

Economywide Institutions and Banking Credit: Protecting Creditor Rights

AMONG the fundamental causes of long-run economic performance, institutions have received considerable attention in recent years. Broadly defined, institutions are the “rules of the game in a society, or, more formally, are humanly devised constraints that shape human interaction. In consequence they structure incentives in human exchange, whether political, social, or economic” (North 1990, p. 3). The most obvious formal institutions are the constitution and set of laws in a society, but informal institutions such as conventions and codes of behavior often referred to as social norms or social values, are also important in determining human interaction.

Under such a broad definition, it is hardly controversial that institutions matter for development. Nonetheless, going back at least to Adam Smith, economists have paid special attention to a particular set of *economic institutions*, most notably, the rule of law and the degree of property rights enforcement as well as the constraints on the actions of powerful groups (including the state). These institutions generate incentives and opportunities for investment and can therefore spur or hinder economic growth. Recent studies have provided convincing empirical evidence supporting the view that differences in these institutions can have a large effect on output per capita (Hall and Jones 1999; Acemoglu, Johnson, and Robinson 2001, 2002a, 2002b; Rodrik, Subramanian, and Trebbi 2002).

Due to the characteristics of *financial contracts*, strong institutions are crucial to support deep and stable financial markets. Indeed, with imperfect ability to enforce loan contracts, people are tempted to renege on their loans. Large and impersonal financial markets not only require an appropriate legal framework, but also adequate enforcement of the rights and constraints of each of the parties involved in the contract. Otherwise, financial contracts may become infeasible.

Historical evidence is consistent with the idea that key economic institutions matter for financial develop-

ment. For instance, North and Weingast’s famous study of the Glorious Revolution in 17th century England shows that constitutional arrangements were aimed at securing property rights, protecting private property, and eliminating confiscatory governments. The authors conclude that “one necessary condition for the creation of modern economies dependent on specialization and division of labor (and hence impersonal exchange) is the ability to engage in secure contracting across time and space. That entails low transaction costs per exchange. The creation of impersonal capital markets is the single most important piece of evidence that such necessary condition has been fulfilled” (North and Weingast 1989, p. 831).

The importance of understanding the determinants of financial development cannot be overemphasized. Differences in the level of financial development can have a large effect on subsequent growth (for a survey of the literature, see Levine 1997, 2004). Therefore, one of the channels whereby better institutions may have an effect on economic development is through the consolidation of larger and better financial markets. This raises the more fundamental question exactly why some countries have developed financial markets and others do not.

One of the major differences between developed financial markets and underdeveloped ones is the role played by property rights (see De Soto 2000). The lack of property rights in developing countries is strongly linked to the institutions that support financial contracts in these countries. To understand the importance of securing property rights, consider a basic credit contract involving three players: the creditor, the debtor, and the institutions that guarantee that each of the other parties will live up to its responsibilities. If institutions are inadequate, the benefits that the other parties have to gain from renegeing on the debt contract can be so pronounced that they prevent the realization of the contract itself. Hence, the ability of these institutions to

align the players' incentives with the clauses of the debt contract can become an engine for promoting financial depth.

One way institutions promote financial development is by creating a framework for the use of collateral. Collateral is used in legal structures called **security interests**. Many kinds of assets can be used as collateral if the laws and institutions surrounding the creation and enforcement of security interests are clear, transparent, and well managed. **Immovable assets**—that is, land, houses, office buildings, and factories—are used as collateral in structures called mortgages. Movable assets, including contractual rights, accounts receivable, inventory, vehicles, and future flows, can be used as collateral in structures that are often called pledges or assignments.

Security interests for both kinds of collateral must usually be registered to be valid against third parties. In addition, in the case of immovable assets, the ownership of the asset must be registered in the same office. Well-functioning secured transactions frameworks involve (i) efficient property registries that allow creditors to track the ownership and pledging of assets; (ii) clear rules and regulations that define property rights regarding the types of assets that could be pledged as collateral in credit agreements; and (iii) enforceable rules and efficient institutions that allow creditors to seize collateral in an efficient and timely manner if the debtor defaults.

It is important to note that while most of the components of a secured transaction framework have been linked to the term *creditor protection*—in particular the possibility of taking over collateral if borrowers default—ultimately those that are protected are the depositors of the financial system. Financial guarantees are useful because they lower credit risk. The benefit of lower risk is enjoyed by the economy in several ways, including offering depositors a more secure place to save. Hence, stronger creditor protection is directly mapped into stronger depositor protection. After all, banks lend mostly resources entrusted to them by depositors. The ability to secure an interest in the collateral used to back up loans is a guarantee to the depositors that, in case of trouble, their savings will not vanish (at least not completely).

Several institutions limit the ability to secure property rights in Latin America. In most countries, laws are not designed to protect creditor rights. However, even if they were, given the low levels of rule of law and judiciary efficiency in the region, securing property rights would still remain costly and inefficient. In fact, the rights of creditors to the assets pledged as collateral

or the cost of taking over collateral has a major role in explaining the depth of financial markets, the allocation of credit among groups of investors, and the way the allocation and amount of credit react to economic shocks, as this chapter will discuss.

In addition, inability to create collateral in a broader sense is also a major impediment to the development of credit markets in Latin America. In most developing countries, and in Latin America in particular, the types of assets that can be used as collateral are limited and mostly reduced to immovable assets, such as real estate. Using movable assets is much more difficult, in part because rules and regulations do not accommodate adequate definitions of collateral that span these assets. Underdevelopment of immovable property registries further diminishes the possibility of using real estate as collateral in many countries (see De Soto 2000, especially on the poor). All these factors are of great relevance and deserve proper attention. However, due to lack of international data that allow formal comparisons and empirical studies, this chapter focuses on the protection of creditor rights, which is used as a proxy for the whole contracting environment.

CREDITOR RIGHTS IN LATIN AMERICA: AN OVERVIEW

La Porta and others (1997, 1998) give new impetus to the empirical discussion on the importance of regulations regarding the rights of creditors to borrowers' assets by providing valuable data on the state of creditor rights regulations around the world. The studies collect information on various regulations regarding creditor rights protections. Using this information, the authors construct an index that summarizes regulations determining creditors' rights to control collateral in case firms file for reorganization or bankruptcy. The index considers whether regulations do the following: (i) impose an automatic stay on assets in case of reorganization; (ii) give secured creditors the right to be paid first in case of bankruptcy; (iii) require firms to consult with creditors before filing for reorganization; and (iv) mandate removal of a firm's management during reorganization. A positive response to each of the four elements of the index is interpreted as creditor rights protection. It should be noted that this measure goes beyond collateral repossession by focusing on total asset liquidation in case of bankruptcy.

Table 12.1 summarizes the La Porta and others creditor rights measure for Latin American countries as well as the average level for countries in the OECD

TABLE 12.1 | CREDITOR PROTECTION, LATE 1990s

Country	Creditor rights	Rule of law	Effective creditor rights
Argentina	0.00	0.50	0.00
Bolivia	0.00	0.40	0.00
Brazil	0.25	0.46	0.12
Chile	0.50	0.75	0.38
Colombia	0.00	0.37	0.00
Costa Rica	0.50	0.65	0.33
Dominican Republic	0.25	0.45	0.11
Ecuador	0.25	0.38	0.10
El Salvador	0.25	0.42	0.11
Guatemala	0.00	0.35	0.00
Honduras	0.25	0.35	0.09
Jamaica	0.25	0.45	0.11
Mexico	0.00	0.44	0.00
Panama	0.50	0.51	0.26
Paraguay	0.25	0.34	0.09
Peru	0.25	0.41	0.10
Trinidad and Tobago	0.25	0.58	0.15
Uruguay	0.50	0.61	0.31
Venezuela	0.50	0.35	0.18
Latin America average	0.25	0.46	0.12
OECD average	0.47	0.85	0.40
Other emerging economies average	0.73	0.50	0.38

Note: Creditor rights, rule of law, and effective creditor rights are normalized between 0 and 1. Effective creditor rights is the product of the creditor rights index and the rule of law index. The higher the number, the better the measure.

Source: For the creditor rights index, La Porta and others (1997, 1998) and Galindo and Micco (2001); for the rule of law, Kaufman, Kraay, and Mastruzzi (2003).

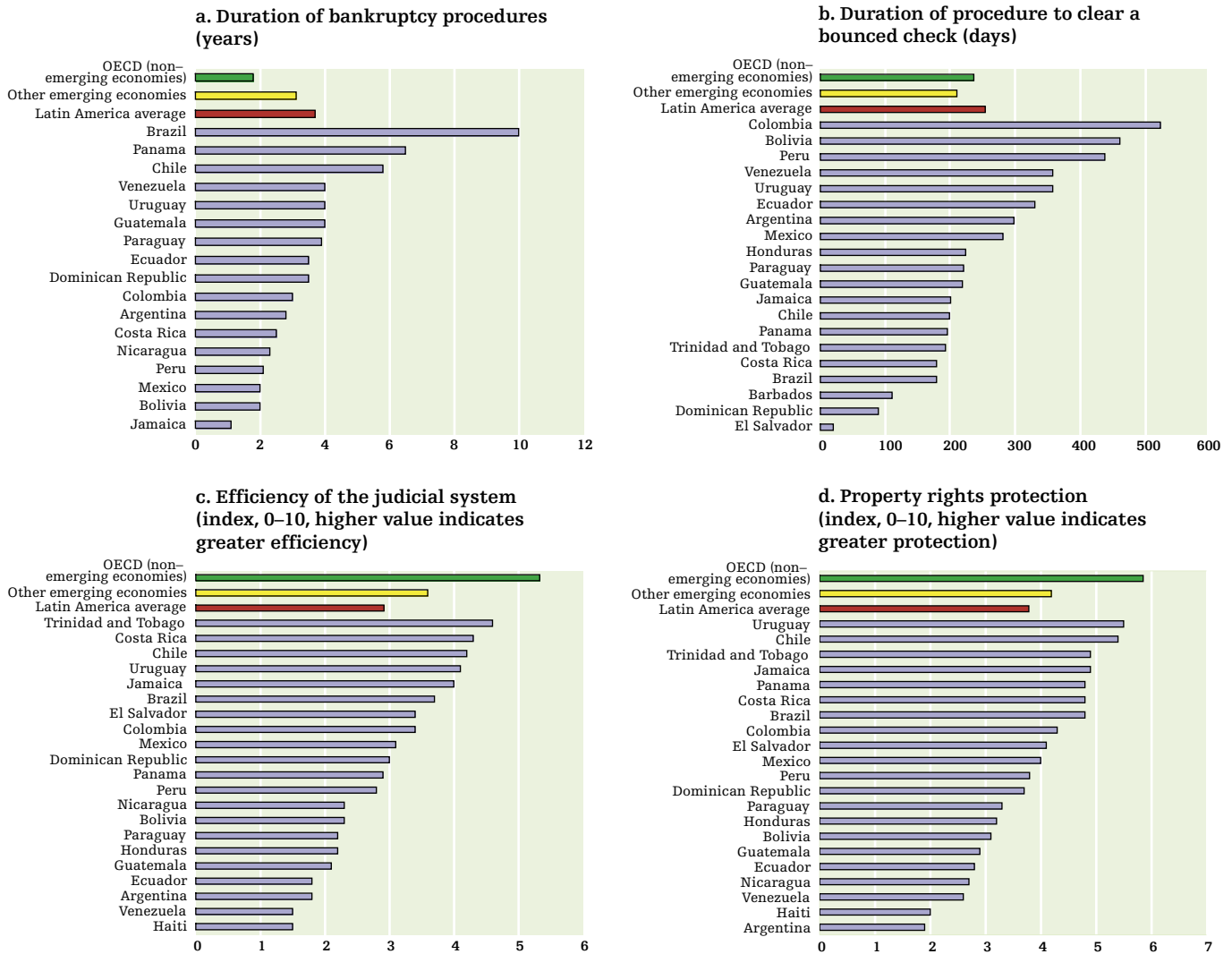
and other emerging economies. A first glance at this data immediately suggests that in Latin America creditors are less protected than elsewhere. Although the measure illustrates the degree to which regulations protect creditors, it only reflects what the law says, which is not necessarily what happens in practice. Thus, it is relevant to account for variations in law enforcement from country to country. Taking into account that law enforcement is weak in Latin America, it is likely that creditors may enjoy even less de facto protection. In order to incorporate such weakness in law enforcement into the measure of creditor protection, a new index labeled effective creditor rights multiplies the creditor rights index by a measure of the rule of law. The last column in Table 12.1 reports values of the effective creditor rights index, with higher values implying greater effective protection. Once rule of law is factored in, the conditions for Latin America and the Caribbean look even worse, as creditor rights in the region are not only weak, but also barely enforced. Based

on this methodology, it is only fair to say that creditor protection in Latin America and the Caribbean is extremely weak.

In addition, Latin American and Caribbean countries fare poorly in several other indicators commonly used as proxies for the institutional environment that determines the ability to contract, such as duration of bankruptcy procedures, duration of clearing a bounced check, efficiency of the judicial system, and protection of property rights. Figure 12.1 summarizes these measures and stresses the weakness of institutions in Latin America and the Caribbean.

In many of the region's countries, the possibility of using collateral fails in several other dimensions. Property registries tend to be weak and poorly managed, which makes it difficult for creditors to establish the priority and seniority of their claims on an asset that has been or will be pledged as collateral.¹ In addition, in some countries property fraud is a significant problem (see De Soto 2000 on the Peruvian case). This further

FIGURE 12.1 The Institutional Environment



Source: For the duration of bankruptcy procedures and procedure to clear a bounced check, World Bank (2003); for efficiency of the judicial system and property rights protection, World Economic Forum (2003).

limits the usefulness of property as collateral and consequently places serious constraints on access to credit.

DEEPENING CREDIT MARKETS

A growing strand of the literature emphasizes the importance of the legal framework in explaining financial development and the depth of credit markets (La Porta and others 1997, 1998, 2000; Beck and Levine 2003). This is not surprising because legal institutions are the most obvious “rules of the game” affecting the interaction of individuals in financial contracts. The underlying framework follows naturally from the development of corporate finance theory. Indeed, in Modigliani and

Miller’s (1958) contribution, debt and equity give creditors and shareholders a right to a project’s cash flow that is taken for granted. Jensen and Meckling (1976) recognize that insiders may use these resources for their own benefit. Thus, debt and equity should be understood as

¹ In Uruguay, for example, assets are classified by date of pledge. Hence, in order to verify whether an asset was previously used as collateral, it is necessary to know when it was pledged, which undermines the use of the registry. Similarly, in Bolivia assets are classified chronologically, and the whole file has to be searched in order to determine whether a particular asset has ever been pledged. Permission is required to search the registries, which makes the process more complex and prone to corrupt practices. In modern registries, searches can be done by name of borrower, date of pledge, name of lender, serial number, and other criteria.

contracts that give outside investors claims to the cash flows. Laws and their enforcement are therefore critical in determining the rights of security holders and the functioning of financial systems. In other words, both laws and their enforcement are thought to be connected with the extent to which insiders (such as managers and controlling shareholders) can expropriate outside investors (such as creditors and shareholders) who take the risk of financing firms. From this perspective, better protection of creditor rights increases the breadth and depth of credit markets by making expropriation more difficult.²

The view in favor of creditor-oriented regulations is complemented by the literature on the role of collateral in financial contracts (for a summary, see Galindo 2001). A critical aspect of creditor rights has to do with the right to repossess collateral. Collateral can solve a variety of problems in financial contracts when there is uncertainty about the project's return or when there is asymmetric information between banks and entrepreneurs (Coco 2000). For example, if the value of collateral is less uncertain than the expected return of a project, pledging collateral reduces asymmetric valuation problems and the cost of credit. Pledging collateral may also reduce rationing by providing information about borrowers and about the project, as entrepreneurs with risky projects will choose not to pledge collateral. Likewise, moral hazard problems might be reduced because collateral requirements add a potential cost to "lazy" borrowers and to those who engage in investments that are too risky for the agreed interest rate.

Theoretical findings regarding the role played by collateral in mitigating these problems are based on the presumption that the creditor can repossess the collateral in case of default. That is, it is presumed that a third party stands ready to protect and enforce the creditor's security interest in the collateral stipulated in the debt contract. The right to repossess collateral as well as efficiency in doing so act as a threat that helps to ensure that borrowers will not engage in inadequate behaviors, and this threat can serve to align the borrower's incentives with the clauses of the contract. If lenders feel that regulations do not protect them and that their chances of taking control of the assets pledged as collateral are uncertain, they are likely to prefer not to extend credit because the risk of bankruptcy will reduce their expected earnings. Under these circumstances, credit rationing will occur. Therefore, countries with a higher degree of creditor protection can be expected to enjoy deeper debt markets by taking advantage of the use of collateral to mitigate problems derived from uncertainty and information asymmetries. Consequently,

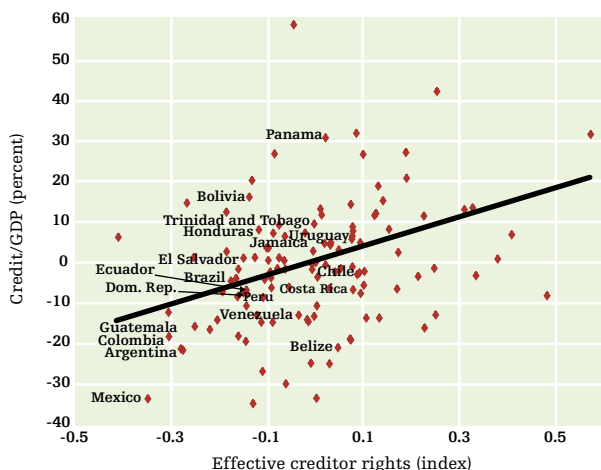
advocates of creditor rights-oriented regulations claim that if the right to repossess collateral in case of debtor default is not protected, the use of collateral will lose its important role in solving problems that can lead to credit rationing and underinvestment.

The theoretical literature regarding the role of creditor rights for financial development is not one-sided. Padilla and Requejo (2000) review countervailing arguments. First, the alternative or critical view suggests that strict protection of creditors might be efficient *ex ante*, but inefficient *ex post*. The argument is that once the uncertainty embedded in an investment project is realized and the borrower defaults, there are two possibilities: selling the assets of the project to repay creditors, or reaching an agreement and continuing the project. If the right to repossess collateral is strictly protected, it might be impossible for the borrower to continue with the project without the creditor's consent. As long as the liquidation value of the assets exceeded the value of the project, the strict protection of creditor rights would be efficient. Yet, if it were efficient to continue the investment project, credit-oriented regulations might lead to underinvestment.

Padilla and Requejo (2000) emphasize that the *ex ante* efficiency of creditor rights can also be disputed. One argument is that strengthening creditor rights may reduce risk-taking incentives, repressing entrepreneurial activity and credit demand. Another argument is that creditors' incentives to screen projects and discourage investment by overconfident entrepreneurs are reduced when creditors are protected against default. Thus, too many unworthy projects may be funded under strict protection of creditor rights, leading to a larger proportion of defaulted loans and insolvent businesses in equilibrium.

It is important to stress that the alternative view does not question the need for efficient enforcement of laws and regulations. This aspect is thought to be critical in solving all sorts of opportunistic behaviors that emerge in financial contracts. The disagreement is over the importance of creditor-oriented laws. For example, a Coasian approach implies that the content of the laws is irrelevant; it suffices to enforce private contracts because the parties involved will design them in a way that ameliorates opportunistic behavior. Yet, to the extent that enforcing private contracts is difficult, writing specific laws that provide a framework for financial con-

² See La Porta and others (2000). In this vein, Himmelberg, Hubbard, and Love (2000) develop a theoretical model in which higher effective investor protection reduces the cost of capital, improves its allocation, and increases investment and growth.

FIGURE 12.2 Credit/GDP vs. Effective Creditor Rights

Note: Variables are adjusted for the log of GDP, average inflation rates during the 1990s, and average real GDP growth rates during the 1990s. Source: IDB calculations.

tracts (albeit in a more rigid setting) may improve the functioning of the financial market.

As usual in economics, the issue of the importance of regulations regarding the rights of creditors and their enforcement is ultimately an empirical matter. Several research papers have linked creditor rights protection to **financial depth** in an empirical manner (see for example La Porta and others 1997, 1998; Padilla and Requejo 2000; and Galindo and Micco 2001). The creditor rights measure developed by La Porta and others has been used in several studies that address a number of important questions. Researchers have examined the impact of creditor rights regulations on the size of credit markets and explored the determinants of creditor rights, reaching the conclusion that legal systems based on the civil law tradition, as is the case in Latin American countries, tend to grant less protection to creditors and more to debtors than do systems based on the common law tradition. Several research papers on this topic have emerged with similar findings.³

Figure 12.2 summarizes the results in the literature on creditor protection and financial development and shows a strong association between the effective protection of creditor rights and the size of financial markets. The main result in the figure is that better legal protection enhances the ability of creditors to operate in risky environments and increases the depth of credit markets. There are several reasons for this. From the perspective of the discussion above, credit markets are deeper due to the fact that protections increase the implicit value of collateral or alternatively reduce liquidation costs in case of borrower default. For example, lower protec-

tion reduces the possibility of seizing collateral at low cost and hence reduces the expected return to creditors in case of default. The increase in credit risk shrinks credit markets. In summary, after controlling for relevant features such as inflation, past economic growth, and the size of the economy, most empirical studies find a strong correlation between creditor protection and financial sector development.⁴

In addition to formal institutions, informal institutions have proven to be necessary for financial development. Box 12.1 discusses this issue.

CREDITOR PROTECTION AND ACCESS TO CREDIT

Information asymmetries tend to increase financial restrictions for smaller borrowers that usually have fewer assets to pledge as collateral. There is extensive empirical evidence suggesting that the size of the borrower matters for financial constraints. The main intuition behind this result is that, as opposed to large firms, smaller borrowers are not able to internalize many of the capital allocation functions carried out by financial markets. Hence, financial development may have a disproportionate impact on smaller firms.

This section reviews evidence on the degree of creditor rights protection and access to credit for small and medium-size enterprises. Results are drawn from Galindo and Micco (2004b), who use a survey of firms around the world to explore the role of creditor protection in small and medium-size enterprises' access to credit.⁵ In particular, the authors test whether the share of firm investment financed with bank credit depends on legal protections and firm size.⁶

³ La Porta and others (1997, 1998), Padilla and Requejo (2000), and Galindo and Micco (2001) show that creditor protection can affect the size of financial markets, the level of interest rates, and the level of nonperforming loans.

⁴ Galindo and Micco (2004) show that this result holds using virtually any other measure that proxies the ability to contract.

⁵ The World Bank's World Business Environment Survey is a cross-country, firm-level survey conducted in 54 developed and developing countries in 2000. The survey includes information on firm characteristics as well as entrepreneurs' perceptions of several issues, including access to financial markets. Previous uses of this database to test credit restrictions on small and medium-size firms include Clarke and others (forthcoming), who analyze whether deeper foreign bank penetration affects access to credit of smaller firms, and Love and Mylenko (2003), who analyze whether credit information registries affect financing constraints for these types of firms. Galindo and Micco (2004b) follow an approach similar to these two studies.

BOX 12.1 | IMPORTANCE OF INFORMAL INSTITUTIONS FOR FINANCIAL DEVELOPMENT

In addition to the legal framework, other institutions affect the functioning and development of financial markets. Recently, economists have paid attention to so-called informal institutions, such as trust or social capital, and their impact on economic performance. Fergusson (2004) provides a literature survey on this issue. Presumably, informal institutions are less important in modern societies where formal rules such as the legal framework are the keys to exchange. Nonetheless, “informal constraints are pervasive features of modern economies as well,” and empirical work has documented a positive correlation between a country’s level of trust and economic performance (North 1990, p. 39).

The theory behind the importance of trust in economic performance is fairly simple. Trust increases people’s perception that others will cooperate. Thus, trust can be important for ensuring cooperation between people who encounter each other infrequently. This implies that trust is especially important for supporting cooperation in large organizations, such as the government, large firms, or simply large markets. It also implies that trust is potentially important for ensuring financial contracts. Indeed, according to Guiso, Sapienza, and Zingales (2000, p. 1), “financial contracts are trust intensive contracts *par excellence*.” A financial contract is an exchange of a sum of money for a promise of more money in the future that can only take place to the extent that the financier trusts the borrower. Adequate enforcement of formal contracts and additional clauses such as collateral requirements may give credibility to such promise. Therefore, trust is especially important when legal institutions are inadequately designed or enforced. Nonetheless, because of incompleteness of financial contracts, even under perfect enforceability there should be a positive association between the size and efficiency of financial markets and the level of trust (Guiso,

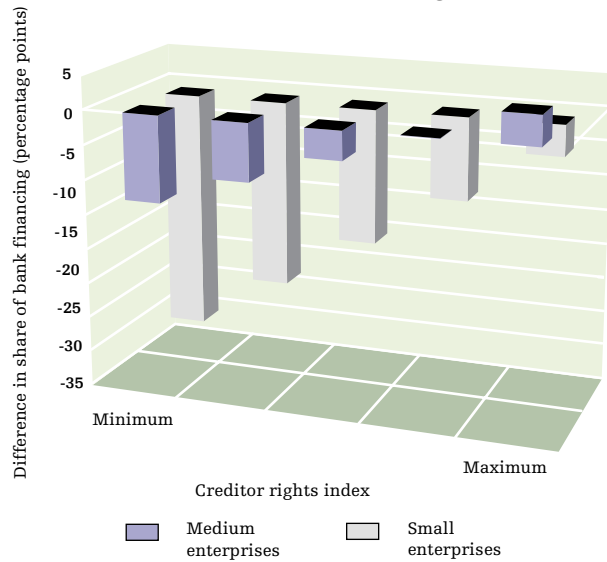
Sapienza, and Zingales 2000; Calderón, Chong, and Galindo 2002).

In a study in Italy, Guiso, Sapienza, and Zingales (2000) consider the effects of social capital in financial development using data on households and firms. The results reveal a strong connection between social capital and financial development. In particular, higher levels of trust are correlated with lower levels of household investment in cash, higher investment in stocks, increased use of checks, higher access to institutional credit, and less informal credit. In addition, firms have greater access to formal markets in high trust areas. Trust is especially important where legal enforcement is weak, although trust matters even after controlling for the quality of the court system.

Do these results extend beyond Italy? Calderón, Chong, and Galindo (2002) examine this question, and their answer is a definite yes. They find that trust has a positive and economically large effect on the size and activity of financial intermediaries, the efficiency of commercial banks, and the extent of stock and bond market development. Moreover, their results hold even after controlling for key determinants such as the size of the economy, human capital, inflation, and especially law enforcement. Their results hold after changing the specification when using a formal sensitivity analysis and after addressing reverse causality issues. The authors conclude that “trust appears to be a key complement to formal institutions when a society has little regard for the rule of law or, vice versa, that is, when trust in a society is low, the development of formal institutions to help uphold the rule of law appears to become particularly crucial in a society.”

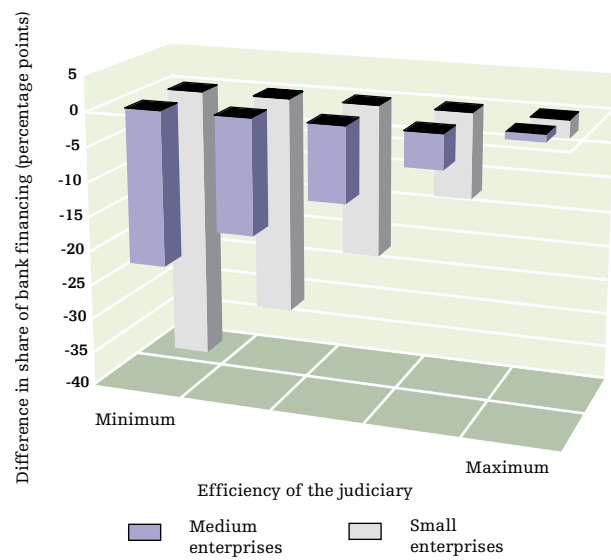
In sum, there is ample evidence that both formal and informal institutions are important for financial development.

FIGURE 12.3 Gap in Bank Financing of Small and Medium-Size Enterprises and Effective Creditor Rights



Note: Values are differences in share of bank financing compared with large enterprises.
Source: Galindo and Micco (2004b).

FIGURE 12.4 Gap in Bank Financing of Small and Medium-Size Enterprises and Efficiency of the Judiciary



Note: Values are differences in share of bank financing compared with large enterprises.
Source: Galindo and Micco (2004b).

Figures 12.3 and 12.4 summarize the results. Figure 12.3 shows the estimated difference in bank credit finance between small and medium-size firms with respect to large firms in countries with different levels of creditor protection.⁷ The figure shows the difference in the share of bank financing between small and large firms for different values of the effective creditor rights index and the difference between the share of financing between medium-size and large firms, also for different values of the effective creditor rights index. In countries with low values for the creditor protection index, small firms have much less credit than large ones. The difference falls as the creditor protection measure rises. While the difference in bank financing between medium and large firms is not as large, it also decreases as the index increases. Figure 12.4 shows results similar to those in Figure 12.3, but for a variable measuring the efficiency of the judiciary instead of the effective creditor rights index to proxy for the contracting environment. For an intuitive view of the magnitude of this result, consider a country in the 20th percentile of effective creditor protection where the difference in bank credit financing between small and large firms is nearly 30 percentage points and the difference between medium-size and large firms is close to 10 percentage points. As effective creditor rights increase, the gap is closed. In fact, according to these estimates, the difference in bank credit between small and large firms in countries with high creditor protection (75th percentile) is only

18 percentage points, and the difference between medium and large firms is only 4 percentage points.

Compared with large firms, small and medium-size firms finance significantly less investment with bank credit. In fact, the share of bank credit in smaller firms is on average lower than that of medium-size firms. Note that this is perfectly normal due to the increased risks and administrative costs involved in lending to small firms. What is important to stress is that the financing gap seems to be reduced as creditor protection increases, given that risk is partially reduced. Even in countries with high creditor protection and deep financial markets, the gap will remain. However, the degree to which smaller firms are constrained depends on the quality of the regulatory framework, suggesting that in countries where creditor rights are protected (and enforced), smaller firms have greater access to bank credit to finance investment.

⁶ The survey classifies firms into three groups. Firms with fewer than 50 employees are labeled small, firms with more than 50 but fewer than 500 are medium, and firms with more than 5,000 are considered large.

⁷ The results come from Tobit estimations. Given that the dependent variable in these regressions is naturally truncated between 0 and 1 (the share of investment financed with bank credit), the empirical model is estimated using a standard two-limit Tobit model. The empirical model is estimated using clustered standard errors, controlling for firm-specific characteristics, as well as for country fixed effects.

It is important to emphasize that strict protection of property rights not only increases the availability of external finance for all types of firms, but also increases the efficiency of its allocation. For instance, firms operating in a market with poorly defined or poorly enforced creditor rights tend to invest more in fixed assets relative to **intangible assets**, given that securing returns from tangible assets is relatively easier when property rights are weak (see Claessens and Laeven 2003a).

The evidence in this section suggests that creditor protection tends to reduce the financing constraints of small and medium-size creditors, despite the fact that even in highly financially developed countries a gap will exist. The ability to pledge collateral may be substantially more important for firms lacking access to internal capital markets or other forms of formal financial markets. Consequently, a reform aimed at increasing creditor protection not only may increase the size of financial markets and promote economic growth, but may also have a significant effect on credit allocation and income distribution.

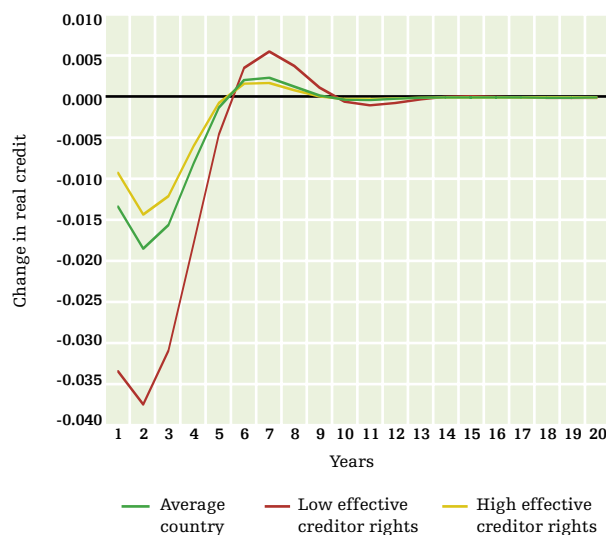
CREDITOR PROTECTION AND FINANCIAL STABILITY

In addition to promoting the depth of credit markets in general and reducing constraints on small and medium-size debtors in particular, credit protection can reduce the effects of adverse shocks on the credit cycle. If creditor rights are protected, when the economy faces an adverse shock that increases credit risk, the extent of credit contraction will depend on the regulations regarding collateral repossession. Creditors' inability to recover the collateral pledged in case borrowers default will likely exacerbate the increase in credit risk experienced during a recession. In such a case, the credit market would overreact to the exogenous shock, and credit would contract.

Figure 12.5 summarizes empirical evidence on how weaker creditor protection increases credit market volatility. The figure plots the response of credit to an external shock in an average country, a country with lower than average creditor protection, and a country with higher than average creditor protection. Clearly, after a negative shock of the same size, credit contracts much more in the country with low creditor protection than in the country with high creditor protection.⁸

Galindo, Micco, and Suárez (2004) analyze the relationship between credit fluctuations and shocks in a formal econometric study and find that an increase in almost any of the legal protection proxies would reduce

FIGURE 12.5 Response of Real Credit to an External Shock



Note: The figure plots an impulse response function of a near-VAR model including credit, GDP, and an external shock.

Source: Galindo, Micco, and Suárez (2004).

the amplitude of the real credit cycle. In addition, they find that countries with legal systems of French origin tend to experience greater volatility than common law countries. The results presented by the authors imply that credit is more stable in countries with high legal protection for creditors. On the one hand, when credit markets are hit by negative shocks, creditors in countries with low legal protection experience high losses because they are not able to seize and sell the collateral pledged. Such a loss translates into a strong contraction of credit. On the other hand, in the face of positive shocks, credit increases more in those countries than elsewhere because the shock provides an opportunity to compensate for losses during downturns. Countries with high legal protection have more stable credit because creditors face lower liquidation costs and hence experience lower losses than in countries where protections are not in place.

The main intuition driving these results is that weak creditor protection reduces the cash flow from a portfolio of loans and can exacerbate the increase in credit risk that occurs during recessions. When there is an adverse shock—such as a reduction in the terms of trade or a reversal of international capital flows—and creditors are not protected, they disproportionately de-

⁸ The measure of creditor protection used in this exercise is the effective creditor rights measure. Countries with high or low creditor protection are those above or below the median of the effective creditor rights measure, respectively.

BOX 12.2 | THE EMERGENCE OF LEGAL CODES

La Porta and others (1999) and Glaeser and Shleifer (2002) argue that legal codes emerged as an efficient response to the degree of political power of feudal lords in each country. Powerful feudal lords in France were more afraid of each other than of the king; therefore, it was important to delegate dispute resolution in a centralized manner to the king. In England, where local lords were less powerful, resolving disputes locally was more efficient and did not pose a threat to the king.

Beck and Levine (2003) trace the historical evolution of legal institutions and find some disagreement among historians and legal scholars regarding the development of Europe's legal traditions. In the case of France, the legal system evolved starting in the 15th century as a fragmented and corrupt system, which ultimately led to the lack of prestige and integrity of the judiciary by the 18th century. The French Revolution strove to place the state above the courts and eliminate jurisprudence. **Napoleon's** intention to unify and strengthen the state built on the theory that the civil code should be so clear and complete that there would be little discretion left for judges. Although this goal is well recognized, the authors report conflicting views regarding the ex-

tent to which it was achieved. Indeed, some scholars argue that this was a largely theoretical deviation from a tradition based on jurisprudence and, in practice, judicial discretion continued to play a major role. Others assert that the relatively rigid framework that was built had real effects and cite the encouragement of alternative and easily verifiable "bright-line rules," such as mandatory dividends and legal reserve requirements (Glaeser and Shleifer 2002).

In the case of Germany, Beck and Levine (2003) show that, although codification under Bismarck was also meant to unify the country and give more power to the central state, there was another approach toward jurisprudence. Indeed, unlike the **Napoleonic code**, the German code was designed to evolve and had a favorable view of jurisprudence. Turning to British common law, its historical evolution has been amply studied, and there is wide agreement that the evolution of this tradition was marked by the importance of placing the law above the crown, defending private property, and giving a leading role to judges in shaping the law through practice as opposed to following a more rigid and formal legal framework.

crease lending because the shock reduces the chances of recovering loans and the collateral that guarantees them.

WHAT TO DO ABOUT BAD INSTITUTIONS?

Many empirical studies support the idea that maintaining and enforcing clear legal rules protecting creditors will have a positive effect on financial markets. The more fundamental question is: Why do some countries have good laws and institutions while others do not? The law and finance literature emphasizes that differences are associated with legal origin (see Fergusson 2004).

The basic building block of this hypothesis is that a country's laws are largely transplanted (through conquest, imperialism, or imitation) from one of a few legal families or traditions (see La Porta and others 1998).

The broad traditions are English common law and Roman civil law, the latter of which includes three major families: French, German, and Scandinavian. Civil law developed in Europe as part of the restrained control by the sovereigns over their subjects, while common law was developed in Britain as a mechanism for protecting the subjects against the crown (for a discussion of the development of legal codes, see Box 12.2). Civil law relies heavily on legal scholars to formulate its rules and on statutes and comprehensive codes, whereas common law is formed by judges who resolve specific disputes based on precedents rather than on contributions by scholars. From this perspective, it is argued that common law gives higher priority to private property vis-à-vis the state and is better able to adapt to changing conditions than is civil law. Beck and Levine (2003) call these characteristics the political and adaptability mechanisms, respectively. Under the presumption that these two characteristics lead to financial development, legal origin influences finance. The origin of legal insti-

BOX 12.3 PRINCIPLES FOR SECURED TRANSACTIONS

The European Bank for Reconstruction and Development has drafted the following basic principles to define a well-functioning regulatory framework for secured transactions:

1. Permit security interests to be created quickly, at a predictable and low cost.
2. Facilitate easy access to information in the registry.
3. Include a broad definition of the scope of rights (both tangible and intangible) that may be the subject of a security interest. Frequently, legislation only recognizes security interests on assets that can be specifically identified at the time the interest is created and excludes property such as accounts receivable, future flows, and floating charges over a company's assets.
4. Enable all kinds of debt and types of creditors to benefit from the framework.

5. Simplify the formalities required to register a security interest through the adoption of a notice filing system (instead of a document registration system) and through the utilization of technology and the standardization of procedures for various types of security interests.
6. Establish clear rules of priority among creditors.
7. Create security interests and priorities that will survive an event of bankruptcy.
8. Establish out-of-court remedies with the objective of ensuring prompt, inexpensive, and effective enforcement of security interests.

Source: Summary based on European Bank for Reconstruction and Development principles and other sources, <http://www.ebrd.org/>.

tutions that are more or less favorable for financial development should be traced back to the historical process leading to the adoption of particular legal systems.

Does this mean that civil law countries are doomed? Not necessarily. Even civil law regimes can adapt. Beck, Demrigüç-Kunt, and Levine (2002) examine the mechanism through which legal origin affects finance and find that the primary channel is the **adaptability channel**. They conclude that “legal systems that adapt efficiently to minimize the gap between the financial needs of the economy and the legal system’s capabilities will foster financial development more effectively than more rigid systems” (p. 31). In addition, they point out that, despite the fact that adjustment is easier in common law countries, there is no strong evidence that countries with legal systems based on civil law cannot adapt their regulations and institutions.⁹

POLICY IMPLICATIONS

Despite the importance of reforms to the secured transaction framework, little has been done in Latin America in this area. It is common knowledge that many Latin American countries have gone through intense re-

form processes during the past 15 years, and many of these reforms have been aimed at increasing the size and stability of credit markets. Financial markets have been liberalized, and there have been radical changes in prudential regulation and supervision. However, due to the lack of reform of underlying institutions, such as the ones discussed in this chapter, many of the reforms directed toward liberalizing financial markets have had little impact.¹⁰ Financial liberalization, in particular that of domestic financial markets (liberalizing interest rate caps and eliminating directed credit), has a positive impact only in countries with strong creditor rights protection and enforcement. Creditor rights protection allows lenders to take advantage of liberalization by granting them the instruments to deal properly with credit risk. However, because of the lack of reform of underlying institutions, the region’s financial markets remain comparatively small and volatile, particularly with respect to other emerging market economies.

⁹ See Fergusson (2004) for a survey on theories of institutional development.

¹⁰ See Galindo, Micco, and Ordoñez (2002b) for a discussion on how the lack of institutional development has hindered the effects of financial liberalization in Latin America.

Several reasons exist for the inadequacy of reform in this area. First, there is not one specific area to reform in order to achieve an adequate framework for protecting creditors. Not only do rules and regulations in different legal codes regarding seizing collateral need to be reformed, with all the complexity that this usually involves in civil law countries, but also, and probably more important, the judicial system needs to be made more agile. With these goals in mind, several analysts have formulated principles for an adequate framework for secured transactions on movable assets, and the European Bank for Reconstruction and Development has drafted some basic principles to define a well-functioning regulatory framework for secured transactions (Box 12.3). Such principles clearly note the need to establish out-of-court remedies that ensure prompt, effective, and relatively inexpensive enforcement of creditor rights. However, the civil law tradition limits this alternative, making it difficult (but not impossible) for lawmakers to achieve a satisfactory reform. Despite these difficulties, East European countries such as Romania and Estonia have been able to implement many of these principles.

Second, in deciding whether to execute these

types of reforms, policymakers face a nontrivial political economy problem (see Fergusson 2004). Despite the fact that a certain degree of awareness of the importance of this topic exists, there is also a great degree of misunderstanding. In general, the public might view these sorts of policies as a way to redistribute wealth in favor of the already maligned financial sector, which could lead to a loss of popularity of such reforms. In addition, political interests might block the creation of new rules and regulations that could help promote financial development. Rajan and Zingales (2003a), for example, argue that a more efficient financial system would likely hurt incumbent firms and financial institutions by facilitating entry and lowering profits. Thus incumbents, who tend to have a strong political lobby, may not support policies and institutional reform leading to financial development, despite their positive effect on development. The main challenge in promoting reform in this area is to align views and generate political consensus toward the need to carry out these types of financial reforms, which not only protect depositors and increase the size of credit markets, but also have important redistributive effects by allowing smaller entrepreneurs to exploit business opportunities.