If there have been improvements in intermediation in some countries, in others, firms are faced with momentous challenges to access external finance to upgrade and deepen their industrial capability in order to contribute to overall economic growth. Cross country variations in institutional quality, as well as their effect on financing options, may explain firms' inability to access finance. In many countries, political institutions may be a catalyst to external finance by easing market tensions and facilitating greater access to finance, while in others, they may contribute to erecting barriers to finance.

Financial disintermediation, coupled with poor institutions, may exacerbate fear of bank runs should savers suspect that liquidity in the system is in jeopardy and the likelihood of recovering their money is low. When banks are the sole securities brokers, sellers of many types of assets may find it difficult to find buyers should these assets become

highly illiquid; especially, when the banking system is outdated. Reversing this situation requires long-term fixes involving improvements and sometimes the creation of an institutional environment that encourages risk-taking and innovation for new forms of intermediation and investment vehicles to emerge.

Whereas the channeling of funds from risk averse economic agents to entrepreneurs is the fundamental role of financial intermediaries, this function is also a reflection of the existing level of financial development in a country, and may be hindered by the type of institutional arrangements prevailing in that economy. The ability of financial intermediaries to resolve issues of information asymmetries, agency and adverse selection problems – ubiquitous in financing contracts – is a reflection of a country's overall institutional quality, financial system, and subsequently, its level of financial development.

The debate on differences in ease of access to finance, across countries, has been mostly concentrated on distinctions between bank and market based financial intermediations (see Allen & Santomero, 1999). Another focus has been on the civil and common laws divide (see La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1997, 1998; Levine, 1997; Levine, 2005; Rajan & Zingales, 1998). In the first case, the discussion has been largely dominated by the proliferation of new financial products and ways for intermediaries and regulators to learn and adapt to new forms of risks. In the second case, the discussion has focused mostly on financial intermediation, the ease of access to finance, and institutions. Either way,

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a large array of financial products remains undeveloped and often very limited in less developed economies due in part to the inability of these countries to develop an institutional framework suitable to the development of new financial products and to handle their underlying contracts.

Financial development is not a natural upshot of the interplay of free market forces. Rather, a reverberation of political and property rights of institutions ensuring sound macroeconomic policies and strong legal protection for stakeholders in financing contracts. Understanding the likely causes of the lack of finance and low level of financial development across countries and regions requires the analysis of views outside of the realm of traditional financial intermediation theories. This compels us to ask the question of why financial markets are still undeveloped in many countries while so many (developing) countries appear to have been relatively quite successful in implementing institutions more conducive to financial development by lowering country systemic risks so that firms might have easier access to external finance. More importantly, why have so many countries managed to increase intermediation despite institutional weaknesses.

The law and finance literature posits that unlike French civil law countries, British common law countries have been very successful in implementing institutions conducive to property rights protection and thereby financial development. Despite this, many civil law countries have circumvented their legal heritage to devise a framework that allows firms to have relatively better access to external finance while many common law countries have failed to capitalize on their legal heritage to set in motion institutions conducive to financial development and growth. In fact, as illustrated in Fig. 1, the theory is at odds with recent data on the spread of financial services around the world. New data, over the period of 2004–2011, extracted from the International Monetary Fund's (IMF) database show that countries with French civil law heritage have increased the scope of financial services and have done so substantially more than their British common law counterparts. In a broader sense, to comprehend why many developing countries have been lagging behind in terms of advances in intermediations for so long, one needs to first grasp the conditions under which intermediations have thrived. This requires us to bring into perspective the role of the formal and informal institutions in devising financial contracts.

There is much less research into what types of institutions – property rights or contracting rights – are more conducive to financial development and what types of new institutions are most needed to stem disintermediation. This delineation may shed some light on how to leapfrog some institutional weaknesses to framing systems that allow private parties to contract with each other and achieve greater redeployment of assets through enhanced intermediation. The law and finance literature, while highlighting the importance of institutions for financial

development, is rather thin on the types of institutions that lead to better financial outcomes. It concentrates on the importance of formal institutions, bureaucratic capacity, government stability, law and order, and private sector organization. However, explanations of why and how private parties leap over their weak judicial system to enforce financial contracts are vague and under-developed.

Are property rights institutions more relevant to financial development than contracting rights institutions? Are formal institutions more conducive to financial contracting than informal institutions? Aggarwal and Goodell (2009) surmise that since all optimal contracts are incomplete, and the efficacy and efficiency of overcoming contracting costs depend not only on the legal environment, but also on ethical and other informal conventions, industrial structure, and social and cultural values. Understanding the effects of property and contracting rights, formal and informal institutions on financial contracting, enforcement mechanisms may be of great importance for multinational and portfolio investors as well as policymakers.

This paper presents a framework for understanding the kinds of institutions necessary for successful financial development. It brings in insights from law and finance as well as other bodies of literature on institutions, financial development, private contracting, and government-firms and private citizens interactions. It expressly concentrates on property and contracting rights, formal and informal institutions, and how do they affect financial outcomes. It underscores the institutional, information and larger banking reforms that are needed for sustained growth in intermediation. By focusing on informal institutions and contracting rights, it adds to the ongoing debate on financial development by exploring other facets of private monitoring and access to finance. Overall, it feeds the debate regarding the relations between political institutions and finance, and the linkages between habits, customs, traditions and credit flows to the private sector. As a consequence, it has implications for finance, economics, politics and sociology.

The remainder of the paper is organized as follows. The next section presents a review of the relations between various forms of institutions and financial development. Section 3 summarizes our argument and presents some perspectives along with some policy issues related to institutional choices and their implications to financial development. Section 4 concludes with a set of reforms needed to increase financial intermediation and access to external finance.

2. Financial development and legal institutions

This study brings together different strands of related literature on institutions and financial development. The first thread, the law and finance literature, is regrouped under a series of studies by La Porta et al. (1997, 1998). This branch of literature relates country legal heritage and institutional infrastructure to investor protection and minority rights. The second thread, the institutions literature, which is substantiated by Acemoglu, Johnson, and Robinson (2001, 2005), relates more to property rights protection. The third thread of literature, dominated by a series of research by Levine (1997), Rajan and Zingales (1998), and Levine (1999), offers a broad view of the financial development literature.

This latter thread of literature analyzes the differences in countries' level of financial development as a reflection of their formal legal system. The current study transposes this strand of literature by relating the theories of institutions or property rights of institutions and contracting rights of institutions to the level of financial development, and the ease with which firms within a certain institutional framework have access to external finance even when they have to use informal channels to enforce financing contracts.

2.1. Institutional differences and external finance

Financial development hinges around the issue of how well a country's institutional arrangement allows for optimal allocation and redeployment of investible resources. The effective implementation of

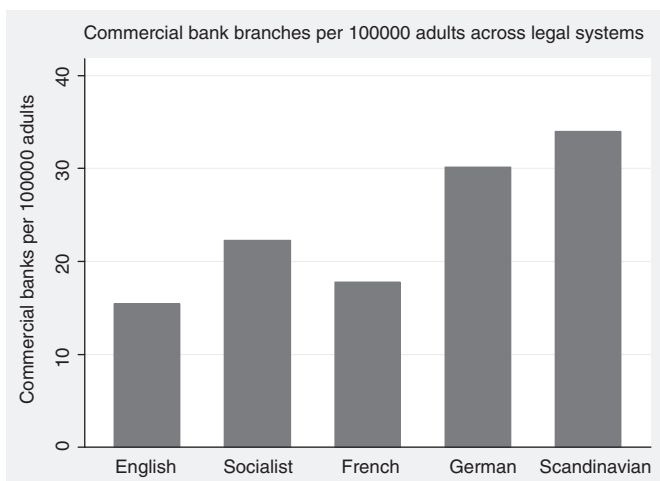


Fig. 1. Commercial bank branches per 100,000 adults across legal systems.

institutions, along with rules enforcement mechanisms, allows not only the creation of financing contracts but also their validity in courts. The possibility of creating viable financing contracts should, in effect, facilitate innovation and increased intermediation. The efficacy and independence of the judiciary, culture, and customs are likely to play an important role in facilitating access to external funds. Recent discussions on institutions and finance suggest judicial inefficiency and a weak judicial enforcement of debt contracts lead to higher cost of financial intermediation for households and firms (Leaven & Majnoni, 2005).

When faced with a predatory state, private citizens have no recourse against extractive policies. In some countries, however, citizens may petition the courts and challenge the legality of the government's actions and prevail. These countries are endowed with the types of institutions deemed more conducive to private property rights and financing contracts. In other countries, where the courts are uniformly weak, although citizens' private property rights may not be properly safeguarded through formal institutions, private citizens might create some forms of enforcement mechanisms for private financial contracts. This requires the implementation of several tools anchored in the country's ethical and informal conventions with deep roots in social and cultural values.

Due to variations in informal or social conventions across countries, the mechanics of financial development might have shifted towards greater reliance on private monitoring, enforcements and market disciplines. This is not only meant to prevent the whole financial system from systemic disruption or dysfunction; but equally, to fill the gap left behind by disintermediation. Thus, institutional choices and their implementation cannot be separated from the ability of the courts to enforce them.

Even when formal institutions are inefficient, the flow of private credit, although limited, may be facilitated by private arrangements. However, such a *modus operandi* should work against financial deepening by inhibiting the financing of economically valuable projects. Acemoglu and Johnson (2005) and Fernandes and Kraay (2007) differentiate between property rights of institutions, protecting the rights of citizens against predatory states and contracting institutions, set of rules, as well as practices and customs governing private contracts between private citizens. Using data from the Enterprise Surveys database by the World Bank, Fig. 2 shows that not only is there a higher proportion of firms with bank loans in French civil law countries, but the proportion of loans requiring collateral is lower in these countries than in British common law countries. This suggests that private citizens do get around their legal and institutional weaknesses to devising tools allowing the creation of financial contracts thereby resulting in an increase in intermediation.

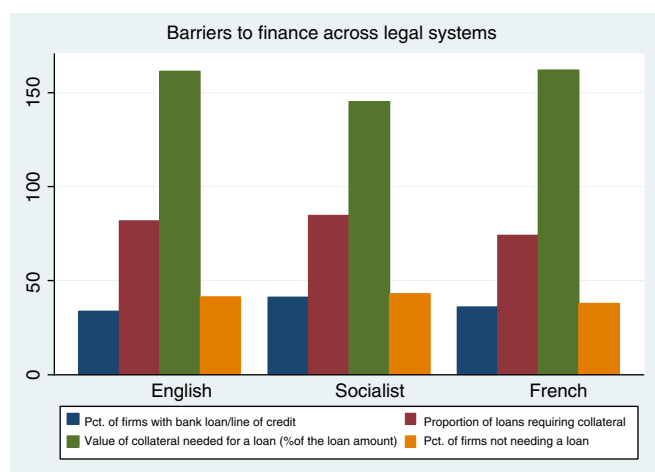


Fig. 2. Barriers to finance across legal systems.

2.2. Institutions, costs of funds, and financial intermediation

Other key considerations to financial development are net interest margins and interest rates spread. An essential function of institutions is to curb systemic risk, and as a result, financing costs – the spread or risk premiums. This holds both for removing barriers to finance and lifting the level of financial development and economic activities in a country. Flows of credit and investments in economically viable projects can be snagged by banks' high net interest margins, and borrowers' adjusted risk premiums. Also, uncertainties over payments and settlement activities may stifle the amount of credit that a financial institution may want to extend to firms when repayment costs are uniformly high. When trade-offs between returns on loans and risk associated to them are unjustifiably high, this results simply in disintermediation.

The association between financing costs and institutions' quality has been explicitly analyzed through the prism of the relation between the courts and finance. Many studies find that financing costs are significantly higher in countries with ineffective judicial systems (Demirgüç-Kunt & Huizinga, 1999; Demirgüç-Kunt & Maksimovic, 2002; Francesca & Giorgio Di, 2004; Leaven & Majnoni, 2005). Particularly, Demirgüç-Kunt and Huizinga (1999) find that banks in developing countries are more profitable than their developed countries counterparts. Moreover, indicators of better contract enforcement, efficiency in the legal system, and the lack of corruption are associated with lower interest margins and lower profitability.

Magda, Tullio, and Marco (2005) stress that there is no conclusive relationship between institutions and bank spread; however, they concede that the relationship depends on banking competition and the type of judicial reform undertaken. In effect, judicial efficiency may be the best proxy for institutions, but the quality of the judiciary, in many developing countries, depends not only on the ability of the courts to enforce contracts, but in the complexity of the financial products and contracts that the judiciary is handling. Whether the quality of the institutions determines the level of intermediation and innovation or whether it is the other way around, remains a matter of empirical interest.

Another research suggests margin to be a function of a country's laws and institutions (Demirgüç-Kunt, Leaven, & Levine, 2004; Leaven & Majnoni, 2005). Demirgüç-Kunt et al. (2004) argue that among the obstacles to finance is interest margin. The authors conclude that net interest margins are narrower in countries with better institutions. When a banking sector enjoys high net interest margins, this is an indication of an inadequate availability of credit, and market distortions in terms of lack of competition and market power of banks. High interest margins and spreads represent the state of financial intermediation in a country, i.e., the extent of distortions in financial markets and the level of difficulty involved in monitoring financing contracts and collecting claims.

Weak institutional settings are consistent with an inefficient and dependent judiciary, which in turn, entails a number of consequences for financial development. The most economically impactful consequence may be an increase in financial disintermediation, backwardness, or sustained under-development; and, as a result, new financial markets and products fail to emerge. This means that finance seekers should find it extremely difficult to issue claims to savers in the form of bonds, commercial papers, equity, or other vehicles such as derivatives because, in part, it is nearly impossible to create those instruments without inshore intermediation or underwriting services. With the increasing diversity of the financial system, the role of banks and the nature of banking have also become more varied and complex. The greater overall complexity of the financial system may increase informational contagion across institutions and markets (see Crockett & Cohen, 2001).

It is noteworthy to highlight that in a disintermediated financial environment, financial intermediaries and end-users will not be familiar with many types of financial products along with the risk they entail; and as a corollary, systemic risks, inherent to financing activities, should be much severe with subpar institutions, thereby leading to higher

financing costs. What is less clear, however, is the extent to which institutions have held back financing to the private sector while tacitly encouraging lending to the public sector, oftentimes, at exorbitant rates. Moreover, as a financial innovation, hindered by the quality of the judicial system, warrants the following question: What would be the effects of any disruption in the financial infrastructure on broad impacts of the flow and availability of credit?

Institutions reflect risk, values, and national consensus. Some values, in effect, may bend toward a culture of corruption and extraction and, when channeled through the established institutions, they are likely to contribute to lower growth in the broader economy. There are, undoubtedly, larger sets of risks borne by developing countries' lenders. In order to mitigate their exposures, these lenders would likely elect to adjust their loan sales by setting high interest rates, reducing maturities as well their amounts. Since risk is inherent to lending, can loans really be priced to adequately reflect real lender risk exposures where extractions and extortions are commonplace? Thus, improving the efficiency of the credit markets along with the financial infrastructure, and improving the quality of the country's institutions via the legal machinery is crucial to finance, investment and growth. However, despite the institutional deficiency prevailing in French civil law countries, new data shows little support for the well-established theory that firms in common law countries should face less obstacles to external finance.

Demirgüç-Kunt and Huizinga (1999) use bank data from 80 countries and show that differences in interest margin and bank profitability reflect various determinants including bank characteristics, macroeconomic conditions, taxes, regulations, financial structure, legal and institutional indicators. Their indicators of better contract enforcement, efficiency of the legal system and lack of corruption are associated with lower realized interest margins and lower profitability. Their results suggest that legal and institutional differences matter. The results also imply that the superior profitability of developing countries' banks is consistent with higher risk environments but starkly contrasts with the poorer institutional framework in developing countries.

La Porta et al. (1998) argue that the legal system in a country is the primary factor of the effectiveness of its financial system given the importance of firms and investors to effectively transact with each other and through the financial system. Modigliani and Perotti (2000) emphasize that in the absence of a strong legal system that can protect the rights of external investors, financial transactions are intermediated through institutions or concentrated among agents who have sufficient bargaining power to enforce their rights privately (Demirgüç-Kunt & Maksimovic, 2002). A direct application of the Coase Theorem yields that, absent significant transaction costs, capital suppliers and users should negotiate, agree, and privately contract on the efficient level of investor protection, when that level is not provided by the law (Bergman & Nicolaievsky, 2002).

In many institutional contexts, the body of written laws, the formal institutions, may be supplanted by the informal institutions' customs and traditions. Institutions can be theoretically and conceptually strong but weak in practice. In reality, the institutions that matter go beyond the written laws. If the laws are enforced, then this will reverberate in the quality of these institutions to eventually impact systemic risk, investment patterns, and lending/borrowing relationships. Where poor institutions are an impediment to finance, the spread should not only be set high, but also banks should be more eager to channel funds to least productive and risk-free borrowers such as the state. In fact, Malouche (2008) reports that in Sierra Leone commercial banks have traditionally often preferred to take a conservative attitude to the granting of credit and investing in government Treasury Bills/Bonds. As of July 2013, a one year Treasury note in Ghana yields 22%, while the 6-month T-bill carries 23.0314%.

The main vehicle through which banks benefit from loan sales is through the spread. The lower financing costs imply fewer obstacles to external finance and thereby greater financial development or enhanced intermediation. Financing costs have numerous implications

for firms and other fund borrowers such as: (1) preventing projects with positive NPVs from financing by making bank credit difficult to obtain, and (2) worsening financial position of already high risk borrowers with low net worth while increasing the default rate on bank loans. In fact, when weak banks deal with a riskier clientele they are expected to charge higher premiums as their expectation of bankruptcy for their borrowers is high.

It has become clear that banks in ineffective institutional settings are expected to have high discount rates and a short investment horizon, especially when they are weak and faced with capital constraints. Demirgüç-Kunt and Huizinga (1999) highlight the large benefits of judicial efficiency on the reduction of banks' net interest income, independently from any notion of market power. This may hide different levels of judicial effectiveness across developed and developing countries where typically banking markets are more concentrated and judges could more likely be captive of the economic power (Leaven & Majnoni, 2005).

2.3. Institutions as a determinant of financial development

By facilitating access to external finance, some forms of institutions may support lending to the real economic sector and thereby contribute to productivity improvements; whereas, others may contribute to diverting scarce resources to non-productive uses, thus creating disincentives to investors in growth enhancing activities. Both the law and finance and the institutions' literature provide ample theoretical justification of a lasting trait of the colonial institutions on today's institutional infrastructure.

Veblen (1899) observes that the situation today shapes the institutions of tomorrow through a selective and coercive process by acting upon men's habitual view of things, and so altering or fortifying a point of view or a mental attitude handed down from the past (in Chavance, 2009). More recently, Acemoglu et al. (2001) assert that the colonial institutions propagated during the colonization era persisted well beyond independence. The law and finance theory holds that the propagation of legal traditions had enduring influences on national approaches to private property rights and financial development.

Levine (2005) argues that the Napoleonic institutions built upon the French civil law system are more rigid and formalistic than those built upon the British common law system. This rigidity has varied consequences on these countries' banking financial systems. According to Merryman (1996), the exportation of the French civil law to its colonies had more pernicious effects on property rights and private contracting than the Code's effects on France and other European countries where it has been adopted. In addition, while colonies imported the inflexibility associated with antagonism toward jurisprudence and reliance on judicial formalism, most did not learn how the French circumvented the adverse attributes of the Code (in Levine, 2005). As a result, the inimical effect of the formalism of the French civil law institutions leads to a financial sector that is lagging behind in terms of innovation, and adoption of new financial products, and the prevalence of high costs of capital.

Beck and Levine (2002) find that differences in legal traditions in the priority they give to individual investors' rights vis-à-vis those of the state have consequences for the development of property rights and financial markets. The authors argue that legal systems that (a) reject jurisprudence (the law created by judges in the process of solving disputes); and (b) rely instead on changes in statutory law will tend to evolve more inefficiently with the negative implications for finance. Djankov, La Porta, Lopez-De-Silanes, and Shleifer (2003) look at the incidences of legal formalism by measuring the number of formal legal procedures necessary to resolve a simple case of collecting an unpaid check or evicting a non-paying tenant. They find that countries with greater legal formalism have higher costs of enforcing simple contracts, longer delays in courts, and lower perceived fairness and efficiency of the judiciary system.

Data from Doing Business and Enterprise Surveys show the little support that firms housed in common law countries enjoy to better access to some kind of financing. Fig. 4 exhibits that the proportion of investments financed by retained earnings are of equal magnitude at common law and civil law firms. Supplier credit is an excellent source of finance for many firms both for financing new projects and working capital needs. Indeed, the proportion of investments financed by supplier credit is higher in French civil law but the proportion of working capital financed through the same tool is higher for common law firms. Overall, Fig. 3 offers a mixed panorama on the ease of access to finance across legal systems.

Nonetheless, when the quality of a country's institutions is poor, the interactions between banks and these institutions may justify a meaningful reform to slow down financial disintermediation. It seems that financial reforms are more consequential to financial intermediation than legal heritage. Such reforms may be fruitless where the capability and the incentives to carry them out are either absent or trumped by special interests and powerful elites, especially where the status quo protects entrenched benefits for potentates and bankers as suggested in Demirgüç-Kunt and Huizinga (2001), and Flamini, McDonald, and Schumacher (2009).

2.4. Property rights, contracting rights and financial development

Acemoglu and Johnson (2005) and Fernandes and Kraay (2007) argue that the interaction between the state and firms and/or private individuals is a vertical relationship while the interactions between private companies is a horizontal relationship. Fernandes and Kraay (2007) explain that a country might have weak property rights institutions with strong contracting rights institutions because the latter reflect the extent to which the courts allow private parties to contract to each other. Along the same lines, Acemoglu and Johnson (2005) highlight the notion that private citizens/investors develop informal sets of institutions to circumvent the court when dealing with each other while they have no recourse when faced with a predatory state. This implies that private property rights institutions may be more relevant to financial development than the contracting rights institutions.

Illustrating two approaches of the law and finance theory, Beck, Demirgüç-Kunt, and Levine (2003) postulate that in countries where legal systems enforce private property rights, support private contractual arrangements, and protect the legal rights of investors, savers are more willing to finance firms and financial markets thrive. They put forward an approach whereby political systems work through differences in legal traditions, especially in terms of the priority they attach to a private property vis-à-vis the rights of the state and the protection of

private contractor rights. They further expound an adaptability system referring to the degree of formalism in the legal system that, if overdone, may impair the legal system's capability to minimize the gap between the contracting needs of the economy and the normative status quo.

The governments in French civil law countries tend to enjoy greater latitude in their abilities to funnel resources toward politically advantageous ends even if this abrogates private property rights and pre-existing contracts. They have difficulty in committing to refraining from interfering in private contractual agreements (Levine, 2005). A legal system's weakness in enforcing contracts certainly provides fadders for corruption and expropriation, which may run from state-to-firms or firms-to-firms. Ahlin and Pang (2008) show that low corruption and financial development facilitate the undertaking of productive projects, and that financial underdevelopment makes corruption more onerous and thus raises the gains from reducing it.

Using data from the Doing Business database of the World Bank, Fig. 4 depicts the association between the courts and access to external finance. It shows that low court effectiveness is associated with lower access to finance. In line with the extant literature on institutions and the law and finance, the picture shows that French civil law countries are more corrupt than common law countries, but the high level of corruption has not erected steeper barriers to external finance. In fact, firms in common law countries appear to be facing more obstacles to external finance than their French civil law counterparts. This suggests that informal institutions such as social norms and habits may supply some monitoring and enforcement mechanisms playing thus an equally important role in facilitating private contractors to do business with each other.

Demirguc-Kunt and Maksimovic (2002) posit that the absolute quality of the banks and securities markets in a country depends on the legal system's ability to enforce contracts. They further argue that the legal system across countries may have a comparative advantage in supporting a quality banking system or a quality of securities. Levine (2005) suggests that the security of property rights is an outcome of policy choices and social institutions. The protection of property rights requires a balance between (1) an active government that enforces property rights, facilitates private contracting and applies the law fairly to all; and (2) a government sufficiently constrained that it cannot engage in coercion and expropriation.

2.5. Institutional view of financial development

North (1994) defines institutions as humanly devised constraints structuring human interactions, and distinguishes formal from informal institutions. Chavance (2009) explains that it is possible to change

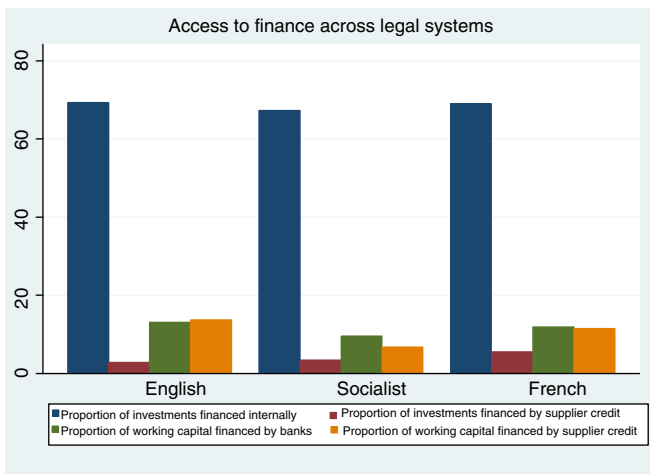


Fig. 3. Access to finance across legal systems.

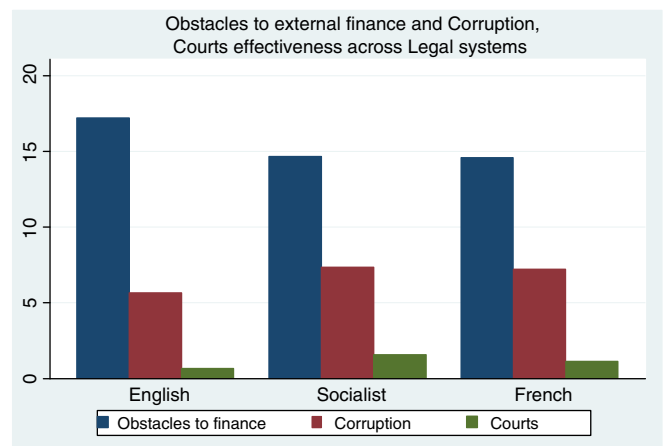


Fig. 4. Obstacles to external finance and corruption, courts effectiveness across legal systems.

formal institutions overnight, but the modification of informal institutions takes place over a very long period of time, which is why revolutionary transformations are never as far-reaching as their advocates would like, and the transfer or imitation of formal institutions between countries does not achieve the desired results. North (1994) further argues that countries that adopt the rules of other countries will have very different performances because of differences in informal norms and enforcement mechanisms. Simply transferring the formal political and economic rules of successful Western market economies to Third World economies is not a sufficient condition for performance (in Chavance, 2009).

In reality, governments can make new laws and create new institutions aimed at supporting financial development in ways that would reduce risk for financial intermediaries to emerge and decrease transaction costs for finance seekers. Nevertheless, these laws would be meaningless if their enforcement is not supported by informal institutions such as customs, traditions and social norms, allowing formal institutions to serve as effective and fair umpires between stakeholders. Formal institutions do not operate in a vacuum, i.e., all types of institutions are interdependent. Aoki (2000) argues that institutions may be codified and represented in an explicit approach, but the codified institutions will have institutional characteristics only if agents collectively believe in them. For instance, statutory laws and regulations are not institutions if they are not followed (see Chavance, 2009).

2.6. Informational reform and financial development

Private and/or public credit registries are another type of institutions affecting financial intermediation and financing outcomes. Miller (2000) explains that credit information registries refer to a database of information on borrowers in a financial system. The information in these registries is available for individual consumers and/or firms and includes a borrower's past payment history, such as late payments, defaults, debt outstanding, and regularity of payments. Such registries, however, may serve a limited purpose if implemented in countries where the institutions are uniformly ineffective and of poor quality.

Despite its relative technological advantages, it appears that the financial sector in emerging economies is unable to deepen financing and efficiently channel financing primarily as a result of informational challenges, lack of bank information sharing, and increased bank secrecy laws. Crockett and Cohen (2001) argue that with the increasing diversity of the financial system, the role of banks and the nature of banking have also become more varied and complex. Moreover, the greater complexity of the financial system may increase informational contagion across institutions and markets. With the lack of viable information gathering and processing mechanisms, transaction and information costs as well as information asymmetries are expected to be high. Innovation should allow a country to leapfrog its outdated institutional, financial, and economic infrastructures reducing the information gap between lenders and borrowers.

Without the necessary informational and institutional reforms, and in spite of its capability to perform ex-post monitoring and verify the stated and seeming financial strength of borrowers to minimize the risk of default, it might be difficult for a bank to efficiently apply its expertise to scrutinize start-ups, small firms, and first time borrowers when credit information is deficient or simply absent. In this instance, ex-ante monitoring plays a vital role in financing new projects, and potentially lessening the risk of adverse selection, reducing the spread, and creating wealth through the financing of positive NPV projects. This suggests that credit registries should play a key role in increasing intermediation along with financial innovation.

In many countries, credit information agencies are mostly nonexistent, and if they do exist, they are mostly symbolic. Miller (2000) surveys Latin American, Eastern European and African banks on their use of credit reporting to grant credit to borrowers. A surprising 28% of banks in the survey were not familiar with such a product known as

credit reporting. Only 40% of the surveyed banks indicated that they use scores reported by those registries. Among those familiar with credit reporting systems, 76% indicated that they would deny credit altogether if a negative information was reported about a client's credit history. Conversely, Brown and Zehnder (2007) analyze the impact of the introduction of such credit registries on loan repayments, and find that the introduction of a registry significantly raises both repayment and the credit volume extended by lenders.

Love and Mylenko (2003), and Djankov, McLiesh, and Shleifer (2007) concur that bank credit to the private sector increases where information sharing institutions are more developed. Pagano and Jappelli (1993), and Kallberg and Udell (2003) argue that information sharing reduces selection costs for lenders by allowing them to predict loan defaults. Padilla and Marco (2000) underscore that creditors often share information about their customers' credit records to help them to spot bad risks. They further maintain that if creditors are known to inform one another of defaults, borrowers must consider that a default on one lender would disrupt their credit rating with all other lenders. Their argument, however, might apply to a limited fraction of the world where records about firms and individual customers are kept and efficiently used in credit allocation. This disciplinary function through information sharing is at best minimal in many developing countries where information about firms is sensitive and does not flow from one lender to another through institutional channels to force borrowers to keep their record intact.

Many countries have implemented credit information bureaus to keep track of consumers' and firms' credit histories. Although the banking literature has shown the importance of information in banking (Diamond, 1984), the effects of such new institutions on net interest margin, interest rates spread and loan quality are less understood due to another significant research gap. Ideally, effective credit information institutions should produce low costs for information, and give rise to productive activities making lending/borrowing relationships healthier. North (1994) argues that if institutional framework rewards productive activities, then organizations will likely engage in productive activities. For example, in banking, financing these productive activities will make lending/borrowing relationships healthier since firms will generate adequate cash flow to grow and service their debt.

2.7. Power of creditor and financial development

A new thread of literature within the family of the financial development research deals with the power of creditors. It specifically pertains to whether secure creditors are paid first from the proceeds resulting from liquidating bankrupt firms. It holds that when secure lenders have priority claims in bankruptcy proceedings, it is easier for them to commit important financial resources to firms' long-term financial needs.

Extending the earlier work of La Porta et al. (1997, 1998), Djankov et al. (2007) literally analyze the impacts of secure creditors' ability to recover collateral when debtors file for bankruptcy or enter reorganization without a stay order or an asset freeze imposed by the court, on financial development. They find that both creditor protection through the legal system and information sharing institutions are associated with higher ratios of private credit to GDP, but that the former is relatively more important in richer countries. They also find that legal reforms contribute to improvements in creditor rights, and that information sharing precedes faster credit growth. They finally report that creditor rights are extremely stable over time, contrary to the convergence hypothesis. This latter finding is consistent with the view that institutions are stable and hardly change over time.

Safavian and Sharma (2007) study two aspects of the law and finance theory: the laws on creditor rights and the quality of contract enforcement by courts. The authors find that the effectiveness of creditor rights is strongly linked to the efficiency of contract enforcement. In addition, firms have more access to bank credit in countries with better creditor rights, but the association is weak in countries with inefficient

courts. Also, they argue that the effect of a change in creditor rights on change in bank credit increases with court enforcement. A study by Qian and Strahan (2007) looks at how laws and institutions shape financial contracts, especially bank loans. They show that under strong creditor protection, loans have more concentrated ownership, longer maturities, and lower interest rates. The study also reports that the impact of creditor rights on loans depends on borrower characteristics such as the size and tangibility of assets. The authors also find that foreign banks appear especially sensitive to the legal and institutional environment, with their ownership declining relative to domestic banks as creditor protection falls.

3. Financial development and institutions: moving forward

Increasing financial intermediation necessitates a set of policies that allows countries to overcome the institutional remnants that have been thrust upon them to deepen finance and economic growth. In a disintermediated financial system, a breakdown of a bank may cause firms to halt their operations due to their inability to tap into their contingent credit commitments with other banks. The resumption of credit extension to creditworthy borrowers may be hindered, and policy responses to dire systemic crises may be inadequate. Any dynamic economy requires a wide range of institutions (apart from banks) performing significant financial functions, including arbitrating risks and redeploying assets within the system.

To improve their system, countries without deposit insurance should explore the possibility of implementing these entities. They should also implement credit insurance to cover some types of loans across some strategic economic sectors. It has become clear that financial innovation is stymied by the inability of a country's institutions including financial intermediaries to arbitrage out risk, and create and handle new financial instruments. Furthermore, the system's capability to create those instruments along with liquidity in order to improve macroeconomic conditions may be limited. The lack of innovation prevents the emergence of new channels of financing leading to firms being unable to effectively take important positions in the short run. This could also have considerable impacts on cross-border financial flows.

To create an institutional framework ensuring that credit flows to creditworthy borrowers, developing countries' governments have to encourage the adoption of credit registry bureaus. These entities need to be resourced to fulfill their promises of collecting and supplying low costs and reliable information to financial intermediaries. They should be oriented in the direction of reducing information asymmetries to provide market-enhancing tools for banks to deal with informationally challenged firms and for first-time borrowers to provide funding for investments.

There are some evidences that French civil law does not inhibit financial intermediation as suggested in the extant literature on financial development. Fig. 5 shows that among all the countries with French civil law heritage it is only in one country, the Democratic Republic of Congo, where firms need to pledge more than 60% of the value of a loan as collateral; whereas in the common law system, the average firm in Ghana, Dominica, Belize, and Zimbabwe has to pledge over 60% of a value of a loan as collateral to secure a bank loan. Meanwhile, Fig. 6 depicts a similar situation i.e., in terms of number of countries where over 60% of the firms with access to bank loan, the Enterprise Surveys database, indicate that access to external finance is a major constraint.

Thus, to address issues related to financial disintermediation, a set of market reforms whose aim is to increase information disclosure and transparency is necessary. To get around financial disclosure problems, central banks in developing countries may play a very important role in facilitating information sharing across lenders. They can also set up a new structure such as a Central of Balance Sheets (CBS). Through a CBS, central banks can collect balance sheets from firms and make some key information available to lenders at costs.

Participation in the CBS should be voluntary, but participating firms may find preferential interest rates as an incentive to participate and disclose their information. The financial information extracted from those balance sheets may serve many purposes including industry analyses as well as an additional monetary tool. Solvency scores can be assigned to participating firms in a fashion that displays their financial strength and the likelihood of bankruptcy. This could reduce the incidence of fiscal frauds among participating firms which would not have to present other financial statements when filing their taxes.

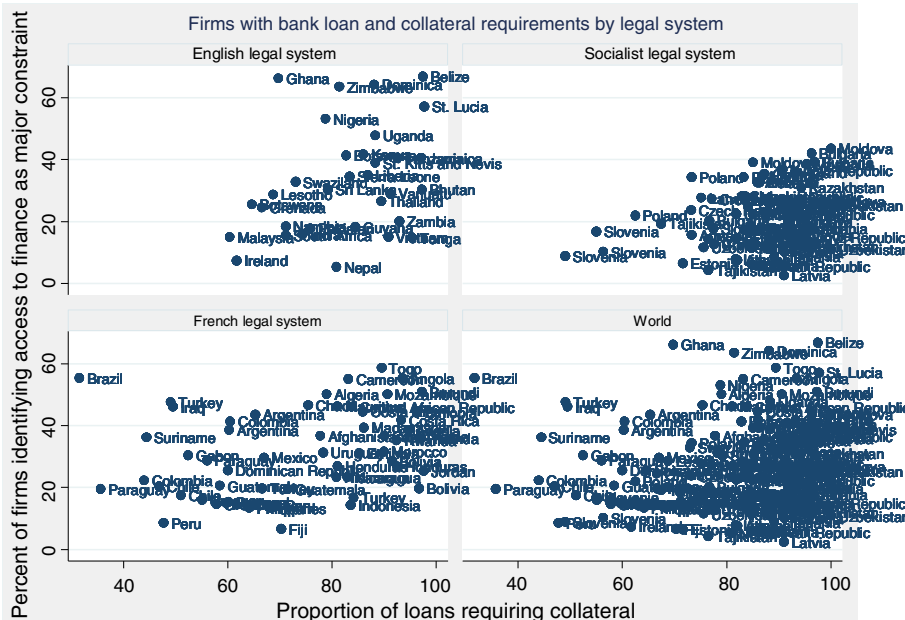


Fig. 5. Firms with bank loan and collateral requirements by legal system.

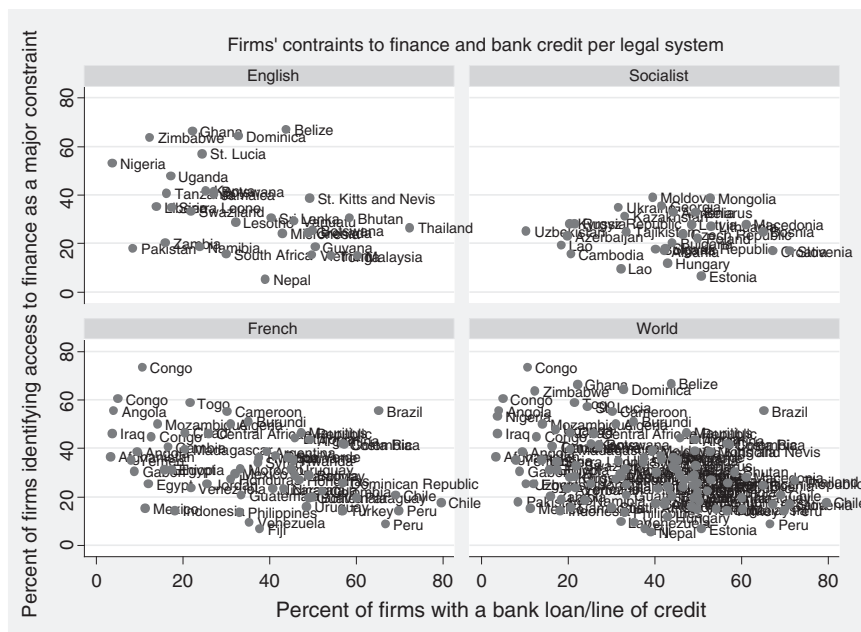


Fig. 6. Firms' constraints to finance and bank credit per legal system.

This would allow central bankers to strategically reorient credit towards vital sectors within an economy. This would significantly reduce information asymmetric problems since management would have to disclose a slew of information, which would have been kept secret otherwise. The role played by the banking sector in monitoring and sanctioning firms' management would be enhanced by the existence of such a structure. This would lead to lower costs of credit thereby increasing the level of financial development. A study by Boot and Thakor (2000) highlights the fact that information asymmetry problems cause banks to impose higher interests on their borrowers. A CBS would keep finance seekers honest since many of the information they would need to produce when applying for a loan would be available at the central bank.

4. Conclusion

This paper is a discussion on the relationship between institutions and financial intermediation. There is a preponderance of evidence that poor institutions inhibit the growth of the financial sector, financial innovation and contribute to higher costs of credit. There is also evidence that contracting rights institutions are relevant to facilitating access to finance, but are of limited capability to ensure financial innovation, which would allow firms to issue claims to savers in terms of bonds, commercial papers, shares, and derivatives. Disintermediated financial environments appear to be consistent with strong state rights at the expense of private property rights.

It also appears that private citizens develop mechanisms to get around weak institutions when dealing with each other. They develop enforcement mechanisms that are rooted in their culture and social norms for financial contracting. Nonetheless, this does not reduce the costs of funds and may lead to extraction. In fact, it appears that even formal banking systems engage in extractive lending by charging high risk premiums often justified by the level of risk channeled through the institutions. There is evidence that with better institutions, net interest margins and interest rate spreads are lower.

Information asymmetric problems are stronger in countries with poor institutions. Thus, countries where credit information institutions are embryonic or at best weak, interbank information exchanges can be increased to remove inefficiencies in the banking system. If such a recommendation is against statutory laws, these deficiencies in the laws

need to be addressed so that transaction costs are reduced and adverse selection problems mitigated.

In countries with weak institutions, embryonic and/or inexistent stock markets, where corporate governance practices are poor and financial disclosures substandard, financing large scale projects might require loan syndication which will alleviate the incidence of information asymmetry, boost information sharing, avoid retail banking, remove inefficiencies, duplications, and lower transaction costs. Such a strategy would significantly decrease costs of financing and increase the availability of credit while participating banks will diversify their risk exposures.

In countries where private credit information bureaus are nonexistent, public registries should be compulsory, run and operated as central bank agencies — at least in the early stages. Where such institutions exist, policymakers should enact laws guaranteeing the confidentiality of gathered information and criminalize their improper use. The bank secrecy laws have to be revamped so that they align with the new idea of using information as a public good and do not interfere with the good functioning of lawful registries. Effective credit registries would reduce information asymmetric problems and provide market-enhancing tools to cope with problems of incomplete financial markets, especially when banks are dealing with informationally challenged firms and other first-time borrowers.

In terms of policy agenda, we recommend that developing countries establish a central of balance sheets to which firms would elect to opt in voluntarily but with the added possibility of lower interest costs within the financial system as an incentive for participation. Information extracted from participating firms' balance sheets may serve as a new tool for monetary policies and the redeployment of credit across sectors. Participating firms would receive a solvency score, which lenders could use to make their lending decisions. This would keep finance seekers honest about their financial strengths. This could prove to be very important, especially in bank based financial systems, where firms' real financial information is hardly known even when they are seeking credit. It could also help to reduce fiscal fraud by participating firms.

References

- Acemoglu, D., & Johnson, S. (2005). Unbundling institutions. *Journal of Political Economy*, 113(5), 949–995.
- Acemoglu, D., Johnson, S., & Robinson, A. J. (2001). The colonial origins of comparative development: An empirical investigation. *The American Economic Review*, 91(5), 32.

- Aggarwal, R., & Goodell, W. J. (2009). Markets and institutions in financial intermediation: National characteristics as determinants. *The Journal of Banking and Finance*, 33, 1970–1980.
- Ahlin, C., & Pang, J. (2008). Are financial development and corruption control substitutes in promoting growth? *Journal of Development Economics*, 86, 414–433.
- Allen, F., & Santomero, A. (1999). What do financial intermediaries do? *The Journal of Banking and Finance*, 25, 271–294.
- Aoki, M. (2000). *Information, corporate governance, and institutional diversity competitive-ness in Japan, the USA, and the transitional economies*. : Oxford University Press.
- Beck, T., Demirgüç-Kunt, A., & Levine, R. (2003). Law, endowments, and finance. *Journal of Financial Economics*, 70(2), 137–181.
- Beck, T., & Levine, R. (2002). Industry growth and capital allocation: Does having a market- or bank-based system matter? *Journal of Financial Economics*, 64(2), 147–180.
- Bergman, N., & Nicolaievsky, D. (2002). Investor protection and the Coasian view, Harvard University mimeo.
- Boot, A. W. A., & Thakor, A. V. (2000). Can relationship banking survive competition? *The Journal of Finance*, 55(2), 679–713.
- Brown, M., & Zehnder, C. (2007). Credit reporting, relationship banking, and loan repayment. *Journal of Money, Credit, and Banking*, 39, 1884–1918.
- Chavance, B. (2009). *Institutional economics*. New York: Routledge, NY (94 pp.).
- Crockett, A., & Cohen, H. B. (2001). Financial markets and systemic risk in an era of innovation. *International Finance*, 4(1), 127–144.
- Demirgüç-Kunt, A., & Huizinga, H. (1999). Determinants of commercial bank interest margins and profitability: Some international evidence. *World Bank Economic Review*, 13(2), 379–408.
- Demirgüç-Kunt, A., & Huizinga, H. (2001). Financial structure and bank profitability. In A. Demirgüç-Kunt, & R. Levine (Eds.), *Financial structure and economic growth: A cross-country comparison of banks, markets and development* (pp. 420). Cambridge, MA: The MIT Press.
- Demirgüç-Kunt, A., Leaven, L., & Levine, R. (2004). Regulations, market structure, institutions, and the cost of financial intermediation. *Journal of Money, Credit & Banking*, 36(3), 593–622.
- Demirgüç-Kunt, A., & Maksimovic, V. (2002). Funding growth in bank-based and market-based financial systems: Evidence from firm-level data. *Journal of Financial Economics*, 65(3), 337–363.
- Diamond, D. W. (1984). Financial intermediation and delegated monitoring. *Review of Economic Studies*, 51(3), 393–414.
- Djankov, S., La Porta, R., Lopez-De-Silanes, F., & Shleifer, A. (2003). Courts. *Quarterly Journal of Economics*, 118(2), 453–517.
- Djankov, S., McLiesh, C., & Shleifer, A. (2007). Private credit in 129 countries. *Journal of Financial Economics*, 84, 30.
- Fernandes, A.M., & Kraay, C. A. (2007). Property rights institutions, contracting institutions and growth in South Asia: Macro and micro evidence. *South Asia growth and regional integration*. : The World Bank.
- Flamini, V., McDonald, A.M., & Schumacher, L. (2009). *The determinants of commercial bank profitability in Sub-Saharan Africa*. : International Monetary Fund (WP/09/15).
- Francesca, C., & Giorgio Di, G. (2004). Deposit insurance, institutions, and bank interest rates. *Transition Studies Review*, 11(3), 77–92.
- Kallberg, J. G., & Udell, G. F. (2003). The value of private sector business credit information sharing: The US case. *Journal of Banking & Finance*, 27(3), 449–469.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, W. R. (1997). Legal determinants of external finance. *The Journal of Finance*, 52(3), 1131–1150.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, W. R. (1998). Law and finance. *Journal of Political Economy*, 106(6), 1113–1155.
- Leaven, L., & Majnoni, G. (2005). Does judicial efficiency lower the cost of credit? *The Journal of Banking and Finance*, 29, 1791–1812.
- Levine, R. (1997). Financial development and economic growth: Views and agenda. *Journal of Economic Literature*, 35(2), 688–726.
- Levine, R. (1999). Law, finance, and economic growth. *Journal of Financial Intermediation*, 8(35), 1–28.
- Levine, R. (2005). Law, endowments and property rights. *The Journal of Economic Perspectives*, 19(3), 61–88.
- Love, I., & Mylenko, N. (2003). *Credit reporting and financing constraints*. Policy research working paper. : The World Bank, 3142.
- Magda, B., Tullio, J., & Marco, P. (2005). Courts and banks: Effects of judicial enforcement on credit markets. *Journal of Money, Credit & Banking*, 37(2), 223–244.
- Malouche, M. (2008). *Trade and trade finance developments in 14 developing countries*. Policy research working paper. : The World Bank, 5138.
- Merryman, J. H. (1996). The French deviation. *The American Journal of Comparative Law*, 44, 109–119.
- Miller, M. (2000). Credit reporting systems around the globe: The state of the art in public and private credit registries. mimeo World Bank.
- Modigliani, F., & Perotti, E. (2000). Security markets versus bank finance: Legal enforcement and investors' protection. *International Review of Finance*, 1(2), 81–96.
- North, D. C. (1994). Economic performance through time. *American Economic Review*, 84(3), 359–368.
- Padilla, A. J., & Marco, P. (2000). Sharing default information as a borrower discipline device. *European Economic Review*, 44(10), 1951–1980.
- Pagano, M., & Jappelli, T. (1993). Information sharing in credit markets. *The Journal of Finance*, 48(5), 1693–1718.
- Qian, J., & Strahan, E. P. (2007). How law and institutions shape financial contracts: The case of bank loans. *The Journal of Finance*, LXII(6), 2803–2834.
- Rajan, G. R., & Zingales, L. (1998). Financial dependence and growth. *The American Economic Review*, 88(3), 559–586.
- Safavian, M., & Sharma, S. (2007). *When do creditor rights work?* Policy research working paper. : The World Bank, 4296.
- Veblen, T. (1899). *Theory of the leisure class: An economic study of institutions: Internet Archive*.