Law and Finance Lessons?

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Abstract

La Porta, Lopez-de-Silanes, Shleifer and Vishny (LLSV) in the 1990s initiated a line of research examining the role of law in encouraging financial development. Most prominent among the LLSV findings is a link between common law (civil law) countries and greater (lower) financial development. This Article surveys the law and finance literature, assessing both the main findings and detailing potential criticisms. At first glance, the link between common law origin and financial development leaves civil law countries with a pessimistic outlook. Other factors within the control of policymakers, nonetheless, may also affect financial and economic performance. Rather than dwell on legal origin (which cannot be changed), policymakers and researchers may wish to focus on why some countries successfully adopt stronger investor protections while others do not—and how a country may commit itself to pursuing a policy of strong investor protections. What are the modifiable preconditions for strong investor protections? Simply adopting formal legal protections for investors alone may not improve investor protections and foster financial development. The Article surveys the literature relating to the preconditions for strong investor protection. Drawing from this literature, the Article suggests a research agenda focused on ways that a country may improve the preconditions for strong investor protections and thereby accelerate financial development.

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Introduction

In the late 1990s, La Porta, Lopez-de-Silanes, Shleifer, and Vishny (LLSV) published a series of articles linking legal protections for investors with financial development. A wide range of research examining the relationship of formal legal protections for investors and a host of country-level performance indices followed the LLSV articles. Most controversial among LLSV's findings was a strong relationship between a country's legal origin and both the level of legal investor protections and financial development. Common law origin countries do best in LLSV's studies; French civil law countries (and to a lesser extent German and Scandinavian civil law countries) do worst.

Now more than ten years after the first LLSV article, what can we learn from the law and finance literature? Can a country simply change to a common law legal system to increase the rate of its financial development? Unfortunately, the answer is probably no. While the law and finance studies identify a number of interesting correlations, the causal relationships between legal origin, investor protection laws, and financial development are murkier. This paper surveys the law and finance literature with the aim of uncovering any lessons that countries interested in improving financial development may utilize. In doing so, this Article also suggests further lines of research that may shed further light on what countries can do to foster financial development and economic growth.

The connection between legal origin and financial development leaves civil law origin countries with a pessimistic outlook. Because a country cannot change its legal origin, the law and finance literature seems to predict financial underperformance for such countries. Seemingly any country with French civil law origins is doomed to have a small capital market and substandard economic growth. Yet, at the beginning of the 1900s, France actually had a

market capitalization approximately twice the size of the stock market of the United States (Rajan and Zingales 2003). The connection between French civil law and lower financial development is primarily a phenomenon after World War II (Roe 2006).

If the connection between legal origins and financial development is suspect, what about the connection drawn in the LLSV papers between formal legal protections for investors and financial development? In assessing the law and finance literature, this Article discusses a number of criticisms of the connection between formal legal protections and financial development. First, commentators have uncovered errors in LLSV's coding of their primary measure of investor protection – the antidirector rights index. Second, several have argued that the components of LLSV's antidirector rights index only haphazardly capture the key aspects of the law that protect investors. Third, commentators have questioned whether something correlated but distinct from legal origin or the antidirector rights index in fact is the actual causal factor behind financial development.

Intuitively, the law certainly does matter. Investors are unlikely to invest in companies where nothing restrains managers or controlling shareholders from expropriating the investment. Investors are unlikely to invest where the government may expropriate profits through exorbitant taxes or corrupt practices. Having the ability to commit credibly to protecting minority investors through strong investor protections and secure property rights is important for investment to occur in the first place. But the fact that the law matters does not necessarily mean that the LLSV papers are correct in the precise laws upon which they focus. Different laws may matter; culture and social norms may matter; enforcement may also matter.

The paper examines choices available to a country to improve the preconditions for regulators to improve investor protection. Some things are hardwired (or are relatively difficult

to change). Legal origin and culture are difficult to change (but may not ultimately be the most important factors behind investor protections). What can a country change? At a minimum, countries can provide a stable business environment where contract and property rights are respected and the threat of government expropriation of funds is low. Beyond these minimum preconditions, what else can a country do? Answering this question requires an examination of why is it that the governments of certain countries implement effective investor protections while the governments of other countries do not. The paper surveys several papers addressing the preconditions necessary for a country to implement strong investor protections. While legal origin may have some long-standing influence on countries, other factors are also likely important in determining a country's commitment to investor protections. Countries without the necessary preconditions to adopt strong investor protections may not carry through on these protections even if adopted. Laws then become much like "window dressing" – good to look at on the books but without much real effect on investors.

Key to whether a country chooses to implement and enforce investor protections is the political dynamic affecting the country's government. Countries with domestic interest groups in favor of investment (and thus investor protection) will have a self-sustaining force to push for both formal laws that investors favor as well as strong enforcement of such laws. Conversely, where domestic interest groups are not in favor of protecting investors or encouraging more investment, even the most stringent formal legal protections are unlikely to benefit investors much in the country. Regulators may therefore wish to focus on ways of increasing the domestic support (or reducing the opposition) to investments and investor protection using antitrust, trade, and financial policy among other regulatory options.

Part I provides a survey of the LLSV and related law and finance literature. Part II critiques the findings of the LLSV and related papers. Despite these criticisms, Part III assesses whether any lessons come out of the law and finance literature useful for a country interested in accelerating its financial development. Part IV discusses the preconditions for a country to commit credibly to stronger investor protections.

I. LLSV and Related Studies

Minority investors in large publicly held corporations face a problem. Those in control of the corporation, whether managers or controlling shareholders, may use their power to expropriate private benefits of control. Without effective investor protections, managers may pay themselves exorbitant salaries. Controlling shareholders may sell assets to a corporation at overinflated prices or purchase assets at underinflated prices. Controlling shareholders may purchase shares from the corporation at a discount price without offering the same terms to minority shareholders. Controlling shareholders may take corporate opportunities for themselves.

Prospective minority investors who can anticipate potential expropriation will demand a discount for their shares or choose not to invest at all, leading to smaller capital markets. What is the role of the legal system of a country in protecting the interests of minority investors and encouraging financial development? The LLSV series of papers sought to quantify the connection between legal systems and financial development.

LLSV (1998) examine the legal protections for minority shareholders and creditors across 49 countries, excluding socialist and transition economies. LLSV develop an "antidirector rights" score for each country as a measure of the level of minority shareholder legal protections based on the following:

Antidirector Rights Index
(1) the ability to mail in a proxy vote
(2) the lack of a requirement that shares must be deposited prior to proxy voting
(3) the availability of cumulative voting
(4) the presence of "legal mechanisms against perceived oppression by directors" against minority shareholders
(5) the "preemptive right to buy new issues of stock"
(6) whether "the percentage of share capital needed to call an extraordinary shareholders meeting" is at or below 10%

For each country, LLSV add up the six antidirector rights (giving each a 1 if minority investors are protected and a 0 otherwise) to generate an aggregate antidirector rights score. LLSV also focus on the right to a mandatory dividend as well as whether a country mandates one-share one-vote. Significantly, LLSV do not examine takeover-related legal provisions, disclosure regulation, or the private regulation imposed through securities exchanges. LLSV provide summary statistic evidence that common law countries have significantly stronger investor protection regimes than civil law countries. They also show that this relationship is invariant to the level of per capita GNP in the countries.[1]

To assess the importance of enforcement, LLSV use a number of proxies including measures for the efficiency of the judicial system, rule of law, corruption, risk of confiscation or forced nationalization by the government, among others. LLSV report that Scandinavian and German civil law countries have the highest enforcement levels. Common law countries have the next highest level of enforcement followed by French civil law countries with the lowest level of enforcement. After controlling for log per capita GNP in an OLS regression, LLSV find

[1] LLSV also analyze the variation in creditor rights across countries. As with antidirector rights, LLSV report that common law countries provide creditors with stronger legal protections against managers compared with weaker protections offered in particular from French civil law countries. They also report that creditor rights are stronger in poor compared with rich countries.

that all the French and German civil law countries generally have weaker legal enforcement regime measures compared with common law countries.

LLSV finally look at ownership concentration, measured for the 10 largest, publicly traded, non-financial, private firms by market capitalization for each country. For each company, LLSV calculate the aggregate share ownership percentage in the hands of the top three shareholders. They hypothesis that where investor protections are weak, higher levels of ownership may act as substitute mechanism of monitoring managers. LLSV report that the highest level of ownership concentration is in the French civil law countries. German civil law countries (particular from East Asia) and Scandinavian have the lowest concentration (leaving common law countries with the middle levels of concentration). To examine further the relationship between concentration and legal origin, LLSV estimate an OLS model with ownership concentration as the dependent variable. Explanatory variables include legal origin dummies among others.[2] They report that French (although not German or Scandinavian) civil law countries have significantly higher concentration of ownership.

La Porta, Lopez-De-Silanes, and Shleifer (1999) (LLS) expand upon LLSV (1998)'s examination of ownership concentration, analyzing the prevalence of controlling shareholders in 27 wealthy economies. For each of their sample countries, LLS examine the ownership structure of the 20 largest publicly traded firms. LLS treat corporations with a shareholder whose direct and indirect voting rights exceed 20 percent as one with a controlling-owner. LLS divide their sample of 27 countries into those 12 with greater than median shareholder protection (based on the LLSV (1998) antidirector rights score) and those 15 with median and lower scores. They

[2] LLSV also include controls for the log of per capita GNP, total GNP, and the Gini coefficient for a country's income inequality.

report that 46 percent of the large firms in high antidirector score countries are widely-held compared with only 27 percent in low antidirector score countries.[3]

LLSV (1997) assess the link between investor protection and external capital market financing. LLSV present evidence from the same 49 country sample from LLSV (1998) on the relationship between the amount of external financing (equity and debt) and the legal structure of the countries. LLSV use three proxies for external equity financing: (1) the stock market capitalization divided by GNP (scaled to take into account the fraction of stocks in the hands outside investors); (2) the number of listed domestic firms divided by population; and (3) the number of initial public offerings divided by population. LLSV report that common law countries score higher on their measures for external equity financing compared with the civil law countries (and in particular French civil law countries). Focusing on minority investor protections, LLSV also report that countries with higher levels of antidirector rights are correlated with higher levels of external equity financing. LLSV then confirm these summary statistic results using a series of OLS regression models with their ratio of stock market capitalization to GNP measure as the dependent variable. For explanatory variables, LLSV include dummy variables for legal origin as well as a measure of the importance of rule of law in the country, the antidirector rights score of the country, and whether the country mandates one-share one vote.[4] They report that civil law countries have significantly smaller equity markets compared with common law countries in the regression. In addition, a higher rule of law score

[3] LLS note an endogeneity problem with their results: countries with powerful controlling shareholder constituencies may more actively seek to enact laws that help to entrench the controlling shareholders at the expense of minority shareholders (resulting in a low antidirector score). To correct for this possible bias, LLS divide their sample based on their legal origin (common law versus civil law). They report that common law countries have a significantly greater proportion of widely held firms compared with civil law countries for both the sample of large and medium-size firms.

[4] LLSV also include controls for historical GDP growth and the log of real GNP.

and antidirector rights score as well as the presence of a one share-one vote policy are related significantly with a larger external equity market capitalization.[5]

LLSV (2000) examine the dividend payouts of firms across 33 different countries to determine the importance of legal protections for minority shareholders. LLSV divide countries into common and civil law countries. LLSV find that the median level of dividend payouts in common law countries is significantly higher than in civil law countries. Within common law countries, they also report that high growth companies have a significantly *lower* dividend payout than low growth companies.[6]

Using the same group of 27 wealthy countries from LLS (1999), LLSV (2002) construct a sample of 539 firms (consisting of the largest 20 firms per country based on market capitalization from the LLS study that also have a shareholder with over 10 percent voting control over the firm). LLSV fit a series of country random effects models with industry-adjusted Tobin's q as the dependent variable. The models use the level of shareholder protection (measured alternatively by a common law dummy variable and by the antidirector rights score) and the industry-adjusted sales growth rate (as a proxy for investment opportunities) as explanatory variables. They also include the cash flow rights owed to the controlling shareholder as well as an interaction term between the cash flow rights variable and the measure of investor protection. LLSV report that coming from a common law jurisdiction has a statistically significant positive impact on Tobin's q (at the 5% confidence level).

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[5] See id. LLSV re-estimate their OLS model using the ratio of the number of domestic firms to population and the ratio of initial public offerings to population as the dependent variables respectively. They report that in both these alternate specifications, civil law countries correlated significantly with a reduced level of equity market activity. LLSV note one exception: the dummy variable for Scandinavian civil law origin countries did not have a statistically significant negative coefficient in the model using the ratio of initial public offerings to population ratio as the dependent variable.

[6] LLSV argue that in countries with strong investor protections, shareholders will choose to have strong growth companies retain their earnings and not payout dividends. In countries where investor protections are weak, however, no such differential in dividends between high and slow growth companies should exist (shareholders of both types of companies will settle for "whatever dividends they get").

In sum, the LLSV line of papers from 1997 to 2002 provide two main measures for the level of investor protection, the antidirector rights index and the distinction between common and civil law (in particular French civil law). The LLSV papers link the level of antidirector rights and common law with lower ownership concentration, more widely held firms, greater stock market capitalization over GNP, greater numbers of listed domestic firms relative to population, greater numbers of IPOs relative to population, higher dividend payouts, greater corporate valuation, and enforcement levels (measured indirectly with proxies for the efficiency of the judicial system, rule of law, and level of corruption among others).

Many papers followed the LLSV line of papers, providing extensions and refinements. Botero, Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2004), for example, examine the determinants of labor market regulation (employment, collective relations, and social security laws) using a dataset of 85 countries. They report that socialist, French, and Scandinavian legal origin countries have significantly higher levels of labor regulation compared with common law origin countries. More regulation of labor, in turn, is correlated with lower labor force participation and more unemployment. Johnson, Boone, Breach, and Friedman (2000) examine whether the impact of the Asian financial crisis (from 1997-98) among 25 "emerging market" countries was more severe in countries with weaker corporate governance protections for investors. They report that the antidirector rights score used in interaction terms with judicial efficiency, corruption, and rule of law is significantly related to a reduced drop in the normal exchange rate—indicating that countries with strong investor protections were better able to weather the Asian financial crisis. On a more light-hearted note, West (2002) reports significant correlation between French legal origin and LLSV's antidirector rights index with World Cup soccer success.

In sum the LLSV line of papers from 1997 to 2002 and its progeny establish a statistically significant correlation between the antidirector rights measure of investor protection and common law legal origin on the one hand and various measures of financial development on the other hand. Financial development, in turn, is an important determinant to a country's overall economic growth. King and Levine (1993), for example, report a positive and significant correlation between financial development and growth. Rajan and Zingales (1998) provide evidence that firms with a greater need for external financing may have an increased ability to obtain such financing in countries with greater financial development, leading to higher growth rates. Wurgler (2000) examines 65 non-socialist countries and reports evidence that more developed financial markets are better able to exploit investment opportunities.

II. Criticisms of LLSV

Several critiques have arisen of the LLSV line of papers. First, (A) LLSV's coding of antidirector rights may contain systematic errors that favor common law countries. Second, (B) even if LLSV's coding is correct, the antidirector rights index may only imperfectly capture the important aspects of the law for investor protection. Third, (c) even if a correlation exists between legal origin and financial development, the correlation does not address causation.

A. LLSV Variable Misspecification

The LLSV findings depend on two key measures: (1) legal origin and (2) the antidirector rights index. Any inaccuracies in the measurement of the antidirector rights index calls into question a large portion of the LLSV (and progeny paper) findings.

Spamann (2008) takes issue with the accuracy with which LLSV measure the components of the antidirector rights index. Spamann surveyed local attorneys and verified LLSV's antidirector rights coding through the use of each country's primary and secondary legal sources. Spamann reports that 33 of the 46 country-level observations used in LLSV (1998) antidirector rights were incorrect. Spamann reports that the correlation between corrected and original values is only 0.53. Among other errors, Spamann reports inconsistent treatment of exceptions in the LLSV (1998) coding. For example, many countries provide both mandatory preemptive rights to their shareholders; however, the mandatory rights are subject to a number of exceptions when the rights are not allowed. In some cases, LLSV coded countries with exceptions as not having preemptive rights. In other cases, LLSV coded countries with exceptions as having preemptive rights.

Spamann re-estimates the relationship between the corrected antidirector rights index and (a) legal origin and (b) market capitalization divided by GNP, listed domestic companies per capita, and IPOs per capita. In the re-estimated models (with controls for GDP growth, log of GNP, rule of law), Spamann reports that the corrected antidirector rights index is no longer significantly correlated with legal origin or stock market size (as measured by market capitalization to GDP, listed firms per capita, or IPOs per capita). He reports that greater investor protection does correlate significantly with lower ownership concentration in one regression; however, when additional data is added (for Uruguay and Venezuela), the relationship becomes insignificant.

B. LLSV Focus on Wrong Aspects of the Law

Even if correctly measured, the LLSV antidirector rights index may not focus on the most relevant portions of law from the perspective of investor protection. Among other things, the antidirector rights index excludes anything related to takeovers (such as prohibitions on defensive tactics or the use of poison pill). The antidirector rights index does not take into account securities regulation (including disclosure provisions and prohibitions on insider trading). The antidirector rights index also curiously does include cumulative voting. While cumulative voting may help minority shareholders obtain some representation on a board of directors, few major public companies in the United States employ cumulative voting.

In Spamann (2008)'s corrected antidirector rights index, the score for the U.S. drops from the sample maximum of 5 in LLSV (1998) down to the sample minimum of 2. If the U.S., widely viewed as at the top end of investor protections, scores poorly on the antidirector rights index, then the index itself is likely flawed—omitting important factors relevant to the true level of investor protection in a country. Coffee (1999), for example, questions the focus of LLSV on aspects of corporate law protections for minority shareholders and the emphasis LLSV place on the distinction between common and civil law countries. Coffee points out that while both the Czech Republic and Poland come from the same legal tradition based on German civil law, the two countries faced different economic experiences. In explaining these differences, Coffee emphasizes the importance of securities market regulation, observing that Poland's securities regulatory protections (including disclosure requirements and the creation of an SEC-like regulatory agency) were far more stringent than those found in the Czech Republic.

C. Causality concerns

Subsequent work on legal origin has consistently found that civil law country governments tend to intervene in the economy more than common law origin countries. La Porta, Lopez-de-Silanes, and Shleifer (2005) report a positive correlation between civil law legal origin (particularly for French civil law) and greater government ownership of banks; greater government ownership of banks in turn is correlated with lower per capita income and productivity growth. Mulligan and Shleifer (2005a,b) report a positive correlation between French civil law origin countries and military conscription.

Ultimately, the LLSV legal origin results provide a pessimistic outlook for countries. If legal origins are hard wired into countries and have a pervasive, time invariant effect on the financial development of a country, then French (and to a lesser extent German and Scandinavian) civil law countries face a bleak long-term economic outlook. But is this pessimism true? What is it about common law countries that may cause faster financial development? La Porta, Lopez-de-Silanes, and Shleifer (2007) characterize the difference between common and civil legal traditions as follows: "We can think of the French civil law family as a system of social control of economic life that is relatively more concerned with disorder, and relatively less with dictatorship, in finding solutions to social and economic problems. In contrast, the common law family is relatively more concerned with dictatorship, and less with disorder" (p. 38). How can legal traditions determined sometimes centuries earlier still have a significant, lingering effect on a country? La Porta, Lopez-de-Silanes, and Shleifer (2007) argue that: "The legal system supplies the fundamental tools of addressing social concerns, and it is that system … with its codes, distinctive institutions, modes of thought and ideologies, that is very slow to change." (p. 38). Moreover, "the toolkit of civil law features

more prominently such policies as nationalization and direct state control; the toolkit of common law features more litigation and market supporting regulation" (p. 40).

Mahoney (2001) similarly argues that common law systems are associated with more limited government and corresponding greater protection of private property and contract rights. The lack of government intervention into the economy, Mahoney contends, creates an environment conducive to greater economic growth compared with countries with greater governmental intervention. Mahoney points in particular to the greater level of independence for the judiciary in common law countries. Mahoney also notes the greater leeway—including a lower level of review by courts—given to executive authority in civil law countries. Mahoney performs a cross-country study of economic growth, examining average annual growth in real per capita GDP across a sample of 102 civil and common law countries from 1960-92 as the dependent variable. Using a multivariate model controlling for initial per capita GDP in 1960, population growth, education, and investment among other controls, Mahoney reports that the per capita GDP of common law origin countries grew at an average rate of 0.71 percent faster than civil law countries. Mahoney also reports that common law regimes are associated more strongly than civil law regimes with greater judicial quality, property rights and contract rights, indicating less intervention by the state in common law countries.

Glaeser and Shleifer (2002) posit that the common law's superiority to civil law in protecting property and individual rights arose out of twelve and thirteenth century institutional changes in England and France. Glaeser and Shleifer argue that feudal lords in France held a large degree of power to the extent that "there was no possibility of effective local justice when these lords' interests were involved." Centralization of judicial power occurred in France as a check on the Feudal lords' power. In contrast, England had a powerful king. The legal system

in England developed (through the adoption of a jury system and the Magna Carta) as check on the power of the king, ensuring stronger property rights protection. Klerman and Mahoney (2007) take issue with Glaeser and Shleifer (2002)'s view of how and when common law systems initially developed independent judiciaries compared with civil law systems. Klerman and Mahoney argue that the shift in common law judge independence instead came out of political choices (arising from the Glorious Revolution in England in the late 17th century and the French Revolution in France in the 18th century) as the determinative factors in increasing (decreasing) judicial independence in England (France).

One can wonder about the relationship between common law and less governmental intervention and civil law and greater governmental intervention. Certainly, in the United States, much of the judge-made common law system has been replaced with largely statutory regimes with accompanying federal bureaucracies. The federal securities laws and the Securities Exchange Commission provide much of the regulation protecting investors in the United States. In response, La Porta, Lopez-de-Silanes, and Shleifer (2007) argue that statutes in common law countries nonetheless differ from statutes in civil law countries. They remark that: "Statutes in common law countries often follow and reflect judicial ruling, so jurisprudence remains the basis of statutory law. Even when legislation in common law countries runs ahead of judicial law making, it often must coexist with, and therefore reflects, pre-existing common law rules." (p. 12). While certain aspects of the U.S. securities laws do follow the common law model – such as Rule 10b-5's antifraud liability provision – many aspects of the securities regime are nonetheless distinct from common law. The U.S. Sarbanes-Oxley Act, for example, imposes numerous statutory requirements that have no parallels in the common law regime, including

CEO certification of SEC filings, prohibitions on certain auditor relationships with audited companies, and penalties for accounting restatements.

Voigt (2008) provides evidence calling into the question the value of the common law versus civil law distinction. Voigt examines the choice of substantive law in arbitration clauses used in international business contracts obtained from International Court of Arbitration cases in 2003. Voigt develops an expected fraction of cases for a particular legal origin based on the home country of the contracting parties. He computes that 8.01% of the cases should involve a choice of law clause for French law given the home countries of the contracting parties. In contrast, 19% of the cases involved a clause choosing French law. Voigt therefore finds no evidence that private contracting parties are actively avoiding French civil law. In contrast, the U.S. follows the reverse pattern: Voigt computes a 13.96% expected choice of U.S. law based on home country origin but finds that only 10% of the cases involved a choice of U.S. law. Voigt's data does not encompass the universe of all international transactions—only those contracts that ended up in arbitration at the ICC. Nonetheless, Voigt's analysis does cast doubt on the general relationship between common and civil law origin systems and the overall quality of a country's formal legal regime for business transactions.

Rajan and Zingales (2003) address whether the effects of legal origin are time invariant. They report that the level of financial development in France in 1913, as measured by stock market size as a fraction of GDP, was almost twice that of the U.S. (although still smaller than that of the U.K.). In addition Belgium, Germany, and Sweden were also all more developed than the U.S. While French civil law origin explains lower financial development in cross-sectional studies from the 1990s, French civil law origin does not explain financial development in the early 1900s. The superiority of common law countries is primarily a post-World War II

phenomenon. This finding supports the view that legal origin is not the sole (or even primary) causal factor behind financial growth.

Coffee (2001) also questions the causal relationship between legal origin and economic performance. Coffee examines the historical growth of public securities market in the U.S. and the U.K. At the end of the 19th century, neither the U.S. nor the U.K. provided strong minority investor protections through the law and (at least in the U.S.) private benefits of control were high. Despite the lack of a minority investor-friendly legal environment, both the U.S. and the U.K. successfully developed liquid securities markets. In the case of the U.S., Coffee points to the need on the part of railroads for capital as the driving engine behind financial innovation. U.S. financiers, attempting in part to draw capital from Europe, sought to use their own reputational capital to assure investors of the value of investing in the U.S. As well, stock exchanges (particularly the NYSE) worked through self-regulation to provide listing standards to protect investors as a means of competing against other exchanges.

Similarly, Cheffins (2000) contends that in the case of Great Britain, legal institutions did not cause (or assist) the formation of public corporations. Cheffins first notes that prior to the 20th century, few private businesses listed stock on the London Stock Exchange (LSE). Throughout the 20th century, the numbers of businesses raising capital through public offerings and subsequently listing on the LSE increased dramatically. While the English judicial system offered a stable and honest means of dispute resolution, Cheffins argues that other aspects of the British legal system did not provide much protection for minority investors through most of the early 20th century. Instead, Cheffins contends that substitute private mechanisms arose to protect the expectations of minority investors. Sophisticated financial intermediaries—particularly after World War II—played a role in certifying the value of companies and their

shares. The London Stock Exchange, as well, provided protections for minority shareholders through private contract with companies seeking to have their securities trade on the LSE.

Roe (2006) questions the value of common law compared with civil law legal origins in explaining differences between the strength of capital markets in varying countries. Roe observes that particularly civil law countries (like Germany and France) faced war and destruction from 1914 to 1945. With war and destruction came a loss of institutions important to maintaining law. As well, citizens of such countries – facing large losses – may have become more risk averse and more on focused on stability rather than more volatile capital market investment. Roe argues that for such countries, governments and the polity focused on other priorities instead of the construction of strong capital markets. In contrast, countries that did not face as much upheaval and destruction (such as the United States), created an environment more conducive to capital market growth. Among other tests, Roe estimates a multivariate regression models using ownership separation in large firms in 1995 as the dependent variable. He reports that his measures of wartime economic devastation and occupation or revolution among other things are as strong or more strongly correlated with less dispersed ownership (and therefore weak) securities markets as legal origin variables. Note though that in Roe's models, common law and civil law origins remain significantly correlated with ownership separation even with the inclusion of his economic devastation and occupation or revolution variables. Roe therefore cannot rule out that legal origin may have a separate and significant effect on the strength of securities markets in addition to his political economy variables.

Other historical factors may influence the development of a country's legal institutions and financial development other than legal origin. Beck, Demirguc-Kunt, and Levine (2003a) compare the importance of legal origin and initial endowments in determining the amount of

financial development in 70 former colonies. Beck et al. posit that the initial endowment--representing the "disease environment" facing the initial colonists, led to the development of drastically different legal institutions in countries – a theory first advanced by Acemoglu et al. (2001).[7] In countries where settlers faced a high mortality rate, Europeans "did not aim to settle but rather to extract as much from the colony as possible" – leading to institutions designed to empower elites to extract resources rather than protect private property rights. (p. 139). As a proxy for the initial endowment, Beck et al. use the mortality rate of initial settlers in a country. Beck et al. estimate a series of regression models with measures of financial intermediary development, equity market development, and private property rights protection as the dependent variable. They include English common law origin as well as the settler mortality rate variable as independent variables in variations of the model. They also include controls for, among other things, religion, ethnic diversity, length of independence from colonial rule. From the regression models, Beck et al. first report that even with the use of their controls for religion, ethnic diversity and length of independence, the relationship between common law legal origin and their various measures of financial development is largely positive and significant. Beck et al. second report that the relationship between settler mortality rate and the measures of financial development is significant and negative. Greater settler mortality correlates with lower financial development. They also report that settler mortality explains more of the cross-country variation in financial development compared with legal origin.

[7] Acemoglu, Johnson, and Robinson (2001) posit that in colonial countries, the European colonial powers pursued radically different institution-building depending on their objectives for the country. In some countries, the colonial powers sought to colonize with Europeans, leading to institutions that protected private property. For countries, in contrast, where colonization was more difficult, the European powers took an "extractive" strategy, generating institutions that "did not introduce much protection for private property, nor did they provide checks and balances against government expropriation". Instead, extractive institutions were designed top-down to extract as much resources out of the country as possible. Acemoglu et al. also posit that the initial institutions post-colonialization continued to influence current institutions and thereby current economic performance.

LLSV (1999) discuss the importance of ethnolinguistic heterogeneity in a country as an alternative to legal origin. They analyze the determinants of the quality of governments using a cross-sectional survey of up to 152 countries. For their measures of government quality, LLSV look at the level of government intervention (including, among others, a measure of property rights protection), government efficiency (including, among others, measures of corruption and bureaucratic delays), output of public offs, size of the public sector, and indices for democracy and political rights. The key exogenous determinants on which LLSV focus are: (1) ethnolinguistic heterogeneity, (2) legal origin, and (3) religious makeup of a country. LLSV write: "In ethnically heterogeneous societies, it has been common for the groups that come to power to fashion government policies that expropriate (or kill) the ethnic losers, restrict their freedom of opposition, and limit the production of public goods to prevent those outside the ruling group from also benefiting and getting stronger." (p. 231). LLSV report that greater ethnolinguistic heterogeneity and more interventionist legal origin (socialist or French civil law) predict worse government quality. Increased proportions of Catholic and Muslims in the population (as opposed to higher proportions of Protestants) also correlate with worse government.

Licht, Goldschmidt and Schwartz (2005) (LGS) argue that culture and not the background legal tradition provides a better explanation for differences in investor protections across countries. LGS use surveys of urban school teachers from different nations to determine the cultural score for each nation.[8] Using LLSV (1998)'s antidirector rights score for minority investor protections in a country, LGS then examine the relationship between cultural groupings and formal corporate governance related laws. They report that the prevailing national cultural

[8] LGS justify the use of school teachers as follows: "As a group, [school teachers] play an explicit role in value socialization, they are presumably key carriers of culture, and they probably reflect the mid-range of prevailing value priorities in most societies." (p. 237).

profiles are significantly correlated with corporate governance related laws. They conclude that "combining classification based on cultural dimensions and on legal families can yield insights obscured by using one approach alone. The combined approach thus militates against assessing legal regimes in isolation from their cultural environment." (P. 251)

In sum, legal origin has a robust correlation with financial and economic development. The robustness of this relationship, however, does not mean that other factors are also not as or more important for development. Studies indicate that initial colonial endowments, ethnolinguistic heterogeneity, and culture may also have correlate with the level of economic development in a country. Moreover, the causal relationship between legal origin and development—while plausible—is not definitive. As a theoretical matter, the differences in the amount of governmental intervention between common law and civil law systems may be overstated. The U.S. employs large statutory regimes (e.g., federal securities regulation) and very interventionist laws (e.g., Sarbanes-Oxley Act). Other factors may also correlate with legal origin that explain much of the variation in the level of development for countries. The importance of legal origin from a policy maker's perspective is also likely overstated. Because of endogeneity concerns, academic research emphasizes the long-run, relatively exogenous factors (such as legal origin) in their causality findings. Just because more the causal relationships of more contemporaneous choice variables (such as the adoption of particular investor protection laws or the level of enforcement to use) are difficult to estimate through econometric methods does not mean a causal relationship does not exist.

III. Law and Finance Lessons?

What lessons may countries interested in improving their financial markets take from the law and finance literature? Despite the criticisms of the LLSV line of papers, evidence exists that the law matters, although not necessarily those aspects of the law (antidirector rights and legal origin) upon which LLSV focus. How exactly can the law protect investors? One approach is to establish a set of minimum, necessary conditions for financial development and investment growth. Evidence is strong that countries should respect property rights, protecting against high levels of government expropriation of profits (either through taxes or corruption). Countries should also provide a legal system that makes contract enforcement both predictable and relatively low cost. Maintaining law and order also is important to financial and economic growth.

Johnson, McMillan, and Woodruff (2002), for example, look at the relationship between property rights protection and the incentive of business to reinvest their profits. They use surveys of 300 manufacturing companies in Eastern Europe and the former Soviet Union countries – countries with weak institutional environments (and corresponding low access to external finance) but large variation in the level of property rights protection. Johnson et al. fit an ordered probit using the survey responses on reinvestment rates as their dependent variable. They include as independent variables a measure of property rights insecurity based on survey responses as well as an indicator variable for whether the responding firms viewed courts as ineffective.[9] They report that report that greater property rights insecurity and ineffective courts are negatively and significantly correlated with a reduced level of profit reinvestment.

Acemoglu and Johnson (2005) assess the importance of property rights institutions (defined as those institutions that "protect citizens against expropriation by the government and

[9] They also include (in various permutations) controls for industry profit rate, firm age, whether the firm is a start-up firm, tax payments, and industry and country controls among other variables.

powerful elites") and contracting institutions (defined as those institutions that "enable private contracts between citizens"). (p. 949).[10] To address these endogeneity concerns in testing the causal relationship between institutions and economic outcomes, Acemoglu and Johnson use both legal origin as well as the European settler mortality rate and pre-colonialization indigenous population density as instruments (obtained from Acemoglu et al. (2002)). Using their instruments in a 2SLS model, Acemoglu and Johnson report that stronger property rights institutions correlates with long-run economic growth (income per capita), investment (investment to GDP ratio and private credit to GDP ratio), and financial development (stock market capitalization). They report that contracting institutions correlate only with a less developed stock market (but not with their other outcome measures). Their results support the view that: "While weak contracting institutions can be very costly, citizens also have certain recourses. Most important, they can change the terms of the contracts or the nature of their activities to protect themselves from the worst type of opportunistic behavior." (p. 951). In contrast, citizens are not able to avoid the risks of expropriation (from the government or elites) in a country with weak property rights institutions.

Government expropriation can occur through legal means. Djankov, Ganser, McLiesh, Ramalho, and Shleifer (2008) examine the corporate income tax rates in 85 countries for 2004. Their data is from PricewaterhouseCoopers and focuses on the taxes imposed on a standardized, mid-size domestic firm. They report from their cross-sectional study that higher effective corporate tax rates correlate with lower aggregate investment, foreign direct investment, and

[10] Acemoglu and Johnson base their measure of contracting institution strength on measures (obtained from the World Bank and Djankov et al. (2003)) of legal formalism (based on "the number of formal legal procedures necessary to resolve a simple case of collecting on an unpaid check"), procedural complexity (based on "the difficulties in resolving the case of an unpaid commercial debt"), and the number of procedures necessary to "resolve a court case involving this same commercial debt" (p. 951). Acemoglu and Johnson base their measure of property rights institution strength on "Polity IV's constraint on the executive measure, Political Risk Services' assessment of protection against government expropriation in a country, and the Heritage Foundation's assessment of private property protection." (p. 951).

entrepreneurial activity. Higher corporate tax rates are also negatively correlated with growth and positively correlated with a larger informal economy.

While necessary, securing property rights from government expropriation and respecting private contracting are not alone sufficient for rapid financial development. Even in countries that respect property and contract rights and the rule of law is strong, controlling shareholders may utilize their power to expropriate private benefits of control (through asset sales, diluting stock issuances, the taking of corporate opportunities and so on). What additional corporate and securities related regulations are sufficient conditions for investor protection leading to faster financial development? Unfortunately, beyond establishing the rule of law, securing private property rights, and respecting contracts, developing a simple, causal formula for how to improve financial development in a country is difficult. Studies, nonetheless, point to several possible to several possibilities as discussed below.

A. Corporate Governance

Studies in the United States focus on the relationship between corporate governance protections and corporate valuations. Gompers, Ishii, and Metrick (2003) construct a broad corporate governance index (the GIM Index) based on an equal weighting of 24 governance provisions tracked by the Investor Responsibility Research Center (IRRC). Gompers et al. reported a significant negative relationship between their broad index and the Tobin's Q measure of firm value and stock returns during the 1990s.

Building on the Gompers et al. work, Bebchuk, Cohen, and Ferrell (2004) assess the precise elements of corporate governance that correlate with increased firm value and shareholder returns. They start with 24 governance provisions compiled by the Investor

Responsibility Research Center (IRRC). From the IRRC provisions, Bebchuk et al. construct an "entrenchment" index using 6 provisions. The 6 provisions include four "constitutional" provisions that "prevent a majority of shareholders from having their way" (the presence of staggered boards, limits to shareholder bylaw amendments, supermajority voting requirements for mergers, and supermajority voting requirements for charter amendments). The 6 also include two "takeover readiness" provisions relating to defensive tactics (the presence of poison pills and golden parachutes). Using a dataset consisting of all companies for which the IRRC provided corporate governance information from 1990 to 2002, Bebchuk et al. report that increases in their entrenchment index correlate with significant reductions in the Tobin's Q measure of firm value. They also report that firms with a higher entrenchment index correlated with large abnormal negative stock returns from 1990 to 2003. In contrast, Bebchuk et al. do not find evidence that the other 18 IRRC provisions are negatively correlated with Tobin's Q or abnormal stock returns from 1990 to 2003 in their sample.[11]

Bebchuk et al.'s study implies that protecting the ability of shareholders to vote as well as the presence of takeover readiness provisions relating to poison pills and golden parachutes are important for corporate valuation in the United States. However, what works in the U.S. may not work in other countries. The presence of controlling shareholders in many firms outside the United States, for example, presents different governance concerns for minority shareholders.

Outside the United States evidence exists nonetheless that certain aspects of corporate governance are important for valuation. Black (2001) provides a firm-level test of the importance of corporate governance protections in Russia—a country at the time with a low level

[11] To assess causality, Bebchuk et al. examine the relationship between firm valuation from 1998 to 2002 and entrenchment scores in 1990. They report that high 1990 entrenchment scores are significantly and negatively correlated with Tobin's Q from 1998 to 2002. While not a definitive test of causality, the time sequence of this relationship suggests that entrenchment may have a causal effect in reducing overall firm value.

of corporate governance protection—for the market valuation of a company using a small sample of 16 "major" Russian firms from 1999. Black, among other things, turns to Trioka Dialog, a Russian investment bank, to obtain an assessment of each firm's actual market capitalization over their potential western market capitalization (the "value ratio"). Trioka Dialog uses multiples of assets, capacity, and revenue to gauge the potential market capitalization of each firm in the West. Black reports a strong correlation between the natural log of the value ratio and a firm's corporate governance ranking.

Black et al. (2006) examine the relationship between corporate governance within Korea and the valuation of publicly traded firms (as measured by Tobin's Q) using firm-level data. Black et al. use a corporate governance index they construct using data from a 2001 Korea Stock Exchange Survey (the KCGI which ranges from 0 to 100) for 515 Korean public firms. The note that: "KCGI is comprised of five subindices, for shareholder rights, board structure, board procedure, disclosure, and ownership parity." (p. 370). Black et al. estimate a firm-level cross sectional OLS model using Tobin's q as the dependent variable. Their main independent variable of interest is their KCGI corporate governance measure.[12] Black et al. report a consistent and significant relationship between a higher KCGI score and firm valuation. Using the OLS model results, Black et al. also report that a shift from the worst to best firm in the KCGI index results in a predicted 0.47 increase in Tobin's q. Board composition is important: "Korean firms with 50% outside directors have 0.13 higher predicted Tobin's q (roughly 40% higher share price), after controlling for the rest of our governance index."[13]

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[12] They also include an extensive set control variables including, among others, assets, number of years listed on the Korean Stock Exchange, the debt/equity ratio, sales growth, R&D/sales, market share, share turnover, foreign ownership, whether the firm is a member of a Chaebol, whether the firm is cross-listed in the U.S. through an ADR facility. They also include industry dummies in their control variables.

[13] See Black et al. at 368. Causality, among other problems, is an issue with Black et al.'s OLS results. Firms with greater valuation may have more dispersed public shareholders who will demand corporate governance protections (leading to a reverse causal relationship). To address the causality issue, Black et al. employ two and

B. Limiting Tunneling

In addition to studies of indices of corporate governance, evidence exists of the importance of legal protections aimed at a specific expropriation activity: tunneling. Many ways exist for insiders to expropriate private benefits of control. Insiders may extract value through the sale of assets, goods, or services in self-dealing transactions. Insiders may obtain preferential loans. Insiders may also sell shares to themselves (or related parties) at diluted prices. Insiders may also pay themselves exorbitant pay packages. Insiders may expropriate corporate opportunities.

Johnson, La Porta, Lopez-de-Silanes, and Shleifer (2000) provide several case studies of those in control of corporations engaging in "tunneling" – expropriating corporate value at the expense of minority shareholders. Johnson et al. focus primarily on asset-related tunneling including "outright theft or fraud" as well as "asset sales and contracts such as transfer pricing advantageous to the controlling shareholder, expropriation of corporate opportunities and so on." (p. 22-23). Bertrand, Mehta, and Mullainathan (2002) report evidence of tunneling in Indian business groups characterized with a pyramid ownership structure, involving primarily the manipulation of non-operating components of profit). Bae, Kang, and Kim (2002) examine acquisitions by Chaebols and report that minority shareholders generally lose value from such acquisitions. In contrast, the acquisitions tend to increase the value of other group firms – benefiting the group controlling shareholders. Baek, Kang, and Lee (2006) provide evidence of tunneling in private equity securities offering by Korean chaebols from 1989 to 2000. They

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three-stage least squares using asset size as an instrument. They note that Korea applies different corporate governance-related rules to public companies with more than 2 trillion won in assets compared with smaller firms. Black et al. use asset size above 2 trillion won as an instrument for KCGI. Their 2SLS and 3SLS results support their OLS results that more corporate governance leads to higher firm valuations.

write that private stock offerings "can involve several interesting forms of tunneling, such as issuing dilutive shares that discriminate against minority shareholders, issuing deep discount shares that benefit controlling shareholders, and issuing poorly performing firms' securities at inflated prices to better performing firms in the same group." (p. 2416).

Cheung, Rau, and Stouraitis (2006) examine specific connected transactions to determine which types of transactions result in more value-loss for minority shareholders. They use a dataset of Hong Kong listed companies and a sample of 375 filings of connected transactions from 1998 to 2000.[14] Cheung et al. divide the dataset of connected transactions into (a) transaction likely to result in expropriation (including "asset acquisitions, asset sales, equity sales, trading relationships, and cash payments to connected parties"), (b) transaction likely to benefit the listed firm, and (c) transactions with a strategic rationale (such as a takeover offer). They report that most connected transactions affect non-operating earning items. The most common types of connected transaction involve a firm acquiring assets from the firm's main owner (27% of all connected transactions in the sample). In many of these deals, the firm's main owner was paid in stock, diluting existing owners. Many value-reducing connected transactions also involved the firm providing cash assistance to third parties. Cheung et al. report that the likelihood of a firm engaging in an expropriating connected transaction is higher for firms with owners in mainland China. They explain that: "[r]uling by courts in Hong Kong are not enforceable in China, and therefore Hong Kong investors have little chance of recovering expropriated assets." (p. 346).[15]

[14] Cheung et al. observe that two-thirds of Hong Kong listed firms have a controlling family with 20% or more voting rights.

[15] Cheung et al. report that the market fails to anticipate which firms are more likely to engage in value-reducing connected transactions – such firms do not trade at a discount prior to the announcement of the connected transaction.

What works to limit the ability of those in control to engage in tunneling? Atanasov, Black, Ciccotello, and Gyoshev (2007) focus on the role of law in limiting financial tunneling in Bulgaria, including dilutive equity offerings and below-market freezeouts. Bulgaria underwent mass privatizations in 1998, involving more than 1,000 firms. The authors report that post privatization, extensive tunneling activities followed. They provide the following example of dilutive tunneling: "When privately controlled firms issue shares, almost all are purchased by controlling shareholders, often at the minimum lawful price (the shares' par value of one Bulgarian lev per share) and at a large discount to market value." (p. 3).

Atanasov et al. hypothesize that "(i) specific legal rules, including preemptive rights and appraisal rights, can affect the level of financial tunneling; and (ii) a reduction in financial tunneling due to changes in the law will lead to a larger increase in equity valuations for firms at higher ex ante risk of financial tunneling." (p. 3). To test these hypotheses, the authors examine how Bulgaria's 2002 securities law reforms affect tunneling. The reforms required that minority shareholders must participate equally in secondary equity offers (through the use of tradeable preemptive rights). The reforms also imposed various freezeout protections for minority shareholders – including a ban on "going dark" freezeout transactions. The reforms imposed a mandatory tender offer rule when a shareholder reaches a predefined critical percentage of ownership levels (50%, 67%, and 90%) and allowed a controlling shareholder to delist only when reaching 90% ownership or higher. The reforms also required that a majority of the minority shareholders vote to approve the terms of a mandatory tender offer. Minority shareholders are also entitled to receive a minimum "fair" price for their shares in the tender offer. The reforms coincided with a large increase in the powers of the Bulgarian Financial

Supervision Commission, Bulgaria's securities regulator—among other things, the FSC reviews all tender offers post 2002.

Atanasov et al. report that the reforms were highly effective. Dilutive offerings ceased post-reform. Similarly, below-market freezeouts and going dark transaction also stopped post-reform. Atanasov et al. report that after the 2002 reforms freezeouts take place at a premium relative to market value (as opposed to a discount prior to the reforms). Atanasov et al. also test the impact of these reforms on overall firm valuation. Using a difference-in-differences analysis, the authors focus on the differential between high-tunneling-risk and low risk firms to isolate the impact of the 2002 reforms on tunneling from other factors that may more generally affect stock market valuations of firms in Bulgaria.[16] Among other things, Atanasov et al. report that after the 2002 reforms, valuation of firms increased (as measured by Tobin's q, price over earnings, and price over sales ratios) by more than double for firms at a higher risk of tunneling compared with firms at a lower risk of tunneling.

Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2005) develop a new investor protection measure focusing on self-dealing related tunneling activity. They define self-dealing to include "executive perquisites to excessive compensation, transfer price, taking of corporate opportunities, self-serving financial transactions such as directed equity issuance or personal loans to insiders, and outright theft of corporate assets." (p. 1). Using the assistance of Lex Mundi law firms, Djankov et al. survey the self-dealing related rules in 72 countries for 2003. For each law firm, Djankov et al. describe the same hypothetical self-dealing transaction between two firms controlled by the same person. They then asked each Lex Mundi firm to

[16] To determine the risk of tunneling, the authors rely, among other things, on the presence of a private controlling ownership (as opposed to no majority owner or a state-controlled company). Firms with a large, private owner may be more likely to profit from tunneling.

describe how their country's legal system would regulate this self-dealing transaction.[17] From the attorney responses, Djankov et al. construct measures of the "intensity" of self-dealing regulation including an aggregate anti-self-dealing index (ASDI). Separate from the ASDI, Djankov et al. also focus on public enforcement, looking at the formal maximum fines and criminal sanctions for their hypothetical self-dealing transaction.

Djankov et al. report that the ASDI is significantly higher in common law countries compared with civil law countries. Using cross-country ordinary least squares regressions (with, among others, log of per capita income and the number of days to resolve a commercial dispute as controls), Djankov et al. report that the ratio of stock market capitalization to GDP, the number of domestic publicly-traded firms in each country relative to population, the value of IPOs relative to GDP in each country are all positively and significantly related to the ASDI. They report that a two standard deviation increase in the ASDI correlates with an increase in the stock market capitalization to GDP ratio of 38 percentage points. Djankov et al. also report that the premium paid in corporate control transactions (a measure of the level of private benefits) is negatively related with the ASDI.[18]

One can question the validity of the ASDI measure. The ASDI does not focus on the presence of extra-legal norms that may regulate self-dealing activity (such as reputation markets for executives). As well, the ASDI measure ignores the actual levels of private and public

[17] Attorneys were asked to describe minimum (mandatory) legal requirements on "(1) who approves the transaction; (2) what needs to be disclosed to the board of directors or supervisory board, the shareholders, the stock exchange, and the regulators; (3) what are the duties of officers, directors, and controlling shareholders; (4) how the transaction's validity could be challenged; (5) what causes of action are available if Buyer suffers damages; (6) what needs to be proved under each cause of action; (7) who has standing to sue under each available cause of action; (8) available of direct and derivative suits; (9) access to information and discovery rights; and (10) fines and criminal sanctions."

[18] To control for endogeneity, Djankov et al. re-estimate their model using common law as an instrument for the ASDI to control for possible endogeneity in the relationship between ASDI and their measures of stock market size. They report that ASDI is significantly related with the ratio of stock market capitalization to GDP, the number of domestic publicly-traded firms in each country relative to population, the value of IPOs in each country relative to GDP, and the control block premium. In contrast, they report that public enforcement is not related with stock market size under their various measures.

enforcement of the formal legal requirements. Moreover, the ASDI focuses on self-dealing transactions by a controlling shareholder between two related firms. Other forms of private benefit expropriation are possible including (a) excessive management salaries, (b) discounted stock issuances to favored parties, (c) the expropriation of corporate opportunities, and so on.[19]

C. Securities Regulation

In addition to focusing on corporate governance in general and self-dealing transactions in particular, regulators may also wish to consider the strength of their securities regulatory regime. La Porta, Lopez-De-Silanes, and Shleifer (2006) analyze the relationship between the strength of securities law protections for investors and stock market development. Their analysis covers a sample of 49 countries with the largest stock market capitalization measured as of 1993 (as used in the LLSV (1998) article). For each of their 49 countries LLS obtained information on the existing securities regulations governing the regulation of initial public offerings (IPOs) from surveys of attorneys. The surveys focused on (a) various disclosure requirements (the need for a prospectus, information on compensation, shareholders and insider ownership among other information), (b) securities liability standards, and (c) the authority of the securities regulatory authority including whether they are appointed by the executive branch, the security of their tenure, the rulemaking and investigative power of the securities regulatory authority, and the sanctions available to the securities regulatory authority. For each of these three dimensions, LLS construct an index based on a mean of the various characteristics (each coded as 0 or 1).

[19] Djankov et al. also revise the LLSV (1998) anti-director rights index in response to the criticism of Spamann among others. They report that the new anti-director rights index is positively related with the stock market capitalization to GDP ratio, the number of domestic firms per million inhabitants, and the IPOs-to-GDP ratio. On the other hand, the revised index is not related with the block premium or ownership concentration. In a "horse race" where the ASDI and new anti-director rights index are both used as independent variables in the same regression, they report that in general the ASDI is a more robust predictor of stock market development (although not universally so—the new anti-director rights index better explains the number of firms per capita).

Using an OLS model, LLS test the relationship of their three aspects of the securities regulatory regime with various measures of stock market development, including the ratio of stock market capitalization by small shareholders to GDP, the ratio of domestic publicly traded firms relative to the population, the value of IPOs relative to GDP, all measured for the period 1996 to 2000, among others. For control variables, they include the LLSV antidirector rights index, a measure of the efficiency of the judiciary, and the log GDP per capita. LLS report that higher disclosure requirements and greater liability standards (e.g., more exposure for IPO participants to liability) are positively related with greater market capitalization, number of publicly traded firms, and IPOs, among others. They report that more expansive formal securities regulatory public enforcement is related only to greater market capitalization and IPOs and is only significant for the subsample of countries with per capita GDP above the median (and insignificant for below the median countries). Focusing more specifically on the components of their public enforcement variable, LLS report that an independent or focused regulator or the presence of criminal sanctions is not significantly related to their measures of capital market development. Only the ability to engage in rulemaking is significantly related. Moreover, when disclosure, liability standards, and public enforcement are included together in the same model, LLS report that disclosure is always significant while public enforcement is not significant (and liability standards is significant in some of their models).

Several criticisms of LLS (2006)'s approach are possible. LLS's indices implicitly weighs each characteristic within their disclosure, liability standards, and public enforcement categories the same in terms of importance for the regulation of IPOs. It is unclear though whether disclosures relating to compensation are as important as information on insider ownership and so on. LLS also do not focus on how vigorously the securities laws are enforced

in practice by private plaintiffs (e.g., whether an active plaintiffs' attorney bar exists in the country, the availability of class actions, the number of private law suits, etc are absent from their models). Lastly, LLS focus primarily on the formal characteristics of public enforcement—looking primarily at formal powers of the securities regulatory authority—and not on the actual budget and enforcement levels at such agencies. As discussed below, the actual level of enforcement is an important omitted variable in tests for financial development.

Hail and Leuz (2005) look at the relationship between strong securities regulation and the cost of capital in a country. They examine a sample of 40 countries from 1992 to 2001 (looking at firms from these companies as reported in Worldscope). Because firms do not generally disclose their cost of capital, Hail and Leuz compute an approximate cost of capital depending on the price of a company's securities and analyst ratings (obtained from I/B/E/S). Among other things, they report that higher LLS (2006) securities disclosure index and liability index scores are correlated with a lower cost of capital.

D. Other Regulations

Not only securities regulation, but other regulatory regimes within a country may be important determinative factors for financial development. Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2003b) utilize Lex Mundi (a large international association of law firms) member law firms from 109 countries to survey the legal procedures litigants and courts use to engage in two types of private legal actions: the eviction of tenants who fail to pay their rent and the collection of money owed on a bounced check. They construct a "procedural formalism" measure of dispute resolution from these surveys. The procedural formalism index is based on indices relating to "(i) professionals versus laymen, (ii) written versus oral elements, (iii) legal

justification, (iv) statutory regulation of evidence, (v) control of superior review, (vi) engagement formalities, and (vii) independent procedural actions." (p. 469). Djankov et al. report that procedural formalism is greater in civil compared with common law countries. Djankov et al. report that the richest countries (in both common law and French civil law countries) have the lowest levels of formalism. Using an OLS model with legal origin as an instrument for formalism, Djankov et al. report that greater levels of formalism are associated with longer expected duration of dispute resolution. They also report that: "Higher formalism also predicts lower enforceability of contracts, higher corruption, as well as lower honesty, consistency, and fairness of the system." (p. 456). Djankov et al. conclude that the level of legal formalism is inefficiently high, particularly in developing countries that received a transplant of their legal tradition due to a colonial past rather than an efficient response on the part of the country to its specific needs.

Several criticisms are possible with Djankov et al.'s analysis. First, they ignore settlements and informal means of adjudication (like arbitration). A country with a highly formalistic legal system may offer alternative arbitration type proceedings for smaller claims, leading to a lower adjudication time than under the formal legal system that the author's ignore when focusing solely on the adjudication time under the formal system. Second, it is unclear if eviction proceedings or bounced checks correlate with other aspects of the legal system (such as protection of investor rights, antifraud provisions, etc.). Third, it is unclear why greater formalism would lead to greater corruption, lower honesty, and less consistency (although the theoretical connection with longer adjudication times is plausible). Choi, Fisch, Pritchard (2008), for example, report that conflicts of interests among securities arbitrators—an informal adjudication mechanism in the U.S. for investor complaints against brokers—correlates with

biased awards against investors. The lack of formalism allows decisionmakers in adjudication great leeway to cater to their own personal and financial best interest in rendering awards.

Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2002) examine the barriers firms face to obtain entry in a sample of 85 countries. They focus on the number of procedures (including licensing, tax, labor, safety and health, and environment related requirements), formal reported time, and formal reported cost of "standardized" industrial company to obtain all necessary permits and licenses to be legally in operation. They hypothesize that greater regulation of entry gives regulators an increased ability to collect rents (bribes) from potential entrants and otherwise "serves no social purpose" (what they call the "tollbooth" theory of entry regulation). Djankov et al. report large variations in their measures of entry barriers (for example the number of procedures range from 2 in Canada to 21 in the Domincan Republic). They report that the number of procedures is positively correlated with poor overall social outcomes (as measured by water pollution levels, deaths from intestinal infections, lower product market competition) and the size of the unofficial economy. The level of corruption in a country is also positively correlated with the number of entry procedures, supporting their tollbooth hypothesis. Djankov et al. also report that countries with more open access to political power, greater executive constraints, and greater political rights impose less burdensome entry regulations compared with countries with less political freedom (even after controlling for per capita income). Similarly, French, German, and socialist origin countries have more regulations and entry procedures compared with English common law legal origin countries.

Djankov, McLiesh, and Ramalho (2006) focus on the importance of business regulations as an institution important for economic growth. To assess the quality of business regulation in varying countries, Djankov et al. look at the World Bank's Doing Business database (available at

www.doingbusiness.org). The database, covering 135 countries, focuses on measures of the ease with which someone may start a business, hire and fire employees, register property, enforce contracts, get credit, and protect investors, and close down a business. They aggregate these rankings by taking a simple mean of a country's rankings in the seven categories (and then normalizing the average to range from 0 to 1). Under Djankov et al.'s rankings, the U.S. scored among the highest. Laos, Cambodia, and Angola scored among the lowest. Djankov et al. report that their business regulation index is positively and significantly related to GDP per capita growth from 1993 to 2002. To assess the causal relationship between higher quality business regulation and GDP growth, Djankov et al. estimate a two-stage least squares regression, using as instruments the legal origin of the country, the absolute latitude of the country, the initial GDP per capita, religion, and language as instruments. In the 2SLS regression, the business regulation index remains positively and significantly related to per capital GDP growth from 1993 to 2002—supporting the view that higher quality business regulation results in faster per capita GDP growth. The magnitude of the impact of business regulation on growth is also large. Djankov et al. report that: "Improving from the worst (first) to the best (fourth) quartile of business regulations implies a 2.3 percentage point increase in average annual growth." (p. 400).

E. Courts

More than the formal laws on the books matter for the actual level of investor protection. A key factor for the implementation of the formal laws is the strength and independence of the judiciary of a country. La Porta, Lopez-de-Silanes, Pop-Eleches, and Shleifer (2004) (LLPS), for example, provide evidence on the relationship between judicial independence and judicial constitutional review on the one hand and economic and political freedom on the other hand. As

their measure of judicial independence, LLPS look at an index based on the tenure of supreme court judges, the tenure of administrative court judges, and whether judicial decisions are treated as a source of law. As their measure of judicial review, they look at an index based on the rigidity of the constitution (e.g., how difficult it is to change the constitution) and the extent to which judges have the power to review the law for constitutionality. Using a sample of 71 countries, LLPS estimate a series of multivariate regression models with economic and political freedom proxies as the dependent variables. As their measures of economic freedom, LLPS examine indices for the level of property rights security, the number of procedures start-ups must go through to obtain necessary licenses and permits (taken from Djankov et al. (2002)), an employment law index, and the amount of government ownership of banks. As their measures of political freedom, LLPS look at indices for the level of democracy, political rights, and human rights. For independent variables, LLPS include, in various permutations, their judicial independence and judicial review indices as well as dummies for legal origin. As controls (in some permutations), they include a measure of the ethnolinguistic fractionalization of the country, the latitude of the country, and the log of GDP per capita. Across their models, LLPS report that judicial independence is correlated positively (and significantly) with greater economic freedom. Judicial review is correlated positively and significantly with greater political freedom. English common law legal origin countries are also positively and significantly correlated with greater economic and political freedom compared with French civil law countries. When judicial independence and common law are included together as independent variables, LLPS report that judicial independence remains significant in explaining the measure of property rights security (one aspect of economic freedom) while legal origin no

longer remains significant. They interpret this result as showing that "at least some of the effect of legal origin on economic freedom is explained by judicial independence." (p. 464).

Klerman and Mahoney (2005) look to five statutory changes that increased judicial independence in England from 1701 to 1800. As their measure of how increased judicial independence affected investors, Klerman and Mahoney examine abnormal equity returns (derived from London stock prices for the Bank of England, the South Sea Company, and the United East India Company among others) around critical points in the passage of statutes that raised judicial salaries and increased judicial tenure. Using a 3-day event window (and a 2-week event window for robustness), they report that: "Early-eighteenth-century legislation granting tenure during good behavior is associated with large and statistically significant positive abnormal returns." (p. 1).

Beck, Demirguc-Kunt, and Levine (2003b) test the relationship of judicial independence and adaptability with financial development. As measures of country outcomes, Beck et al. look to the ratio of private credit to GDP (a measure of banking sector development), the ratio of equity market capitalization to GDP, and an index of the security of private property rights (from LLSV (1999)). As proxies for the political power of judges, Beck et al. use variables on the tenure of supreme court judges and whether the supreme court has the power to review administrative (government) decisions (from LLPS (2002)). As proxies for the adaptability of the law, Beck et al. use whether judges decide cases that become law and the degree to which judges depend on statutory principles as opposed to principles of equity in deciding cases (from Djankov et al. (2003)). Beck et al. estimate a series of cross-country regressions (using a sample of up to 115 countries). They use two-stage least squares with legal origin as the instrument for both their political and adaptability variables. They report that while their political channel

variables are largely insignificant, the adaptability variables are significantly related to greater financial development.

Beck, Demirguc-Kunt, and Levine (2005) provide a firm-level test of the importance of legal origin, the adaptability of a country's legal system, and judicial independence on the ability of firms to raise capital externally. Beck et al. posit that common law gives judges discretion, allowing the judges to respond to unforeseen circumstances and changes in the business environment on a case-by-case basis. This adaptability, Beck et al. posit, is less present in civil law countries where judges play a more administrative role and have less judicial flexibility. Beck et al. examine responses of 4000 firms across 38 countries to surveys on the difficulties the firms face in raising external capital. The surveys focus on general financial obstacles, collateral requirements, paperwork and bureaucracy, and access to long-term loans. Using the survey responses as the dependent variables, Beck et al. estimate a series of ordered probit models. For independent variables, they include various firm-level controls (including government or foreign ownership, firm size, market structure, governance system related variables, and GDP per capita). In addition, they include (in various models), French legal origin, and the measures of judicial independence and adaptability from Beck et al. (2003b). Beck et al. (2005) report that countries with more adaptable judicial legal systems correlate with a greater ability of firms to obtain external financing. Lastly, they do not find a significant correlation between their measure of judicial independence and obstacles to external financing.

Questions exist about the importance of the judicial adaptability results. Much of the law in the United States (and other common law countries) is now codified (including the federal securities laws). It is unclear whether the differences between civil and common law system of judging is as relevant for the codified aspects of the regime. How flexible and adaptable is the

legislature and administrative agencies would also seem an important factor in determining the level of adaptability of even common law countries – omitted from Beck et al.'s analysis. Countries with administrative agencies devoted to regulating the capital markets (such as the SEC) with detailed statutory frameworks to regulate the markets (such as the securities laws of the United States) may provide a more flexible and expert regulatory environment for firms than a regime of pure judge-made law.

F. Enforcement

Recent research indicates that the level of enforcement of the laws is a crucial factor for whether a country in practice provides strong investor protections. A country may have extremely detailed disclosure and antifraud laws on its books; however without enforcement, such laws do little to protect investors.

Pistor, Raiser, and Gelfer (2000) (PRG) raise doubts whether formal legal protections are important in determining the growth in transition economies. They examine the impact of background legal enforcement, compliance norms and institutional structure (which they call "legality") as well as the formal law on the development of strong capital markets in transition economies in a sample of transition economies including Russia and primarily Eastern European countries from 1990 to 1998. PRG estimate an OLS model using the ratio of stock market capitalization to GDP as the dependent variable. For explanatory variables, PRG use measures of legality as well as indices for the level of formal legal protection given minority shareholders. They report that legality has a large, positive, and statistically significant relationship with market capitalization. Formal legal protection variables, in contrast, have only insignificant relationships.

A strong public enforcement regime may be more important than a strong judiciary in protecting investor rights. Glaeser, Johnson, and Shleifer (2001), for example, observe that relying on judges to develop, interpret, and apply laws to protect investors is not necessarily superior to relying on securities regulatory authorities to enforce the securities laws. In particular, they argue that: "Judges … are by design more independent and therefore harder to motivate. The stronger incentives of the regulators have the benefit of bringing about more aggressive enforcement than can be achieved through courts". (p. 854). On the other hand, Glaeser et al. observe that greater incentives to enforce are not always better for investors and the markets. They point out that public enforcement may also result in too much enforcement "when regulators motivated to find violations penalize innocent suspects". (p. 855).

To test the overall value of public enforcement, Glaeser et al. (2001) compare financial market regulation in Poland and the Czech Republic in the 1990s. They note that both countries in their recent political history (transitioning away from a communist state and implementing broad privatization) and both are fully industrialized and border on Western Europe. Using the LLSV antidirector rights index, Poland has a 3 out of 6 score while the Czech Republic has a 2 out of 6 score. The rough similarities between Poland and the Czech Republic allow for a relatively controlled comparison between different approaches to securities regulation. They report that a greater level of formal securities regulation and enforcement through a "highly motivated regulator" in Poland correlated with faster stock market growth (as well as a rapid increase in new listings and equity capital raised). Less intrusive, laissez-faire regulation enforced by an "unmotivated office in the finance ministry" in the Czech Republic correlated with a weaker stock market. Note that Glaeser et al. focus primarily on the formal grant of

authority to the securities regulatory authorities in Poland and the Czech Republic and do not examine the actual budgets, staffing levels, and number of enforcement actions.

Bhattacharya and Daouk (2002) examine the frequency and effectiveness of insider trading prohibitions across the world. They report that prior to 1990, 34 countries with stock exchanges had insider trading laws and only 9 of them ever enforced their laws. At the end of 1998 (the end of their study period), 103 countries with stock exchanges had insider trading laws and enforcement had taken place in only 38 of these countries. Bhattacharya and Daouk estimate a series of panel time-series regressions with country fixed-effects using the monthly realized rate of equity return for a country as the dependent variable. They report a negative and statistically significant relationship between equity returns and insider trading enforcement (as an explanatory variable) – indicating that more stringent insider trading enforcement leads to a reduced cost of capital (represented by the lower equity returns). When the presence of formal insider trading laws is substituted for the insider trading enforcement variable, and a control for the degree of financial liberalization of a country's equity market is included in the regression, the coefficient on the presence of formal insider trading laws is no longer significant.

Jackson (2007) presents preliminary evidence comparing the level of direct expenditures on financial market regulation in the U.S. and other countries. Jackson collects information on the direct regulatory budgets and staffing levels of financial regulator institutions in the U.S. (including those focusing on the oversight of depositary institutions, the securities industry, the insurance industry, and private pensions). Jackson reports: "The United States … spent nearly $6 billion on financial regulation in 2004 and employed more than 43,000 staff members, which is equivalent to 133 staff members for every million people in the population. Other well-regarded jurisdictions such as the United Kingdom, for example, maintain regulatory staffing and

budgets at substantially lower levels." (p. 255-56). Jackson also makes a comparison of direct regulatory costs more generally between the common law countries in his sample (including the U.S., Canada, Australia, and the U.K.) and civil law countries (including France, Germany, and Sweden). Jackson reports: "[T]he civil law jurisdiction average regulatory costs ($88,942) are substantially lower than the averages for common law jurisdictions ($342,460). Similarly, average staffing levels for civil law countries (28.76 per million of population) are markedly lower than those of common law jurisdictions (75.09 per million of population)." (p. 275-76). Jackson lastly provides comparative evidence on the level of enforcement outputs. Jackson writes that: "Between 2002 and 2004, U.S. regulatory bodies charged with overseeing our securities markets brought, on average, 3,624 actions per year, imposing in excess of $5 billion in sanctions. In addition, U.S. private parties generated 2,824 actions per year in the form of both class action lawsuits and securities arbitration proceedings, resulting in at least $3.5 billion of additional damage awards per year during the period." (p. 256). Jackson then provides evidence that the U.S. levels of enforcement actions (public plus private) are substantially higher than the U.K. and Germany.

Jackson study only shows differences in enforcement inputs and outputs in a summary statistic fashion across several countries. As Jackson notes, whether we can draw policy conclusions from these differences in unclear. The optimal level of regulatory enforcement may vary based on country-specific factors, including the scale of the capital markets, the sophistication of the financial services industry, the regulatory objectives of the country, the country's endowment of labor and capital, and the degree of lawlessness in the population of the country among other factors. Different regulatory systems may also have different styles of enforcement. Countries with more informal enforcement mechanisms may not generate as much

"hard" enforcement numbers as other countries while still having an effective level of enforcement.

Jackson and Roe (2007) examine the relative effectiveness of public and private enforcement. Jackson and Roe note that public enforcement officials have incentive problems, possibly following political and personal goals other than investor welfare, and lack information on the market. Private enforcement, in contrast, may face rent-seeking by attorneys, weak judiciaries, free riding among dispersed investors. Private enforcement also lacks the array of enforcement tools available to public enforcement, including criminal enforcement. Neither is perfect: which is better?

To test the importance of public enforcement for financial development, Jackson and Roe create a resource-based proxy for the level of public enforcement based on the amount of staffing levels and budget assigned to securities regulators. They note that obtaining comparable data on securities staffing and budget levels across countries is difficult due to the differences in how countries structure their financial regulatory regimes. Nonetheless, they collect staffing levels per million of domestic population for 30 countries that do report staffing data separately for securities regulatory authorities. They also expand their dataset to a total of 53 jurisdictions by extrapolating "securities staffing from estimates using the median ratios in jurisdictions where we could observe the ratio of securities staffing to staffs of other financial regulatory functions." (p. 13). Jackson and Roe stress the difference in their resource-based measure from La Porta et al. (2006)'s public enforcement index which depends on more formal allocation of power to securities regulatory authorities and not the funding or intensity of regulatory activity. A securities regulator may have a number of formal powers but never exercise these powers in the marketplace.

Jackson and Roe link their measures of public enforcement resources with various measures of financial outcomes, including "ratios of market capitalization to GDP, trading volumes to GDP, the logarithm of the ratio of the number of listed domestic firms to million of population, and the ratio of annual capital raised through IPOs to GDP." (p. 16). Using a series of regression models (with wealth as a control variable), they report a strong relationship between greater levels of public enforcement and greater financial outcomes, particularly with stock market capitalization and their other measures of financial development (although not with their measures of dispersed ownership). As a measure of private enforcement, Jackson and Roe use two private law indexes developed by LLS (2006): the Disclosure Index and the Liabilities Standards index. They report that even with the addition of private enforcement variables to their regressions, public enforcement remains both statistically and economically significant – if anything, public enforcement is more strongly correlated with market capitalization. Jackson and Roe, while not arguing that private enforcement is unimportant, conclude that their evidence refutes the view of LLS (2006) and others that public enforcement is deficient.

Causality is an issue with Jackson and Roe's analysis.[20] Strong financial markets and more dispersed public ownership of securities may cause the development of strong public enforcement. As an instrument, they use the log of GDP. They support this instrument as follows: "there are economies of scale in the regulatory staffing and regulatory budgets: the larger a nation's economy, fewer regulatory staff members or less regulatory expenditures could do the job as well." (p. 28). One can wonder whether log of GDP truly is exogenous from the

[20] Coffee (2007) also questions the causal relationship between high enforcement levels and securities market size writing: "[I]n a democracy, there is usually competition for public funds. Investment in enforcement rises only after the securities market first convinces the middle class to invest in it. Thin markets create no such political demand because the principal investors are financial institutions, which, even if defrauded, hesitate before demanding new laws, stronger regulation, and more enforcement (which could someday be applied against them)." (p. 298).

level of financial market development. It could be that countries with larger financial markets allow capital to shift to their most efficient use, increasing GDP growth and the overall GDP level at any particular point in time. Therefore, financial market development (the dependent variable) would correlate with log of GDP, diminishing its value as an instrument. Nonetheless, using this instrument, Jackson and Roe report that their public enforcement resource measures remain significantly (and possibly causally) related with capital market development and size.

G. Other Mechanisms

Developing strong investor protections may depend not only on specific laws implementing rights for investors but also on more indirect means. Fauver and Fuerst (2006) develop the notion that other monitors are available to watch incumbent managers and controlling shareholders. Fauver and Feurst focus on employee representation on the supervisory board of German companies. Among other things, they argue that employee representatives bring with them information and expertise, making them powerful monitors of managers, thereby reducing agency costs. At least two possible (and opposite) effects result from employee representatives on the board. First, employees may push for policies that improve employee-welfare at the expense of shareholders, reducing shareholder valuation. Second, employees may increase shareholder value through, among other things, better monitoring of management to reduce private benefits of control. Presumably, employees have an incentive to block private benefits to the extent the expropriation of such benefits leaves a less available to pay employees (and may endanger the long-term viability of the company and thus job security).

As a test of their hypotheses, Fauver and Fuerst (2006) examine all publicly traded German corporations as of 2003 (786 firms). The degree of labor representation on the supervisory board ranged from zero to more than 50% in the sample companies. Fauver and Fuerst use this variation to assess the impact of greater labor representation on the valuation of the firm. Using a logit model, they report that firms with greater labor representation on the board are more likely to pay a dividend (which they take as a sign of reduced insider expropriation). Fauver and Fuerst also report that for firms in more concentrated industries (where the risk of private benefits is greater due to the greater cash flow and lessened competition), greater labor representation correlates with a higher Tobin's q (the dependent variable).[21] More generally, Fauver and Fuerst report that "prudent" (below 50%) employee representation on the board correlates with increased valuation.

Desai, Dyck and Zingales (2007) look at the relationship between corporate taxes and corporate governance. Their central observation is that when managers expropriate private benefits from the corporate treasury, this also reduces corporate tax liabilities (and consequently revenues for the government). From this observation, Desai et al. posit that higher corporate tax rates increase the incentive of managers to expropriate private benefits (by reducing the opportunity cost of not taking from the corporate treasury). On the other hand, they posit that greater enforcement of the tax laws works to reduce the ability of those in control to expropriate private benefits of control and therefore may increase the market values of companies.

[21] Among other things, their logit and OLS models control for asset size, operating income/sales, capital expenditures/sales, leverage, and the presence of a bank representative on the board. A possible endogeneity issue exists with Fauver and Fuerst's results. Firms with a higher Tobin's Q may increase the likelihood that the firm's managers feel confident enough to increase employee representation on the board. To control for endogeneity, Fauver and Fuerst use the German codetermination law's mandatory requirement for employee representation (which varies based on the number of firm employees) as an instrument. Using this instrument, they report similar results.

As a test of their hypotheses, Desai et al. (2007) focus on Russia. They report a case study of Sibneft, a major oil company in Russia. Prior to the election of President Putin, Desai et al. note the large amount of tunneling within Sibneft, in particular through related party transactions. After Putin's election, tax enforcement increased greatly, resulting in a tenfold increase in tax payments from Sibneft. Corresponding with the increased tax enforcement was also a significant increase in shareholder returns. Desai et al. also report on a cross-industry test within Russia during the same time period. They focus on all Russian companies with two classes of stock with differential voting rights. They use the size of the voting premia as an indicator of the level of private benefits of control (e.g., the value of control over simple cash flow rights). They report an average decline of voting premium of 7.8 percentage points (significant at the 5% level) during the 4 month period surrounding the Putin regime change.[22]

IV. Preconditions for Strong Investor Protections

A variety of methods are available to countries seeking to improve their investor protections. Countries can improve their securities disclosure and liability laws, focus on specific acts of expropriation such as financial tunneling; reduce the level of red-tape in their business regulations, employ alternative means of monitoring managers and controlling shareholders, and so on.

One approach would be simply to pick and choose among various potential determinative factors that may lead to greater financial development. However, the best approach for a particular country may vary with country-specific factors. For example, the United States has

[22] Desai et al. also examine the relationship between corporate tax revenues and the control premia for companies as a measure of corporate governance in a cross-country panel study. They also look at the relationship between corporate tax revenues and the LLSV (1998) antidirector rights index, among other variables. They report that countries with worse corporate governance have a lower sensitivity of tax revenues to changes in the tax rate.

long had a vigorous (if somewhat controversial) private class action regime. Recently, other countries, including Korea, have adopted similar private class action regimes on paper. However, at least in Korea, the institutional structure behind a well-functioning class action regime is absent. Unlike the United States, Korea lacks a professional plaintiffs' attorney bar. Moreover, as Choi (2004) discusses, the range of potential targets for class actions in Korea is much smaller than in the United States, resulting in a much-reduced financial incentive for plaintiffs (and their attorneys) to pursue a class action. Not surprisingly, this author is aware of no securities class actions filed in Korea.

Academic studies confirm the importance of determining the precise laws that will work in a specific country context. Berkowitz, Pistor, and Richard (2003) (BPR) conduct a study on the importance of path dependence in laws. They divide LLSV (1998)'s sample of 49 countries into non-transplant countries (including countries that received their law through a transplant but followed an idiosyncratic development such as the United States) and transplant countries. They then categorize their transplant countries along two dimensions: (a) whether the transplant is direct from an origin country or only indirect through another transplant country and (b) whether the transplant country was receptive to the transplant or unreceptive.[23] BPR estimate a series of OLS models with the various LLSV measures for the strength of legality in a particular country as the dependent variables.[24] For the explanatory variables they include dummy variables for the different possible groups stemming from their 2 part categorization of transplant countries (with an origin country as the base case) as well as dummy variables for the country's legal origin

[23] BPR posit that voluntary transplants may be "receptive" to the extent they modify or actively consider what laws to transplant. BPR also posit that even involuntary transplants may be "receptive" to the extent the people in the country are familiar with the origin country's laws – e.g., through migration from the home country as in New Zealand and other countries.

[24] These measures include: (a) the efficiency of the judiciary system, (b) the rule of law, (c) corruption, (d) risk of expropriation, and (e) the risk of contract repudiation.

(with common law as the base case). They report that the coefficients on all the transplant variables except for the direct-receptive transplant dummy variable were negative and significant, consistent with the hypothesis that indirect and unreceptive transplants result in a lower level of legality.

What are the preconditions for a country's regulatory system to commit to protecting investors? Countries may not have the ability to change their legal origin, past status as colonies, or initial endowments or geographical location. However, countries do have the ability to change other factors that may prove even more determinative of long-term financial development and economic growth.

One important and endogenous factor within countries is the internal support among interest groups within the country in favor of investor protections. Internal support increases the probability that formal investor protection laws will work in practice to protect investors. How can a country improve the internal support for investor protections? While there are no easy answers, researchers may wish to explore two possible and related approaches.

A. Interest Groups

Where strong interests groups exist in a country against improved investor protections, the country will face significant barriers in improving the investor environment. Incumbent firms with controlling shareholders that enjoy large private benefits of control (such as the Chaebols in Korea) may resist any regulatory efforts to increase transparency and reduce such private benefits. While improvements in investor protection are not impossible in such circumstances, they will be slower than without such strong interest group opposition.

Academic research supports the importance of the background interest group dynamics of a country. Pagano and Volpin (2005) focus on the question of when and why do countries decide to improve their investor protections. Pagano and Volpin model the political agenda within a country as focused on company and labor law. They posit three types of voters in the country: company, employee, and others (including investors). Company voters are biased toward laws favoring the company; employee voters are biased toward laws favoring labor. The other voters have more dispersed preferences. In a proportional voting system, Pagano and Volpin argue that political parties cater to the preferences of social groups with homogeneous preferences to obtain as many votes as possible. In a majority, winner-take-all, system, Pagano and Volpin argue that political parties instead cater to the preferences of pivotal votes, consisting of less ideologically committed votes. They posit that unlike the company and employee blocks, shareholders are less ideologically committed. Thus in majority election countries, the laws will provide stronger investor protections. Pagano and Volpin present empirical evidence drawn from OECD countries that the more proportional the voting system of a country (as measured from the World Bank Database of Political Institutions), the lower is the level of investor protections (as measured using the LLSV anti-director rights index) and the stronger is the level of employment protections. They also examine the determinants of the level of investor protection using a panel dataset from 1993 to 2001 for 47 of the original 49 LLSV (1998) countries. In the model, they report that when both political and legal origin variables are entered into their model, only proportional voting remains significantly related to the level of investor protection.

One can wonder whether Pagano and Volpin's results are driven by the assumptions of their model. For example, what if the focus is on investor protection laws and the other voters in

their model (including investors) are assumed to care strongly about investor protection. Then one might predict that in a proportional voting system investor protection laws might be stronger. Nonetheless, Pagano and Volpin's study provides an important alternate hypothesis to how countries develop strong (or weak) investor protection that is less dependent on static legal origins than the LLSV work.

Similarly, Rajan and Zingales (2003) provide a political economy theory for financial development. They conjecture that financial and business incumbents in a country oppose financial development because with development typically follows greater competition. The ability of incumbents to block financial development however is lessened as a country's economy increases both cross-border trade and capital flows. They write: "Because of product market competition, these firms will now be much less profitable, while need much more investment. Moreover, competition in financial markets will make long-term relationships, through which the traditional financier could have hoped to recover investments, more difficult. Both factors would combine to make finance more difficult. Difficulty in financing will lead these firms to push for greater transparency and access so that their own access to finance improves." (p. 23).

As proxies for financial development, Rajan and Zingales look at the ratio of deposits to GDP, the fraction of investments funded through equity issues, the total stock market capitalization, and the number of publicly traded domestic companies per million of population. Rajan and Zingales estimate a series of multivariate regression models with their various proxies for financial development as the dependent variable. As an independent variable, they include, alternatively, a measure of openness and an interaction between openness and a measure of the demand for finance (per capita industrialization for their 1913 model and per capita GDP for

their late 1990s model). They also include log of per capita GDP as a control variable. Rajan and Zingales report that the interaction between openness and the demand for finance is positive and significant, indicating that as the demand for finance increases, greater openness correlates with greater financial development.[25] Lastly, Rajan and Zingales look longitudinally at the relationship between financial development and a country's openness to trade. They report that "financial development is positively correlated with trade openness in periods when cross-border capital flows are high, but less so, or not at all, when cross-border capital flows are low. This is consistent with our theory that incumbents are most able to coordinate opposition to financial development when cross-border capital and trade flows ebb but not when they are vibrant." (p. 36).

Further academic research may wish to focus on the relationship between interest groups in a country and financial development. Correspondingly, policy makers may wish to focus on policy levers that may affect interest group dynamics. A country may be unable to change its legal origin or background culture and norms. However, lawmakers are able to affect antitrust, trade, and financial liberalization policies. Through antitrust policy, for example, a country can reduce the power and profits of incumbent firms and controlling shareholders. Once exposed to external capital market discipline, firms may shift from opposing investor protections to supporting such protections to increase the amount investors are willing to pay for the firms securities. Similarly, reducing trade barriers by increasing competition will reduce firm profitability and increase the demand of firms for external capital. Lastly, encouraging foreign

[25] Endogeneity may exist between cross-border trade and capital flows on the one hand and financial development on the other. Greater financial development may cause flows to increase. To address this endogeneity, Rajan and Zingales instrument trade openness with a measure of "natural" openness based on a country's geographical distance with its trading partners. To instrument capital flows, they use the level of world-wide capital flows – "because [as] capital is more mobile, the strategic complementarities in cross-border capital flows are likely to be stronger." (p. 8). With these instruments, they obtain qualitatively similar positive relationship between trade openness x demand for finance and financial development.

investment introduces a new constituency within a country—large, sophisticated foreign investors—who will benefit from (and push for) greater transparency and investor protections.

Policymakers may also consider reducing the level of governmental intervention in the economy. Where private groups operate in a competitive environment with little governmental intervention, the opportunities for rent-seeking from the government are limited. Private interests instead will focus on competing in the marketplace. In contrast, where the government supplants the competitive markets in a country, through subsidies, low interest rate loans to favored parties, government mandated monopolies, and so on, the objective of private groups changes from competing in the marketplace toward capturing part of the rents flowing from the government.

Rent-seeking has two negative effects on investor welfare. First, the availability of government rents will place a premium on private entities that are best able to capture such rents, even if the entities also result in lower transparency and greater expropriation of private benefits of control. Bertain et al. (2002) for example discusses how a heavily regulated economy may distort the value of conglomerate groups to investors. They write: "groups may provide other benefits, which offset the costs imposed by tunneling. To cite on example, they may provide important political contacts, which are quite valuable in a heavily regulated economy." Leuz and Oberholder-Gee (2006) similarly examine the importance of political connections for firms. Leuz and Oberholder-Gee examine a sample of 22 Indonesian firms with publicly traded debt and equity securities in 1997. Using a probit model, the authors report that "foreign securities and close political connections are substitutes. Firms that were close to the Suharto regime were significantly less likely to have publicly traded securities abroad. These findings hold after controlling for firm size, financial leverage, profitability, and industry characteristics." (p.

413).[26] Moreover, Leuz and Obserholder-Gee observe that: "Firms with political ties dislike the transparency and scrutiny that come with publicly traded securities." (p. 436).

Second, where government intervention is the norm, government officials may seek to increase the level of intervention to capture some of these rents for themselves—at the expense of investor and societal welfare. Shleifer and Vishny (1993), for example, observe that corruption levels vary in countries. They posit that countries with greater political competition have lower levels of corruption. They write: "Countries with more political competition have stronger public pressure against corruption—through laws, democratic elections, and even the independent press—and so are more likely to use government organizations that contain rather than maximize corruption proceeds." (p. 610). Djankov, McLiesh, Nenova, and Shleifer (2003a) report a positive correlation between greater government ownership of media and lower political and economic rights, lower freedom of the press, and worse education and health outcomes.

B. Regulatory Choice

One important means of decreasing the rents available from governmental intervention in an economy and increasing the private interest group support for strong investor protections is to introduce a degree of regulatory choice. Several regulatory regimes allow at least some choice for market participants. In the United States, for example, corporations enjoy choice in the state corporate laws that govern among other things the duties of the board of directors toward the shareholders. Many companies also have choice in where to list their securities. Through cross-

[26] It's possible that endogeneity may exist between a firm's financing choises and domestic opportunities. To control for this endogeneity, the authors use firm age and the ethnicity of the firm's president director as instruments for the degree of political connections and re-estimate their model. Using these instruments, they obtain qualitatively similar results.

listing, companies may piggy-back on the protections provided through other country's securities regime.

In recent years, countries have moved to provide a degree of choice within their stock exchanges. The now defunct Neuer Markt in Germany, a subsidiary of the Deutsche Boerse, adopted disclosure and accounting standards on par with US standards. Over its initial three-year period, these stringent forms of investor protection allowed the Neuer Markt to grow from 2 to 302 listed companies (including some non-domestic companies). The Neuer Markt eventually closed in 2003 after technology stocks fell precipitously in the early 2000s and a series of scandals affected Neuer Markt listed companies.[27] While the Neuer Markt eventually failed, its initial success indicates that separate and voluntary high corporate governance sections of a securities exchange are feasible. More recently, the Bovespa in Brazil established the Novo Mercado, providing for strong minority investor protection and targeted at small to medium capitalization issuers. The Novo Mercado made the protection of minority investors and US GAAP or IAS accounting standards part of its listing requirements. Firms listed on the Novo Mercado, for example, must have at least five members on the board of directors, 20% of whom must be independent. Firms must provide minority investors tag-along rights for change in control transactions (at the same terms as given majority shareholders).[28] Unlike the Neuer Markt, however, the Novo Mercado was not initially successful, with only a handful of listings. Recently, the number of listed companies on the Novo Mercado has grown; to date, 100 companies were listed on the Novo Mercado.[29]

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[27] See Neal E. Boudette, Neuer Markt's Battered Image May Be Poised for a Recovery, Wall St. J., Mar. 13, 2002, at C11.

[28] See http://www.bovespa.com.br/Companies/NovoMercadoSpecial/NovoMercadoi.asp.

[29] For the list of listed companies on the Novo Mercado see http://www.bovespa.com.br/Home/Redirect.asp?end=/Companies/ExecutaAcaoConsultaNivelGovernanca.asp?nivel=nm&idioma=i

Providing for choice in regulatory regime (particularly the provision of a high corporate governance choice), has several advantages over purely mandatory regulatory reform (as discussed in Choi and Kim (2002)). First, a system based on choice provides important feedback for regulators about what investor protections work in the specific country. Feedback is important for regulators. Without market feedback, regulators are left with imperfect cross-country studies to determine what regulations work to protect investors and what do not. Rather than rely on imperfect academic research, regulators may look to the market for information when choice exists. Regulatory choice focuses regulators on producing investor protections that investors' desire. Those regulators that fail to provide what investors want will see a flight of both capital and then listed companies. Avoiding regulations that do not work (such as arguably the Sarbanes Oxley Act) is just as important as adopting regulations that do work. Regulators that impose too high levels of corporate governance for example, will find that the numbers of issuers and investors in a voluntary market (such as the Novo Mercado) will stagnant. Regulators may then adjust the level of regulation to better meet the needs of the market.

Second, regulatory competition lessens the opposition of private interest groups opposed to strong investor protections. If domestic incumbents that do not wish to improve investor protections are able to remain with their current regime, they will apply less opposition to newer companies that desire stronger investor protections to raise capital at a better price from investors.

Lastly, over time, the presence of a high investor protection market will have spillover effects on the low investor protection markets. Government regulators will become accustomed to enforcing strong investor protection laws. Those working in business will become accustomed to focusing on shareholder value and providing transparency. These spillover effects will eventually affect even those companies that do not opt into a strong investor

protection regime. Regulatory competition also limits the ability of less-well-meaning regulators to extract rents from the economy and also limits rent-seeking behavior on the part of private interest groups. Regulators that attempt to intervene too greatly will face the prospect that regulated parties may simply shift to the competing regulator. Regulators that grant political favors in the form of lower investor protection for controlling shareholders will face pressure from the competing regulator. The high market valuations and financial performance of companies in the competing market will provide transparency to the value-decreasing regulations employed by regulators who seek to cater only to the interests of controlling shareholders. Investors that see the contrast will place pressure on the value-decreasing regulator to improve their regulations.

Aside from the examples of the Neuer Markt and the Novo Mercado, research into regulatory choice within the United States, while mixed, support the view that choice can improve the incentives of regulators to provide investor protections that investors find value-increasing. Romano (1985) finds a positive market reaction for reincorporations into Delaware (even for antitakeover motivated reincorporations), but statistically significant only for merger and acquisition-related reincorporations. Romano concludes that firms actively seek to reincorporate into Delaware and that Delaware is responsive to the needs of such firms. Daines (2001) reports that Delaware firms have a significantly higher mean Tobin's q than firms located outside of Delaware. Daines hypothesizes that one reason for the heightened valuation of firms incorporating in Delaware experience is the relatively permissive approach Delaware takes toward takeovers. Daines provides evidence that firms that incorporate in Delaware are significantly more likely to receive at least one takeover bid (a 20% likelihood compared with a 14% likelihood for non-Delaware firms).

The evidence is not all supportive of choice. Bebchuk and Cohen (2001) present more pessimistic evidence on the value of state corporate law competition (particularly for legal provisions—such as antitakeover statutes—directly related to the ability of managers to engage in opportunism). Bebchuk and Cohen focus on the competition for corporate charters among states other than Delaware, using a data set of 8,556 publicly-traded companies with their headquarters and incorporation inside the U.S. They report that in addition to Delaware, only Maryland and Nevada have a significant net inflow of companies. Looking at the patterns of incorporations, they report a substantial "home" preference: a large fraction of corporations simply incorporate in the state in which they are located. Bebchuk and Cohen report that the (greater) presence of antitakeover statutes is an important explanatory variable in the degree with which a state enjoys a home state preference and is also able to attract out-of-state incorporations.

Looking outside the United States, Pistor and Xu (2005) examine how transition economies can "jump start" their stock markets. They observe that stock markets in transition economies face a crisis of confidence with investors. Investors worry about the lack of effective corporate governance and are at a large informational disadvantage relative to corporate insiders. Investors may also worry about a lack of enforcement of formal legal protections. Despite these problems, Pistor and Xu suggest that China's stock performed did relatively well compared to other transition economics (particularly when measured by the ability of firms to raise capital) through the use of administrative governance as a substitute for formal legal governance protections for investors. Under the administrative quote system, China allocated a fixed number of shares of IPO companies that specific regions in China could bring to the market. Each region was placed in competition with other regions, competing in part on the aftermarket performance of the companies that the region brought forward for IPO (in order to obtain higher quotas in the

future among other incentives). Officials from better performing regions also had a higher likelihood of promotion compared to officials from other regions. The quota system both reduced information problems facing investors as well as placed incentives on local bureaucrats to select viable IPO companies to bring forth to the market. While weaknesses exist with the quote system in China, the systems initial success provides evidence that competition among regulators may provide an alternative source of investor protection when formal legal rules and enforcement are weak.

Evidence exists that when given a choice, a substantial number of companies will opt for higher levels of investor protection. Reese and Weisbach (2002) focus on the decision of non-U.S. firms to list their securities on exchanges within the United States and NASDAQ, examining a sample of 1942 non-U.S. firms trading inside the U.S. compiled from a list of American depositary receipts (ADR) (excluding unsponsored ADRs among others). Reese and Weisbach report that firms from a French civil law tradition engage in a significantly higher proportion of cross-listing into the United States compared with English common law countries.[30] Conditional on cross-listing into the United States, firms from a French civil law tradition are more likely to list on NASDAQ or a securities exchange (termed "organized exchanges")—subjecting themselves to a higher degree of U.S. securities regulation—than on the OTC or through an offering pursuant to Rule 144A (for resale in the PORTAL market). They also report that lower levels of LLSV (1998)'s antidirector rights measure of investor protection also correlate with an increased probability of listing with an organized exchange.

Reese and Weisbach also examine the equity offerings that non-U.S. firms conduct after listing inside the United States. As a benchmark, they compare post-listing equity offerings

[30] Reese and Weisbach relate that 10.52% of the publicly-traded companies from French Civil law countries cross-list into the U.S. while only 6.66% of the publicly-traded companies from English Common law countries do so (significant at the 1% confidence level). See id.

(measured for the two years after the listing) against pre-listing equity offerings (measured for the two years prior to the listing). They report a large and statistically significant increase in equity offerings post-listing generally for all firms and in particular for firms that list on an organized exchange inside the U.S. Firms cross-listed on the OTC or that engaged in a Rule 144A offering, in contrast, did not experience an increase in equity offerings. Reese and Weisbach point to this difference as consistent with the hypothesis that firms list on an organized exchange to bond their quality for investors (in anticipation of a subsequent equity offering). They also report that firms that cross-list in the U.S. from French civil law countries tend to raise more equity post-listing outside the U.S. than firms from English common law countries.[31]

In contrast, Siegel (2005) examines whether companies benefit from piggy-backing on the legal regime of another country through cross-listing of equity securities. He focuses in particular on the ability of firms from countries with weak legal institutions to piggy-back through a listing of equities in New York that exposes the firm to U.S. securities laws, using Mexican firms for his empirical test. Siegel distinguished between Level I and IV (Rule 144A) ADRs that do not require compliance with the U.S. periodic disclosure with Level II and III ADR facilities (that do require periodic disclosures) prior to 1994. Siegel estimated a probit model with the dependent variable of whether insiders at the firm engaged in asset taking (including embezzlement, fraud, theft). His primarily independent variable of interest is whether

[31] Evangelos and Weisbach (2004) survey the empirical evidence on the value of cross listing into the U.S. Through cross-listing, a firm can commit to a low level of private benefits expropriation from minority shareholders. Not all firms will wish to bond. But firms with good investment opportunities that outweigh the loss of private benefits to the controlling shareholders may value the ability to bond themselves to strong investor protections to reduce their cost of capital (see Coffee (1999, 2002)). They report that the evidence shows that level of private benefits varies widely across countries: "for the 22 emerging market countries, the average private benefit level is 18.1%, while for the 16 developed market countries, the average level is 3.8%." (p. 224-226). They report from their survey that "the evidence provides a compelling case that the desire to protect shareholders' rights so as to facilitate access to equity markets is one of a number of reasons why firms choose to cross-list their stocks in the United States." (p. 217).

the Mexican firm had a U.S. Level I/IV or II/III ADR.[32] He reports that firms with a Level II/III ADR results in a 37.4% increased likelihood of insider asset taking. Cross-listing in the U.S. prior to 1994, if anything, correlates with an increased risk of asset taking during the 1994 to 1995 downturn.

Siegel also provides evidence that the SEC and minority shareholders of the firm have not frequently enforced the securities laws against cross-listed foreign firms. He examined whether the SEC took action against any of the firms from 1995 to 2002. Siegel reports that a LEXIS search of U.S. federal and state court cases found no cases involving a Mexican firm charged by the U.S. government for wrongdoing under the securities laws. More generally, Siegel searched all SEC litigation releases and found that the SEC has taken few enforcement actions against cross-listed foreign firms from 1995-2002. He also interviewed 116 plaintiffs' attorneys in 2002 to identify any other SEC enforcement actions. During the 1995-2002 period, the SEC took action against only 13 cross-listed foreign firms (none of which came from Mexico). Where the SEC did pursue an enforcement action, it was not always successful. Siegel concludes: "A key finding of this study is also that the SEC has not been able and/or willing to be the world's governance enforcement agency. The commission does not maintain foreign offices, and, instead, relies on the case-by-case cooperation of foreign law enforcement agencies. Some foreign regulatory agencies are simply incapable or unwilling to cooperate." (p. 349). Siegel also found only one private case involving a Mexican firm. The cases resulted in a $9.25 million settlement. Despite the settlement, the Mexican insiders looted the firm again after the settlement. Cross-listing nonetheless is not worthless. Siegel reports that firms that cross-listed

[32] As control variables, Siegel includes a measure of political connectedness, the presence of a significant foreign ownership block of equity (more than 10%), and measures for firm quality, reputation, and growth opportunities prior to 1994. Siegel also includes controls for a firm's financial condition, size, sources of finance, and export orientation.

and maintained a strong reputation had better long-term access to outside finance—such firms had a higher incidence of public debt and equity capital raisings from 1995 to 1999.

Future research should focus on the incentives of companies to select voluntarily higher levels of investor protection as a means of increasing firm valuation. Researchers and policymakers may also wish to examine how to generate greater amounts of choice within a country—either through greater choice in the domestic capital markets (such as the Novo Mercado example in Brazil) or facilitation of cross-listing to higher investor protection regimes (such as the United States capital markets).

Conclusion

The law matters. If nothing else, the law and finance literature reinforces an intuitive but nonetheless important point: providing strong investor protections is important to get investors to part with their money and to pay more for company securities. Investors without adequate protections will either eschew investments or demand high discounts upfront to compensate for the prospective losses from managerial or controlling shareholder opportunism.

The LLSV line of papers provides a specific view of what law matters. LLSV originally focused on antidirector rights and common versus civil law origin. However, LLSV's original antidirector rights contained coding errors. It is also unclear why the specific components of the antidirector rights index were chosen – other factors are arguably more important to protecting investor interests (such as the level of securities regulatory protection of investors). Causality concerns surround the common law versus civil law distinction – which holds true only after World War II and may, as Roe (2006) argues, reflect more the lingering effects of World War II rather than anything inherent in common law versus civil law countries.

The LLSV line of papers is not the only evidence that the law matters. Companies (at least prior to the Sarbanes-Oxley Act) routinely chose to issue securities in the U.S. in part to obtain the benefits of a higher regulatory regime. Similarly, companies in countries with weaker investor protections faced large discounts for their securities prices. Perhaps the law matters – just not the specific laws on which LLSV focus. Indeed, attempts have been made to reconstruct new indices, such as Djankov et al. (2005)'s self-dealing index.

Rather than attempt to discern the precise elements of the law that matters—which may vary based on country-specific and institution-specific factors—this paper instead asks how countries may structure their law-making institutions to orient themselves toward providing investor protections. At least two avenues of reform are available to a country interesting in restructuring their institutions toward investor protection. First, countries may seek to affect their internal interest group dynamics. Reducing the power of domestic conglomerates, opening up a country to more trade flow and outside financial investment are all methods of increasing the constituencies within a country in favor of stronger investor protections. Second, countries may affect the incentives of their regulators directly. Regulators in a monopoly position may choose to enjoy their monopoly, extracting rents from shareholders and encouraging rent-seeking behavior by firms. Regulators facing some degree of competition may respond with greater attentiveness to investor needs. Providing regulatory choices for issuers and investors may also lessen the opposition of private interest groups (such as controlling shareholders) against reform; only those issuers that desire stronger protections may opt for a high investor protection choice.

Simply transplanting laws from one country to another often does not work. Achieving internal support for investor protections is an important factor in increasing the receptiveness of a country to new laws to protect investors, increasing the likelihood of effective enforcement and

greater financial development. Once committed to investor protection, policymakers within countries will have the information and expertise to determine what aspects of the law are best suited to protect investor in their own country-specific situation.

References

Acemoglu, Daron, Simon Johnson, and James A. Robinson, The Colonial Origins of Comparative Development: An Empirical Investigation, 91 American Economic Review 1369-1401 (2001).

Acemoglu, Daron and Simon Johnson, Unbundling Institutions, 113 Journal of Political Economy 949-995 (2005)

Atanasov, Vladimir, Bernard Black, Conrad S. Ciccotello, Stanley B. Gyoshev, How Does Law Affect Finance? An Examination of Financial Tunneling in an Emerging Market (Working Paper 2007)

Lucian Bebchuk, Alma Cohen, and Allen Ferrell, What Matters in Corporate Governance? (Working Paper 2004)

Benos, Evangelos and Michael S. Weisbach, Private Benefits and Cross-Listings in the United States. Emerging Markets Review 5: 217-240 (2004).

Bae, Kee-Hong, Jun-Koo Kang, and Jin-Mo Kim, Tunneling or Value Added? Evidence from Mergers by Korean Business Group, 57 Journal of Finance 2695-2740 (2002).

Jae-Seung Baek, Jun-Koo Kang, Inmoo Lee, Business Groups and Tunneling: Evidence from Private Securities Offering by Korean Chaebols, 61 Journal of Finance 2415-2449 (2006)

Bebchuk, Lucian Ayre and Alma Cohen, Firms' Decisions Where to Incorporate (working paper, 2001) (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=296492).

Beck, Thorsten, Asli Demirguc-Kunt, and Ross Levine, Law, Endowments, and Finance, 70 Journal of Financial Economics 137-181 (2003a).

Beck, Thorsten, Asli Demirguc-Kunt, and Ross Levine, Law and finance: why does legal origin matter?, 31 Journal of Comparative Economics 653-675 (2003b).

Beck, Thorston, Asli Demirguc-Kunt, and Ross Levine, Law and Firm's Access to Finance, 7 American Law and Economics Review 211-252 (2005).

Daniel Berkowitz, Katharina Pistor, and Jean-Francois Richard, Economic Development, Legality, and the Transplant Effect, European Economic Review 47: 165-195 (2003).

Bertrand, Marianne, Paras Mehta, and Sendhil Mullainathan, Ferreting out Tunneling: An Application to Indian Business Groups, 117 Quarterly Journal of Economics 121-148 (2002).

Utpal Bhattacharya and Hazem Daouk, The World Price of Insider Trading, 57 Journal of Finance 75-108 (2002).

Bernard Black, Does Corporate Governance Matter? A Crude Test Using Russian Data, 149 U. Penn. L. Rev. 2131 (2001).

Black, Bernard S., Hasang Jang, and Woochan Kim. 2006. Does Corporate Governance Predict Firms' Market Values? Evidence from Korea, Journal of Law, Economics, & Organization 22: 366-413

Botero, Juan C., Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer, The Regulation of Labor, 119 Quarterly Journal of Economics 1339-1382 (2004)

Brian R. Cheffins, Does Law Matter? The Separation of Ownership and Control in the United Kingdom, 30 Journal of Legal Studies 459 (2001).

Yan-Leung Cheung, P. Raghavendra Rau, and Aris Stouraitis, Tunneling, Propping, and Expropriation: Evidence from Connected Party Transactions in Hong Kong, 82 Journal of Financial Economics 343-386 (2006).

John C. Coffee, Jr., Law and the Market: The Impact of Enforcement, 156 U. Pa. L. Rev. 229 (2007)

John C. Coffee, Jr., The Rise of Dispersed Ownership: The Roles of Law and the State in the Separation of Ownership and Control, 111 Yale L.J. 1 (2001)

John C. Coffee, Jr., Privatization and Corporate Governance: The Lessons from Securities Market Failure, 25 J. Corp. L. 1 (1999)

Choi, Stephen J., and Kon Sik Kim, Establishing a New Stock Market for Shareholder Value Oriented Firms in Korea, 3 Chicago Journal of International Law 277 (2002) (with Kon Sik Kim)

Choi, Stephen J., Evidence on Securities Class Actions, 57 Vand. L. Rev. 1465 (2004)

Choi, Stephen J., Jill E. Fisch, Adam C. Pritchard, Attorneys as Arbitrators (Working Paper 2008).

Robert Daines, Does Delaware Law Improve Firm Value?, forthcoming Journal of Financial Economics 2001.

Mihir A. Desai, Alexander Dyck, and Luigi Zingales, Theft and Taxes, 84 J. Fin Econ. 591 (2007).

Djankov, Simeon, Caralee McLiesh, Tatiana Nenova, and Andrei Shleifer, Who Owns the Media, 46 Journal of Law and Economics 341-81 (2003a)

Djankov, Simeon, Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer, Courts, 118 Quarterly Journal of Economics 453-517 (2003b).

Djankov, Simeon, Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer, The Regulation of Entry, 117 Quarterly Journal of Economics 1-37 (2002).

Djankov, Simeon, Caralee McLiesh, and Rita Maria Ramalho. 2006. Regulation and Growth. Economics Letters 92: 395-401.

Djankov, Simeon, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer, The Law and Economics of Self-Dealing (Working Paper 2005).

Djankov, Simeon, Caralee McLiesh, and Andrei Shleifer, Private Credit in 129 Countries, 84 Journal of Financial Economics 299-329 (2007).

Djankov, Simeon, Tim Ganser, Caralee McLiesh, Rita Maria Ramalho, and Andrei Shleifer, The Effect of Corporate Taxes on Investment and Entrepreunship (Working Paper 2008)

Durnev and Kim, 2005 Journal of Finance 60: 1461-1493

Larry Fauver and Michael E. Fuerst, Does Good Corporate Governance Include Employee Representation? Evidence from German Corporate Boards, 82 Journal of Financial Economics 673-710 (2006).

Eric Friedman, Simon Johnson, and Todd Mitton, Propping and Tunneling, 31 Journal of Comparative Economics 732-750 (2003).

Glaeser, Edward, Simon Johnson, Andrei Shleifer. 2001. Coase Versus the Coasians, Quarterly Journal of Economics 853-899

Glaeser and Shleifer, Legal Origins, 117 Q. J. Econ. 1193-1229 (2002).

Gompers, Ishii, and Metrick (2003)

Hail, Luzi, and Christian Leuz, International Differences in the Cost of Equity Capital: Do Legal Institutions and Securities Regulation Matter? 44 J. Accounting Res. 485 (June 2006).

Jackson, Howell E. and Mark J. Roe, Public Enforcement of Securities Laws: Preliminary Evidence (Working Paper, 2007)

Jackson, Howell E. 2007. Variation in the Intensity of Financial Regulation: Preliminary Evidence and Potential Implications. Yale Journal on Regulation 24: 253-290.

Johnson, Simon, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer, Tunneling, 90 American Economic Review Papers and Proceedings 22-27 (2000).

Johnson, Simon, Peter Boone, Alasdair Breach, and Eric Friedman, Corporate Governance in the Asian Financial Crisis, 58 J. Fin. Econ. 141 (2000).

Johnson, Simon, John McMillan, and Christopher Woodruff, Property Rights and Finance, 92 American Economic Review 1335 - 1356 (2002)

King, Robert G. and Ross Levine, Finance and Growth: Schumpeter Might Be Right, 108 Q. J. Econ. 717 (1993).

Klerman, Daniel and Paul G. Mahoney, Legal Origin? (Working Paper 2007).

Klerman, Daniel M. and Paul G. Mahoney, The Value of Judicial Independence: Evidence from Eighteenth Century England, 7 American Law and Economics Review 1-27 (2005).

La Porta, Rafael, Florencio Lopez-de-Silanes, and Andrei Shleifer, Government Ownership of Bank, 57 Journal of Finance 265-301 (2005)

La Porta, Rafael, Florencio Lopez-De-Silanes, Cristian Pop-Eleches, Andrei Shleifer, Judicial Checks and Balances, 112 Journal of Political Economy 445-470 (2004).

La Porta, Rafael, Florencio Lopez-De-Silanes, Cristian Pop-Eleches, Andrei Shleifer, The Guarantees of Freedom (NBER Working Paper 2002).

La Porta, Rafael, Florencio Lopez-De-Silanes, Andrei Shleifer. 2006. What Works in Securities Laws? Journal of Finance 61: 1-32.

La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert Vishny, Investor Protection and Corporate Valuation, 58 Journal of Finance 1147-1170 (2002).

La Porta, Rafael, Florencio Lopez-De-Silanes, Andrei Shleifer, Robert W. Vishny, Agency Problems and Dividend Policies around the World, 55 Journal of Finance 1 (2000).

La Porta, Rafael, Florencio Lopez-De-Silanes, and Andrei Shleifer, Corporate Ownership Around the World, 65, J. Fin. 471 (1999).

La Porta, Rafael, Florencio Lopez-de-Silanes, and Andrei Shleifer, Robert W. Vishny, Law and Finance, 106 J. Pol. Econ. 1113, 1117 (1998).

La Porta, Rafael, Florencio Lopez-De-Silanes, and Andrei Shleifer, Legal Determinants of External Finance, 52 J. Fin. 1131 (1997).

Christian Leuz and Felix Oberholzer-Gee, Political Relationships, Global Financing, and Corporate Transparency: Evidence from Indonesia, 81 Journal of Financial Economics 411-439 (2006).

Amir N. Licht, Chanan Goldschmidt, and Shalom H. Schwartz, Culture, Law, and Corporate Governance, International Review of Law and Economics 25: 229-255 (2005).

Mahoney, Paul G. 2001. The Common Law and Economic Growth: Hayek Might Be Right, Journal of Legal Studies 30: 503-25.

Macro Pagano and Paolo F. Volpin, The Political Economy of Corporate Governance, American Economic Review 1006-1030 (Sept. 2005)

Mulligan, Casey, and Andrei Shleifer, Conscription as Regulation, 7 American Law and Economics Review 85-111 (2005a)

Mulligan, Casey, and Andrei Shleifer, The Extent of the Market and the Supply of Regulation, 120 Quarterly Journal of Economics 1445-73 (2005b)

Katharina Pistor, Martin Raiser, and Stanislaw Gelfer, Law and Finance in Transition Economies (working paper, 2000) (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=214648).

Pistor, Katharina, Chenggang Xu, Governing Stock Markets in Transition Economics: Lessons From China, 7 American Law and Economics Review 184-210 (2005)

Raghuram G. Rajan and Luigi Zingales, The Great Reversals: The Politics of Financial Development in the Twentieth Century, 69 Journal of Financial Economics 5-50 (2003)

Raghuram G. Rajan and Luigi Zingales, Financial Dependence and Growth, 88 Am. Econ. Rev. 559 (1998).

William A. Reese, Jr. and Michael S. Weisbach, Protection of Minority Shareholder Interests, Cross-listings in the United States, and Subsequent Equity Offerings, Journal of Financial Economics 66: 65-104 (2002).

Roe, Mark J. 2006. Legal Origins, Politics, and Modern Stock Markets. Harvard Law Review 120: 460-527.

Roberta Romano, Law as Product: Some Pieces of the Incorporation Puzzle, 1 J. L. Econ. & Org. 225 (1985).

Shleifer, Andrei, and Robert W. Vishny, Corruption, Quarterly Journal of Economics 599-617 (1993)

Siegel, Jordan. 2005. Can Foreign Firms Bond Themselves Effectively by Renting U.S. Securities Laws, Journal of Financial Economics 75: 319-359.

Holger Spamann, 'Law and Finance' Revisited, Working Paper 2008 (available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1095526)

Voigt, Stefan. 2008. Are International Merchants Stupid? Their Choice of Law Sheds Doubt on the Legal Origin Theory. Journal of Empirical Legal Studies 5:1-20 (2008)

Mark West, Legal Determinants of World Cup Success (Working Paper 2002) (available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=318940).

Jeffrey Wurgler, Financial Markets and the Allocation of Capital, 58 J. Fin. Econ. 187 (2000).