Law, Finance and Path Dependence: Developing Strong Securities Markets

Stephen J. Choi†

I. Introduction

Investors part with their money in the expectation that they will receive even more money from their investments. The amount of expected return investors require depends on the risk they face from their investments. Investments in securities present particularly acute risks for investors.[1] As intangible assets that provide value primarily through voting rights as well as rights to cashflows (including dividends and assets in liquidation), securities pose an asymmetrical information problem for investors. Those selling the securities (the issuer and the entrepreneurs behind the issuer) enjoy much greater information on the true value of the securities compared with outside potential investors. In addition, where an investor takes the role of a minority investor, the investor runs the risk that managers or a controlling shareholder may expropriate private benefits of control at the expense of the minority investors. Rational investors will then demand a larger discount for the added risk they bear from securities investments.

The legal system may play a role in reducing the risks facing minority investors. Through fiduciary duties and (typically optional) cumulative voting mechanisms,[2] among other provisions, corporate law works to protect the interests of minority investors against private benefit expropriation. Disclosures on a company's business and financials, handled under the rubric of securities regulation within the United States, may also reduce the risks from informational

† Visiting Professor, Harvard Law School (2002); Professor, UC Berkeley (Boalt Hall School of Law). Special thanks to Un Kyung Park. Thanks for helpful comments from Andrew Guzman, Kon Sik Kim, Charles Silver, and Roberta Romano. **[SEND COMMENTS TO SCHOI@LAW.BERKELEY.EDU]**

[1] Even among securities the risk may vary. An investment in U.S. Treasury bonds, for example, presents investors a significantly lower risk compared with an investment in the newest internet stocks and investors that invest in U.S. Treasuries receive a correspondingly reduced expected return.

[2] For an argument that cumulative voting provides a valuable mechanism for institutions seeking to coordinate in monitoring and disciplining managers in large publicly-held corporations see Jeffrey N. Gordon, Institutions as Relational Investors: A New Look at Cumulative Voting, 94 Colum. L. Rev. 124 (1994).

asymmetries that face investors.[3] Once risks are reduced, investors gain confidence in their investments and will be willing to pay more for securities, all other things being equal. Issuers, in turn, are able to obtain larger proceeds from securities offerings and generate a more liquid secondary market for their securities. A strong case can be made, therefore, that law matters.[4]

But the fact that law matters is only a starting point. Two questions arise immediately. First, how does a country actually develop "good" law and accompanying institutions and norms to support this law. The fact that law matters does not mean that all legal intervention in fact helps investors. History is rife with examples of well-meaning (and perhaps not so-well-meaning) governmental interventions within the financial markets that worked ultimately to the detriment of investors.[5] Some scholars have developed a laundry list of applicable good law, institutions, and culture that are "essential" for a strong securities market.[6] Even if one were to agree that the lists are in fact complete and accurate, how can we get a country to adopt such a list in more than just name (if at that)?

Second, even if we assume that law matters (and can provide investors protections that private contract cannot), the question remains whether law should be made mandatory. Precisely because the issuer gains as the risks facing investors face are reduced, the issuer and its entrepreneurs already have incentives to select protections that reduce such risks in a cost effective

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[3] For a discussion of the federal securities disclosure-related regime see James D. Cox, Robert W. Hillman, Donald C. Langevoort, Securities Regulation: Cases and Materials (2d ed. 1997).

[4] See John C. Coffee, Jr., Privatization and Corporate Governance: The Lessons from Securities Market Failure, 25 J. Corp. L. 1, 1 (1999) (coining the term "law matters"). But see Bernard S. Black, Is Corporate Law Trivial?: A Political and Economic Analysis, 84 Nw. U.L. Rev. 542 (1990) (putting forth the hypothesis that state corporate law is trivial).

[5] See infra notes 237-239 and accompanying text (summarizing Jack Coffee's observations on government capital market interventions in Germany and France during the 19th century).

[6] See Bernard S. Black, The Legal and Institutional Preconditions for Strong Securities Markets, 48 UCLA L. Rev. 781, 790-803, 807-15 (2001) (noting that the "list reflects my personal judgment, based on experience in corporate law and capital markets reform in a variety of countries."). See also Curtis Milhaupt, Privatization and Corporate Governance In a Unified Korea, 26 J. Corp. L. 199, 216 (2001) (advocating that Korea implement reforms that lead to "effectively regulated capital markets, a highly developed information infrastructure, courts with sufficient skill and political insulation to enforce rules against self-dealing and fraudulent conduct by dominant shareholders, and efficient formal insolvency mechanisms.").

manner.[7] The government may have an advantage in providing for enforcement, investigation, and legal certainty – but if such advantages benefit investors then issuers will opt into such protections.[8] Responses, of course, are possible. Issuers may ignore third party external benefits from regulation.[9] Managers may abuse their authority well after a public offering to shift the legal regime applicable to the corporation toward their own opportunistic advantage.[10] The responses are not all one-sided, however. Mandatory government intervention can often be slow, mistake-prone, and subject to public choice pressures from the opportunistic desires of government officials.[11]

The Article in Part II surveys empirical evidence on whether in fact the law does matter for investors. Part III then discusses the problem of how to generate legal regimes where the law in fact works in the best interests of investors. As the Article explains, the question of whether to allow companies freedom of choice among legal regimes and the question of how to obtain good legal regimes are related. In particular, the Article puts forth the view that constant competitive pressures—whether through product, financial, or regulatory competition—provide at least as an attractive policy approach as more mandatory regulatory harmonization proposals.

II. The Law Does Matter

[7] See, e.g., Michael C. Jensen & William H. Meckling, Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure, 3 J. Fin. Econ. 305, 305-07 (1976).

[8] Indeed, one could imagine a regime under which firms pick and choose their desired regulatory protections. See, e.g., Stephen J. Choi, Market Lessons for Gatekeepers, 92 Nw. Univ. L. Rev. 916, 951-58 (1998).

[9] Merritt Fox, for example, contends that more accurate securities prices (resulting from government mandated disclosures)—by assisting the movement of resources to their highest value use—benefit other factors of production including labor. See Merritt B. Fox, Securities Disclosure in a Globalizing Market: Who Should Regulate Whom, 95 Mich. L. Rev. 2498, 2562 – 2569 (1997).

[10] A well-known agency problem exists between managers and dispersed shareholders of public corporations. See, e.g., ADOLF A. BERLE, JR. & GARDINER C. MEANS, THE MODERN CORPORATION AND PRIVATE PROPERTY 6 (1933); Michael C. Jensen & William H. Meckling, Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure, 3 J. Fin. Econ. 305, 308 - 10 (1976). Managerial opportunism may become particularly a problem where managers may force firms to engage in a "mid-stream" shift. See Jeffrey N. Gordon, The Mandatory Structure of Corporate Law, 89 Colum. L. Rev. 1549, 1573 (1989).

[11] See Jonathan R. Macey, Administrative Agency Obsolescence and Interest Group Formation: A Case Study of the SEC at Sixty, 15 Cardozo L. Rev. 909, 924 (1994) (providing a public choice explanation for the continued existence of the SEC despite its obsolescence). For a refutation of the argument that mandatory regulation is necessary in the area of international securities regulation see Stephen J. Choi, Assessing Regulatory Responses to Securities Market Globalization, 2 Theoretical Inquiries L. 613 (2001).

The term "law" is both wide ranging and ambiguous in its scope. Certain functions of one area of the law in a particular country may be handled through a completely different area of the law in another country (or through extra-legal mechanisms). In the United States, we can point to both state corporate law and the federal securities laws as the two primary sources of legal protections for investors. Working together, the two regimes provide protection against both information asymmetries and outright opportunism on the part of managers and controlling shareholders. This section surveys the empirical evidence on the importance of the law in protecting minority public investors. Section A discusses evidence that managers may enjoy large private benefits of control at the expense of investors. Section B then relates evidence from within the United States on the value of legal protections in controlling these private benefits. Section C reports on evidence based on cross-country comparisons.

A. Existence of Private Benefits of Control

Managers of large publicly-held corporations face a well-known agency cost problem. To the extent managers own only a small fraction of the outstanding shares, they will not capture the full benefit from maximizing the value of the firm.[12] Instead, managers may gain more from shirking, expanding into new industries in an effort to build an empire, and paying themselves large salaries – all at the expense of shareholder welfare. Controlling shareholders, similarly, may take actions designed to increase their own wealth at the expense of minority public shareholders. Several studies in turn provide evidence on the existence of private benefits of control.

Lease, McConnell, and Mikkelson (1983) (LLM) provide a test of the hypothesis that those in control of a public corporation are able to expropriate private benefits.[13] They construct a data

[12] See supra note 10 (citing the agency cost literature).

[13] See Ronald C. Lease, John J. McConnell, Wayne H. Mikkelson, The Market Value of Control in Publicly-Traded Corporations,11 Journal of Financial Economics 439 (1983).

set of 30 corporations in the U.S. that had at least two classes of publicly-traded common stock sometime during the period from 1940 to 1978.[14] LLM select only firms where the two classes differ only in voting rights (and thus have identical rights to cash flows of the firm).[15] LLM divide their set of firms into three categories: (a) firms with dual classes of common (and no preferred) where one class has all the voting power to elect the board of directors; (b) firms with dual classes of common (and no preferred) where both classes have some voting power to elect the board (but one class has more than the other); (c) firms with dual classes of common and an additional class of preferred with some voting power to elect the board.[16] LLM then calculate the price premium for the class of common in their three categories with superior voting rights compared with the lower voting rights class of common.[17] LLM report that the mean premium across the two categories of firms without a preferred class of stock was equal to 5.44 percent.[18] To the extent the different classes of shares have equal cash flow rights, the higher premium for voting shares provides evidence of the value of control (and therefore the level of private benefits) inside the United States for public corporations.

Barclay and Holderness (1989) examine the price premium paid for blocks of shares as an indirect measure of the magnitude of private benefits of control inside the United States.[19] Their sample is made up of 63 block trades that take place during 1978 to 1982 where the block consists of at least 5% of the common stock of a NYSE or AMEX listed corporation.[20] Measuring the

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[14] See id. at 443.

[15] See id.

[16] See id. at 450-51.

[17] Stock prices are measured on the last trading day of the month (obtained from the Wall Street Journal) for each firm across the time period of their study. See id. at 452-61.

[18] See id. at 469. On the other hand, the market priced the higher voting class of common at a significant discount of 1.25 percent relative to the lower voting class of common where a separate voting class of preferred was present. See id. Only four firms, however, fit this third category of firms. See id.

[19] See Michael J. Barclay and Clifford G. Holderness, Private Benefits from Control of Public Corporations, 25 Journal of Financial Economics 371 (1989)

[20] See id. at 376-77. They identify the block trades through examination of the company index of the Wall Street Journal. They also require that the corporation is neither acquired nor taken private within six months of the initial announcement of the block trade. See id. at 377.

premium relative to the closing secondary exchange price on the day of the initial announcement of the block trade, they find a mean premium of 20.4% for the block shares, representing a mean total dollar premium of $4.1 million.[21] They calculate that the block premium on average represents 4.3% of the total market value of the firm's equity.[22] Barclay and Holderness contend that the premium reflects the value that the block shareholder receives on net above the benefits that all shareholders receive (as measured by the post-announcement exchange price) and thus corresponds with private benefits of control.[23]

Moving outside the United States, evidence exists of even greater levels of private benefits.[24] Levy (1982) analyzes the premium given shares with proportionally more voting power in the Israeli stock market.[25] Levy's data set consists of 25 (out of 104 total) corporations listed on the Israeli stock exchange in early 1981 with at least two classes of shares with identical rights to cash flows but differential voting power.[26] He reports that the average premium for the class of shares with higher voting rights is equal to 45.5% (for the sample period from 1974-1980).[27] For some of the firms, the voting premium is higher than 100%.[28] As an additional test, Levy examines the correlation between the relative average voting premiums across his sample firms against a voting inequality ranking he

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[21] See id. at 380.

[22] See id. at 379.

[23] See id. at 372. Not all blocks are sold at a premium; thirteen blocks in Barclay and Holderness's sample are sold at a discount. See id. at 379-80. Barclay and Holderness hypothesize that holding a block can be privately costly to the block shareholder due, for example, to possible litigation brought against the block shareholder personally by other shareholders as well as the costs of monitoring management. See id. at 386. They report that "[t]he more substantial discounts are often associated with firms in severe financial distress at the time of the trade suggesting that the private costs of block ownership are likely to increase during times of financial difficulty." Id. at 393.

[24] Several other studies of the vote premium exist. See Brian Smith and Ben Amoako-Adu, Relative Prices of Dual Class Shares, 30 J. Fin. & Quant. Analysis 223 (1995) (examining the vote premium in Canada); Kristian Rydqvist, Dual-Class Shares: A Review, 8 Oxford Review of Economic Policy 45 (1993) (examining the vote premium in Sweden); Melchior Horner, The Value of the Corporate Voting Right: Evidence from Switzerland, 12 J. Banking & Finance 69 (1988) (examining the vote premium in Switzerland); William Megginson, Restricted Voting Stock, Acquisition Premiums, and the Market Value of Corporate Control, 25 The Financial Review 175 (1990) (examining the vote premium in the U.K.).

[25] See Haim Levy, Economic Evaluation of Voting Power of Common Stock, 38 J. Fin. 79 (1982).

[26] See id. at 85.

[27] See id. at 88. The average premium is calculated compared against the secondary market price for the lower voting class of shares. Monthly prices (measured on the 15th of each month) are used for the sample period from 1974-1980 (where observations are available). See id. at 85-87.

[28] See id.

develops.[29] He finds a significant positive correlation between higher levels of voting inequality and greater voting premiums.[30]

Zingales (1994) provides an examination of the premium paid for voting compared with non-voting shares in Italy.[31] Zingales data sample consists of all companies that have both voting and non-voting stock trading on the Milan Stock Exchange from 1987 to 1990, for a total of 301 firm-years.[32] As a proxy for the probability that any particular outside voting-share may prove pivotal in a control contest,[33] Zingales calculates the Shapley value for votes held by small shareholders.[34] Zingales then estimates an ordinary least squares (OLS) regression with the voting premium[35] as the dependent variable using a measure of the voting premium based on the calculated Shapley value as one of the explanatory variables.[36] Zingales finds that the intercept in his regressions are uniformly positive in the range of 60 to 103 percent and statistically significant,

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[29] Levy uses a Lorenz inequality measure of voting inequality that takes into account both the voting power differential and the proportion that each class of stock represents of a firm's outstanding equity. See id. at 81-82.

[30] See id. at 89. Note that Levy's findings are based on Spearman rank correlations and do not reflect any controls for industry, types of investors, or other factors. See id.

[31] See Luigi Zingales, The Value of the Voting Right: A Study of the Milan Stock Exchange Experience, 7 Rev. Fin. Stud. 125 (1994). In Italy, firms have the ability to issue non-voting stock known as "savings shares". See id. at 128-129. Although non-voting, savings shares entitle the bearer to a minimum dividend as well as the right to receive dividends equal to the dividends given to voting stock (plus an additional amount equal to 2 percent of par value). See id. The higher dividends given to non-voting savings shares, if anything, biases Zingales results against finding a premium for voting shares.

[32] See id. at 129. Zingales notes that the use of non-voting shares is a relatively recent phenomenon in Italy. He therefore starts his data sample from 1987 to ensure a large number of companies with non-voting shares. See id. at 130.

[33] Voting shares should receive a premium only where the purchase of such shares from outside investors is likely to assist a person in obtaining or maintaining control. Where a large block shareholder already owns over 51% of the voting shares, for example, the trading price for voting shares will not display any premium.

[34] See id. at 134. The Shapley value calculates the contribution of a player (in a cooperative bargain with other players) based on the marginal contributions of that player to different coalitions that may form. For a derivation of the Shapley value see ROGER B. MYERSON, GAME THEORY: ANALYSIS OF CONFLICT 436-44 (1991). In calculating the Shapley value, Zingales looks only at block shareholders who owned more than 5 percent of the company's voting shares.

[35] The voting premium is defined as the price during the first 5 days of the year in question for voting shares minus the price for non-voting shares all divided by the price for non-voting shares. See Zingales, supra note 31, at 135.

[36] In particular, Zingales divides the Shapley value of votes held by small shareholders by the fraction of votes held by small shareholders to generate a "relative Shapley value". He then divides the relative Shapley value by the proportion of votes outstanding to generate the explanatory variable for his regressions. See id. at 134-140. Zingales also includes an explanatory variable for the additional dividend yield of a non-voting share. See id.

indicating a large mean voting premium.[37] Moreover, the coefficient on the Shapley variable is positive and significant, ranging from 16 to 37 percent. Zingales concludes that private benefits of control represent a significant fraction of overall firm value in Italy.[38] He speculates that weak corporate governance in Italy, giving managers the ability to extract large rents in the form of asset dilution among other techniques, is a large causal factor behind the large private benefits.[39]

One possible criticism of the different voting stock premium tests of the magnitude of private benefits is that the focus on firms with dual class stock generates a selection bias. It may be, for example, that only firms with particularly high levels of private benefit expropriation possibilities elect to structure their capital stock with dual classes of common involving differential voting rights. The premium placed on the class of shares with higher voting rights in such firms, therefore, may be indicative of the private benefits in firms with dual classes of common but not of firms generally in the economy (which elect not to adopt a dual class voting structure). Nevertheless, the possibility of selection bias does not take away from the finding that at least in firms with dual classes of shares, private benefits appear significant in magnitude, particularly in countries outside the United States.[40]

B. Evidence on the Value of Law in the United States

Where agency problems become acute, managers and controlling shareholders may appropriate higher levels of private benefits. Laws that limit the ability of managers and controlling

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[37] See id.

[38] A reduced liquidity for non-voting compared with voting shares may explain the high premium for voting shares. Nevertheless, Zingales notes that while firms typically had more voting shares, the voting shares were often tied up in blocks. See id. at 133-34.

[39] Zingales provides an anecdotal example involving that sale of the stake of one state owned company (IRI) in a software company (Finsiel) to another state owned enterprise (STET). While IRI was wholly owned by the government, STET had 47 percent ownership in the hands of small private investors. Zingales provides evidence that the sale took place to STET at a grossly marked up price over the fair market value of the block in Finsiel (to the benefit of IRI and the state at the expense of minority investors). See id. at 146.

[40] Cf. Simon Johnson, Rafael La Porta, Florencio Lopez-De-Silanes, and Andrei Shleifer, Tunneling, 90 Am. Econ. Rev. 22 (2000) (noting that "legal tunneling," defined as the process through which a controlling shareholder expropriates resources from the corporation, is both prevalent in developed countries—including particularly civil law countries—and legal in many cases).

shareholders to take advantage of minority public shareholders may therefore increase overall shareholder welfare. This section canvasses some of the research on the value of the law in reducing the risks facing investors in the United States.[41] Ideally to test the value of a particular legal regime, researchers could examine corporate-related variables for different regimes across time and jurisdictions. Within the United States, the federal securities laws represent a uniform regime. Researchers, as a result, have focused primarily on the impact of the initial passage of the federal securities laws during the 1930s.[42] State corporate law does provide researchers with variation across the states. Complicating the analysis of the value of different state corporate law regimes, however, is the ability of firms within the United States to select the corporate law regime of their choice.[43] This section therefore focuses primarily on the evidence related to the federal securities laws. The Article later discusses evidence related to the benefit of state corporate law as part of a broader analysis on the value of competition among legal regimes.[44]

Stigler (1964) puts together an empirical study comparing new issues of industrial stocks above a certain minimum size from the 1920s (a total of 53 new issues)[45] against a sample from the 1950s (a total of 26 issues)[46] to determine the efficacy of the Securities Act of 1933 (1933 Act). He tracks after market performance (adjusted for overall market return to obtain abnormal returns) for the first five years after the offering.[47] Stigler finds that new issues from the 1920s and the 1950s perform virtually identically for the first 2 years after the offering. For the last three years, the 1950s

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[41] For a general survey of research relating to corporate governance see Andrei Shleifer and Robert W. Vishny, A Survey of Corporate Governance, 52 J. Fin. 737 (1997).

[42] For a description of the U.S. securities laws see Cox, et al., supra note 3. For a discussion of the impact of state corporate law in the United States *see infra* Part III.B.

[43] For example, if firms in a particular state enjoy higher valuations than firms in other states is this caused by the state corporate law regime or just an artifact of higher valuation firms self-selecting into the particular state.

[44] See infra Part III.B.

[45] See George J. Stigler, Public Regulation of the Securities Markets, 37 Journal of Business 117 (1964). Stigler set the minimum size for new issues at $2.5 million for 1920s and $5 million for 1950s. See id. at 120.

[46] See id. at 120.

[47] See id. at 120 – 21.

new issues do better – but this is largely due to the poor performance for new issues from 1928.[48] Stigler concludes that stocks issued before and after the passage of the securities laws in the 1930s did not offer much difference in abnormal returns from an investors' standpoint. Instead, Stigler does find one significant difference between the two time periods: volatility. The variance of returns was much lower in the 1950s new issues compared with those from the 1920s.[49] He hypothesizes that the drop in volatility is due to the exclusion of new, higher risk companies from the public capital markets after the 1930s reforms.[50]

A weakness of Stigler's study is the relatively crude adjustment he makes to returns using the overall market return as the benchmark. Securities with different levels of risk, for example, should receive different levels of expected return. Jarrell (1981) updates Stigler's test of the impact of the 1933 Act in protecting investors with a more sophisticated approach to adjusting returns.[51] Jarrell's dataset consists of all new issues of common stock (for offerings above $2 million) from manufacturing and railroad businesses from 1926 to 1939.[52] Using a two-factor market model to calculate expected returns and thereby obtain abnormal returns,[53] Jarrell reports that while pre-1933 Act new issues earned a significant negative abnormal return in their first-year, post-1933 Act new issues earned a positive abnormal return.[54] On the other hand, Jarrell reports that the five-year mean

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[48] See id. at 121. Stigler explains that issuers in 1928 may be exceptional to the extent that "these enterprises did not have sufficient time to become well launched before the beginning of the Great Depression." Id. at 121.

[49] See id. at 122.

[50] See id. at 122 & n. 7 (detailing that "[o]f twenty-six issues of common stock in 1949-54, only six were by companies less than three years old; the corresponding figure for 1923-27 was thirty-eight less than three years old of a total of fifty three issues."). Higher risk firms, however, are not necessarily bad for investor to the extent investors obtain an appropriately higher expected return for investing in such firms. Indeed, eliminating such firms from the mix of available firms reduces the ability of investors to diversify and thereby may harm investor welfare. As well, social welfare may drop as financing becomes more limited for riskier ventures. See, e.g., Roberta Romano, Empowering Investors: A Market Approach to Securities Regulation, 107 Yale L.J. 2359, 2377 (1998).

[51] See Greg A. Jarrell, The Economic Effects of Federal Regulation of the Market for New Security Issues, , 24 J.L. & Econ. 613 (1981).

[52] See id. at 627.

[53] The two-factor model (following the capital asset pricing model) includes both the risk-free return as well as the market return as dependent variables. In addition, Jarrell includes one-period lagged risk-free and market return variables in the model. Jarrell requires at least 30 months of returns data for each security. See id. at 631-32.

[54] See id. at 639-41.

abnormal return of pre-1933 Act new issues is in fact more positive than for the post-1933 Act new issues.[55] Consistent with Stigler, Jarrell uses the five-year performance comparison to "reject[] the hypothesis that the performance of new issues registered in accordance with SEC disclosure regulations was superior (net-of-market) to that of pre-1933 Act new issues."[56] Jarrell nevertheless hypothesizes that the federal securities laws may have reduced the overall variability of stock returns.[57] For each company in his sample, he calculates the standardized variance (equal to the variance of the security's returns divided by the contemporaneous variance of returns on the market portfolio).[58] He reports that the post-1933 Act mean standardized variance is significantly lower than the pre-1933 Act mean.[59] Jarrell also reports that the pre-1933 Act standardized variance is more skewed to high variance issues compared with the post-1933 Act sample.[60] Jarrell states that: "The SEC may have reduced variance in their attempts to screen out unsound issues, but there is no evidence from the unregulated period that links high-variance new issues with abnormally poor performance."[61]

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[55] See id. at 641.

[56] Id. As an alternative test, Jarrell uses the returns across time and space ("RATS") methodology to "estimate a market model using return observations from a given month of seasoning across securities." Id. at 641-642. Jarrell reports that using the RATS methodology to generate abnormal returns, the five-year performance of pre and post-SEC new issues is no longer statistically different. Jarrell uses the RATS results to reinforce his conclusion that "post-SEC new issues did not perform better than pre-SEC issues, net of market factors." Id. at 645.

[57] See id. at 646.

[58] See id.

[59] See id. at 648.

[60] See id.

[61] Id. One possible explanation for the reduction in security return variance post-SEC is that more fraudulent issues (corresponding to higher variance issues) are removed post-SEC. To test this possibility, Jarrell excludes all pre-1933 Act securities with a standardized variance greater than 10. See id. at 650. Comparing the screen pre-1933 Act sample against the post-1933 Act sample, he then reports nearly identical standardized variance levels. Comparing the abnormal market performance of the screened pre-1933 Act sample against the non-screened pre-1933 Act sample, however, he finds that the screened pre-1933 Act sample performed worse – inconsistent with the hypothesis that the high variance issues were predominantly fraudulent. See id.

Jarrell also reports evidence that in the post-1933 Act time period a marked increase in private placements of debt offerings occurred in 1934. See id. at 660. As well, Jarrell reports that the fraction of common stock issues decreased relative to the total volume of security issues after the start of SEC regulation while the volume of bond and preferred stock offerings increased. See id. at 664. Jarrell notes that this evidence is "consistent with the general hypothesis that SEC regulation reduced the risk of new security issues placed with the public." Id. Jarrell concludes that while such a shift in risk is consistent with the view that SEC regulation reduces risk across the board for new issues, the evidence is more supportive of the view that "SEC regulation imposes higher registration costs on relatively risky new issues." Id. at 669.

Simon (1989) continues with the line of work started by Stigler and Jarrell in examining the impact of the 1933 Act.[62] Unlike Stigler or Jarrell, Simon partitions new issues along two dimensions: (1) seasoned versus unseasoned offerings and (2) NYSE-listed versus non-listed issuers.[63] Simon argues that the 1933 Act had the greatest impact, if any, on firms where investors lacked substitute sources of information – the unseasoned, non-NYSE listed firms. Simon's data set consists of common stock issues floated from 1926-33 (pre-1933 Act) and then from 1934-1939 (post-1933 Act).[64] Using a multi-beta asset pricing model to generate expected returns, she calculates monthly abnormal post-offering returns (for a period of 60 months).[65] She reports that the category of unseasoned, non-NYSE listed stocks received statistically significant negative abnormal returns during the pre-1933 Act time period and positive (but insignificant) abnormal returns post-1933 Act. Moreover, the difference between the pre-1933 Act and post-1933 Act returns for the category of unseasoned, non-NYSE listed stocks is significant.[66] In contrast, no significant difference in abnormal returns for the pre-1933 Act and post-1933 Act time period exists for seasoned issues as well as for NYSE-listed issues.[67] Simon writes that with respect to NYSE-listed issues and seasoned issues: "There is no evidence that investors were systematically misinformed in these markets."[68] Simon then looks at the variance of monthly abnormal returns as a measure for the amount of uncertainty among investors in how to value a security, finding that the

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[62] See Carol J. Simon, The Effect of the 1933 Securities Act on Investor Information and the Performance of New Issues, 79 Am. Econ. Rev. 295 (1989).

[63] See id. at 297.

[64] See id. at 300.

[65] See id. at 300-301. For new issues she states that "returns … are modeled as a function of the overall market, industry specific effects, and changes in the relative risk of equity securities. Market beta parameters are permitted to fluctuate over the business cycle." Id. at 300.

[66] See id. at 305, 308.

[67] See id. at 305.

[68] Id. at 305. Simon checks the robustness of her results through the use of an alternative abnormal return model. Rather than use an asset pricing model, she calculates abnormal returns by taking the net return above (or below) the overall market return. See id. at 308. She replicates her result that unseasoned, non-NYSE listed stock received a significant negative excess return during the pre-1933 Act time period and a positive (but insignificant) excess return post-1933 Act.

variance dropped significantly during the post-1933 Act time period for all issues in her sample.[69] Moreover, the drop is most pronounced for the unseasoned, non-NYSE listed firm category in her sample.[70]

Only inconclusive evidence therefore exists on whether investors received higher abnormal returns after the passage of the securities laws. Although Stigler (1964) and Jarrell (1981) find no evidence of an increase in abnormal returns, Simon (1989) does find such evidence but only for the subset of unseasoned, non-NYSE listed firms. In all the studies, nonetheless, evidence exists that stock return variability decreased post-enactment of the securities laws.[71]

In addition to the studies that assess the impact on investor returns from the passage of the 1933 Act, empirical studies also exist that examine the value of information disclosure more specifically – focusing on the periodic disclosure requirements under the Securities Exchange Act of 1934 (1934 Act).[72] Benston (1969) examines the amount of voluntary accounting disclosure prior to the passage of the federal securities laws.[73] Where mandatory disclosure is important, one would expect to see a large increase in disclosure after the enactment of the securities laws. His sample consists of all the companies traded on the NYSE as of June 1935 (just prior to the commencement of mandatory disclosure pursuant to the 1934 Act).[74] Benston examined the financial statements of each of these firms (totaling 508 firms) from 1926 to 1934.[75] For his sample of firms, he found

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[69] See id. at 309.

[70] See id. at 309, 313.

[71] See supra note 50 (detailing the argument that high risk investments are not necessarily bad for investor welfare).

[72] In a recent unpublished study, Artyom Durnev, Merritt B. Fox, Randall Morck, Bernard Yeung study the impact of the promulgation of mandatory rules relating to the Management, Discussion and Analysis (MD&A) disclosure in December, 1980. They report that after the promulgation of the MD&A rules, share price accuracy increased. See Artyom Durnev, Merritt B. Fox, Randall Morck, Bernard Yeung, Law, Share Price Accuracy and Economic Performance: The New Evidence (presented at American Law and Economics Association Annual Meeting, May 12, 2001) (presentation on file with author).

[73] See George J. Benston, The Value of the SEC's Accounting Disclosure Requirements, 44 Acct. Rev. 515, 519 (1969)

[74] See id. at 519.

[75] Financial statements are obtained from Moody's Manuals. See id. at 519-20.

significant evidence of voluntary disclosure prior to the federal securities laws,[76] including significant levels of information related to balance sheet, current assets and liabilities, and net income.[77] Although the U.S. securities laws certainly increased disclosure (particularly with respect to sales and cost of goods sold), securities exchanges and issuers were already moving toward high levels of voluntary disclosure prior to the securities laws.

Benston (1973) expands on his earlier work to provide a test of the benefits from the 1934 Act in mandating disclosure.[78] Using a sample of 466 NYSE-listed firms, Benston divides the firms into those that disclosed sales prior to the start of mandated disclosure (290 firms) and those that did not (176 firms).[79] Benston then performs an event study of the stock market return for both sets of firms during the "period of adjustment" from February 1934 to June 1935 accompanying the passage of the 1934 Act.[80] He predicts that if managers avoided disclosure as a means of hiding poor performance then the abnormal return for the period of adjustment "of the nondisclosure companies compared to the disclosure companies would be negative since investors would revalue downward the returns to their securities."[81] Contrary to this hypothesis, however, Benston reports that the abnormal returns of neither the disclosure and nondisclosure group of firms were

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[76] On the other hand, Benston does note that mandatory disclosure worked as a "powerful influence" to provide uniformity within the accounting profession. See id. at 530.

[77] See id. at 519-20. The fraction of companies reporting sales information rose from 55 to 62 percent across the time period. See id. The fraction of companies disclosing costs of goods sold similarly rose from 45 to 54 percent; in addition, 93 percent of firms reported depreciation information by 1934 (pre-mandatory disclosure). See id. Also by 1934 (due in part to a NYSE listing requirement), 94 percent of the listed firms also had their annual financial statements audited by an independent public accountant. See id. Benston also questions the value of mandatory disclosure based on the amount of delay involved from the actual results to the filing (120 days for Form 10-K). See id. at 520-21.

[78] See George J. Benston, Required Disclosure and the Stock Market: An Evaluation of the Securities Exchange Act of 1934, 63 Am. Econ. Rev. 132 (1973). Compare Merritt B. Fox, Retaining Mandatory Securities Disclosure: Why Issuer Choice is Not Investor Empowerment, 85 Va. L. Rev. 1335, 1373-79 (1999) (criticizing Benston's test of the 1934 Act) with Roberta Romano, The Need for Competition in International Securities Regulation, 2 Theoretical Inquiries L. 387, 465-77 (2001) (defending Benston's empirical methods and results).

[79] Benston focused on sales because sales was one of the only items (together with cost of goods sold) NYSE listed firms had not (uniformly) already voluntarily disclosed prior to the 1934 Act. See Benston, supra note 79, at 142-43. Benston's sample initially consisted of the 508 corporations whose stock was traded on the NYSE in 1934. He then eliminated firms where monthly trading data was insufficient for his tests. See id.

[80] See id. at 142-48. Abnormal returns are calculated using expected returns generated from the market model (estimated with monthly returns over a several year period both before and after the period of adjustment). See id. at 145-46.

[81] Id. at 144.

significantly different from zero.[82] Benston also examines the variance of individual stock prices (controlling for stock market variance) across the nondisclosure and disclosure firms, reporting that while variance decreased for both groups, the change in variance was "almost the same" for the two groups.[83] Benston argues therefore that "the Securities Exchange Act of 1934 had no measurable positive effect on the securities traded on the NYSE."[84]

C. International Evidence

Over the past decade, researchers have generated a large amount of international evidence on the value of protecting investor rights. This section examines evidence on the relationship between law and financial development (referred to as the "law and finance" literature).[85] Possible criticisms of the law and finance literature and related evidence are then discussed.

1. Law and Finance

In a series of path-breaking articles La Porta, Lopez-De-Silanes, Shleifer, and Vishny (LLSV) develop evidence on the relationship between strong legal protections of minority shareholders and creditors on the one hand and various measures of financial development.

LLSV (1998) examine the legal protections for minority shareholders and creditors across 49 countries (consisting of countries with at least 5 nonfinancial private firms and excluding socialist

[82] See id. at 148.

[83] See id. at 148-49.

[84] Id. at 153. One possible bias in comparing the disclosure and nondisclosure firms is that nondisclosure firms may have systematically fared worse for stockholders and been delisted as a result – removing them from Benston's sample of firms. To test for this bias, Benston examines the relative experience with delisting for a sample of NYSE firms listed as of 1929 (prior to the Great Depression). He reports that, if anything, nondisclosure firms delisted less frequently than disclosure firms. See id. at 149-50.

[85] For a survey of the law and finance literature see Rafael La Porta, Florencio Lopez-De-Silanes, Andrei Shleifer, and Robert Vishny, Investor Protection and Corporate Governance, 58 J. Fin. Econ. 3 (2000).

and transition economies).[86] In analyzing the variation in legal protections, they group countries based on their legal tradition, including common law as well as French, German, and Scandinavian civil law origin countries.[87] LLSV develop an "antidirector rights" score for each country as a measure of the level of minority shareholder legal protections based on: (1) the ability to mail in a proxy vote;[88] (2) the lack of a requirement that shares must be deposited prior to proxy voting;[89] (3) the availability of cumulative voting;[90] (4) the presence of "legal mechanisms against perceived oppression by directors" against minority shareholders;[91] (5) the "preemptive right to buy new issues of stock";[92] (6) whether "the percentage of share capital needed to call an extraordinary shareholders meeting" is at or below 10% (represent the world median).[93] 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.[94] LLSV then provide summary statistic evidence that common law countries have significantly stronger investor protection regimes than civil law countries.[95] They also show that this trend is invariant to the level of per capita GNP in the countries.[96]

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

[87] In classifying countries, LLSV look at the origin of the initial laws instead of any revisions to the law. See id. at 1119.

[88] See id. at 1127.

[89] See id.

[90] See id.

[91] Id. at 1128.

[92] Id.

[93] Id.

[94] LLSV also focus on the right to a mandatory dividend as well as whether a country mandates one-share one-vote. See id. at 1127-28. Significantly, LLSV do not examine takeover-related legal provisions, disclosure regulation, or the private regulation imposed through securities exchanges. See id. at 1120. Commentators, as well, have questioned the importance of the specific corporate law provisions on which LLSV base their antidirector rights score. See 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, 4 n.6 (2001). ("By no means is it here implied that [antidirector] rights are unimportant, but they seem to supply only partial and sometimes easily outflanked safeguards, which have little to do with the protection of control and the entitlement to a control premium.").

[95] See LLSV, supra note 86, at 1129-31.

[96] See id. at 1132-33.

LLSV then analyze the variation in creditor rights across countries. They use several proxies for the degree of protections given secured creditors (aggregating them into a "creditor rights" score ranging from 0 to 4): (1) the absence of an automatic stay on the assets designed to prevent "secured creditors from getting possession of loan collateral" in the reorganization procedure;[97] (2) whether secured creditors have "the right to collateral in reorganization";[98] (3) the lack of ability on the part of managers to "seek protection from creditors unilaterally by filing for reorganization, without creditor consent";[99] and (4) whether management is not allowed to stay in control pending a reorganization.[100] LLSV also look to whether a country imposes a minimum legal reserve requirement to avoid automatic liquidation.[101] 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.[102] They also report that creditor rights are stronger in poor compared with rich countries.[103]

Whether legal protections actually make a difference depends on the level of enforcement within a particular country. To assess enforcement, LLSV use a number of proxies including: the "efficiency of the judicial system, rule of law, corruption, risk of expropriation—meaning outright confiscation or forced nationalization—by the government, and likelihood of contract repudiation by the government."[104] LLSV also estimate the quality of each country's accounting standards based

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[97] Id. at 1135.

[98] Id.

[99] Id.

[100] See id.

[101] See id.

[102] German and Scandinavian civil law countries score in between common law and French civil law countries. See id. at 1138. For an earlier study examining the importance of creditor rights for the amount of financial leverage among firms in G-7 countries see Raghuram G. Rajan and Luigi Zingales, What Do We Know about Capital Structure? Some Evidence from International Data, 50 Journal of Finance 1421 (1995). Rajan and Zingales note that while the U.S. has a relatively pro-management oriented reorganization procedure, Germany and the U.K. are more focused on creditor rights. See id. at 1444-45. One possible explanation for the relatively low levels of leverage in the U.K. and Germany, they hypothesize, may be the high level of creditor rights in these countries. See id. at 1445.

[103] See LLSV, supra note 86, at 1139 (noting "perhaps because poor countries adapt their laws to facilitate secured lending for lack of other financing opportunities.").

[104] Id. at 1140.

on a privately constructed index assessing company reports.[105] LLSV report that Scandinavian and German civil law countries have the highest enforcement levels.[106] Common law countries have the next highest level of enforcement followed by French civil law countries with the lowest level of enforcement.[107] After controlling for log per capita GNP in an OLS regression, LLSV find that all the French and German civil law countries generally have weaker legal enforcement regime measures compared with common law countries.[108] They also report that accounting quality is worse for German and French civil law countries compared with common law countries.[109]

LLSV finally look at ownership concentration, measured for the 10 largest, publicly traded, nonfinancial, private firms for each country.[110] For each company, LLSV calculate the aggregate share ownership percentage in the hands of the top three shareholders.[111] 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.[112] German civil law countries (particular from East Asia) and Scandinavian have the lowest concentration (leaving common law countries with the middle levels of concentration).[113] To examine further the relationship between concentration and legal origin, LLSV estimate an OLS model with ownership concentration as the dependent variable.

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[105] See id. ("For investors to know anything about the companies they invest in, basic accounting standards are needed to render company disclosures interpretable. Even more important, contracts between managers and investor typically rely on the verifiability in court of some measures of firms' income or assets."). LLSV define their measure of accounting standards as follows: "This [accounting] index was created by examining and rating companies' 1990 annual reports on their inclusion or omission of 90 items. These fall into seven categories (general information, income statements, balance sheets, funds flow statement, accounting standards, stock data and special items). A minimum of 3 companies in each country were studied. The companies represent a cross section of various industry groups where industrial companies numbers 70% while financial companies represented the remaining 30%." Id. at 1125.

[106] See id. at 1141.

[107] See id.

[108] See id. at 1144-45. Scandinavian civil law countries have similar results with common law countries in the OLS regressions. See id.

[109] See id.

[110] LLSV use market capitalization as a measure of size. See id. at 1145.

[111] See id.

[112] See id. at 1146.

[113] See id. at 1147-48.

Explanatory variables include legal origin dummies among others.[114] They report that French (although not German or Scandinavian) civil law countries have significantly higher concentration of ownership.[115]

La Porta, Lopez-De-Silanes, and Shleifer (1999) (LLS) expand upon LLSV's examination of ownership concentration, analyzing the prevalence of controlling shareholders in 27 wealthy economies.[116] For each of their sample countries, LLS examine the ownership structure of the 20 largest publicly traded firms.[117] LLS focus in particular on control over voting rights to assess ownership. They then make the following separation: "We divide firms into those that are *widely held* and those with *ultimate owners*."[118] LLS treat corporations with a shareholder whose direct and indirect voting rights exceed 20 percent as one with an ultimate controlling-owner.[119] They report that for their sample of large firms, "36 percent are widely-held, 30 percent are family-controlled, 18 percent are State-controlled, and the remaining 15 percent are divided between the residual

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[114] LLSV also include controls for the log of per capita GNP, total GNP, and the Gini coefficient for a country's income (measuring the level of income inequality). See id. at 1148. LLSV then estimate a separate regression (with ownership concentration as the dependent variable) adding various measures of minority shareholder and creditor rights (including the antidirector rights measure and the measure for accounting standards) as explanatory variables. See id.

[115] See id. at 1149-50. In the OLS model with direct measures of minority shareholder and creditor rights as explanatory variables, see supra note 114, antidirector rights and accounting standards have a significant and negative relationship with mean ownership levels. See id. The coefficient on the dummy variable for French civil law, however, becomes insignificant. See id. (writing that this result "suggests that our measures of investor protections actually capture the limitations of the French-civil-law system."). LLSV note that "[s]ome of our independent variables, but particularly accounting standards, might be endogenous. Countries that for some reason have heavily concentrated ownership and small stock markets might have little use for accounting standards, and so fail to develop them." Id. at 1150.

[116] See Rafael La Porta, Florencio Lopez-De-Silanes, and Andrei Shleifer, Corporate Ownership Around the World, 65, J. Fin. 471 (1999). For a related paper examining ownership concentrations in almost 3,000 firms from 9 East Asian countries see Stijn Claessens, Simeon Djankov, and Larry H.P. Lang, The Separation of Ownership and Control in East Asian Corporations, 58 J. Fin. Econ. 81 (2000). Claessens, Djankov, and Lang report a large degree of family ownership, noting that the top 10 families in each of the non-Japan East Asian countries they examine control from 18.4 to 57.7 percent of the value of listed corporate assets in their respective countries. See id. at 107-08.

[117] LLS use market capitalization as a measure of size. See LLS, supra note 116, at 474-75. LLS also examine the smallest 10 firms in each country with a common equity market capitalization of at least $500 million at the end of 1995 (the medium size firms). See id. The alternative sample controls for the possibility that "firms in countries with good shareholder protection are larger, and hence have more dispersed ownership". Id. at 497. They report similar qualitative results as with their main sample of large firms. See id. at 497-98.

[118] Id. at 476.

[119] See id.

categories."[120] LLS then 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.[121] They report that widely held firms (for both their sample of large and medium size firms) are more frequent in countries with higher antidirector rights scores.[122] LLS state that these results "suggest that dispersion of ownership goes together with good shareholder protection, which enables controlling shareholders to divest at attractive prices."[123]

LLSV (1997) demonstrate the link between investor protection and capital market activity.[124] 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.[125] 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

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[120] Id. at 491-96. LLS write that "we classify every firm . . . as one of six types: widely held, family-controlled, State-controlled, controlled by a widely held financial institution, controlled by a widely-held corporation, or miscellaneous." Id. at 491. LLS also use the 10 percent threshold as an alternative definition for the presence of an ultimate owner and find qualitatively similar results. See id. at 491-96.

[121] See id.

[122] See id. at 496. They 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. See id.

[123] Id. 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). See id. at 505. To correct for this possible bias, LLS divide their sample of 27 countries based on their legal origin (common law versus civil law) – adopting the assumption that legal origin is exogenous to the presence of a controlling shareholder. See id. at 505-06. 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. See id. Countering the criticism that the presence (or absence) of controlling shareholders is driven more by the bank-center nature of the country's economy, LLS divide their sample between those with strong and weak bank sectors. See id. at 506-09. They find no significant difference in the frequency of widely held corporation between these two types of countries. See id. LLS also examine whether tax rules, other aspects of corporate governance besides the protection of minority shareholders, and stock market liquidity matter for the fraction of firms that are widely-held; they find no relationship between ownership concentration and these various factors. See id. at 506-10.

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

[125] LLSV use three proxies for external equity financing: (1) the stock market capitalization over GNP (scaled by "the fraction of the stock market held by outside investors"); (2) "the number of listed domestic firms in each country relative to population"; and (3) "the number of initial public offerings of shares in each country between mid-1995 and mid-1996 . . . also relative to the population". Id. 1133-35. LLSV use the aggregate amount of private debt plus private bond issues divided by GNP as a proxy for the ability of private parties to use debt financing in a particular country. See id. at 1135.

countries).[126] 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.[127] LLSV then confirm these summary statistic results using a series of OLS regression models with the ratio of stock market capitalization to GNP (scaled to take into account the fraction of stocks in the hands outside investors) as the dependent variable.[128] 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.[129] They report that civil law countries have significantly smaller equity markets compared with common law countries in the regression.[130] In addition, a higher rule of law score 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.[131] LLSV conclude that their results "add up to a rather consistent case that the quality of the legal environment has a significant effect on the ability of firms in different countries to raise external finance."[132]

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[126] See id. at 1137.

[127] See id. at 1139. LLSV also write that "[b]etter law enforcement, as measure by rule of law, is associated with more domestic firms and IPOs per capita, as well as a greater ratio of private sector debt to GNP." Id.

[128] LLSV write that "if 90 percent of a firm's equity is held by the insiders and 10 percent by the outsiders, then looking at the market capitalization of the whole firm gives a ten fold overestimate of how much has actually been raised externally". See id. at 1139-42.

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

[130] See id. at 1142.

[131] 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. See id. at 1142-44. 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. See id. at 1144. LLSV also perform a similar OLS model using the level of private sector debt over GNP as the dependent variable. For explanatory variables, they include the rule of law, dummies for legal origin, and a composite measure of creditor legal rights (in addition to controls for GDP growth and the log of GNP). See id. at 1145. They report that French and Scandinavian civil law countries have a significantly lower debt to GNP ratio in the regression but German civil law countries do not in comparison with common law countries. See id. at 1146.

[132] Id. at 1146. LLSV (1997)'s results relate directly to a number of studies linking financial development with greater economic growth in a country. King and Levine (1993) examine the relationship between financial development and economic growth. See Robert G. King and Ross Levine, Finance and Growth: Schumpeter Might Be Right, 108 Q. J. Econ. 717 (1993). King and Levine's data set consists of "over 80 countries" from 1960 to 1989. Id. at 717. Using different measures of growth as dependent variables, King and Levine estimate a series of contemporaneous regressions (using averages for the 1960-1989 time period) with measures of financial development as explanatory variables

As an indirect test of the importance of investor protections in shifting the balance of power toward minority investors, LLSV (2000a) examine the dividend payouts of firms across 33 different countries to determine the importance of legal protections for minority shareholders.[133] LLSV divide countries into common law and civil law countries.[134] LLSV find that the median level of dividend payouts in common law countries (offering better protections for minority shareholders) is significantly higher than in civil law countries – consistent with the hypothesis that firms pay dividends when minority shareholders have the power to force such an outcome.[135] Within common law countries, they also report that high growth companies have a significantly *lower* dividend payout than low growth companies.[136] LLSV then estimate a random effects model

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(together with various control variables). See id. at 726-27. In all the regressions, King and Levine report a positive and significant correlation between financial development and growth. See id. King and Levine conclude that their results are "consistent with the view that financial services stimulate economic growth by increasing the rate of capital accumulation and by improving the efficiency with which economies use that capital." Id. at 735. See also Ross Levine and Sara Zervos, Stock Markets, Banks, and Economic Growth, 88 American Economic Review 537 (1998) (providing further evidence on whether a well-developed stock market and banking sector are important for long-term economic growth).

Rajan and Zingales (1998) provide evidence on the causal relationship between financial development and economic growth. See Raghuram G. Rajan and Luigi Zingales, Financial Dependence and Growth, 88 Am. Econ. Rev. 559 (1998). To determine causality, they focus on the mechanism through which financial development may lead to higher economic growth. In particular, they hypothesize 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. See id. at 562. To test their hypothesis, Rajan and Zingales estimate a regression model using industry growth in manufacturing industries for 41 countries as the dependent variable and an interaction term between proxies for financial development and the need for external financing as the independent variable of interest. Their models also include fixed effects dummy variables for both the country and industry to control for other influences that may affect growth. Rajan and Zingales report that each of the interaction terms in their regression models between financial development and the need for external financing are positive and statistically significant – consistent with the hypothesis that financial development facilitates funding for firms that require external financing for growth. See id. at 575.

[133] See Rafael La Porta, Florencio Lopez-De-Silanes, Andrei Shleifer, Robert W. Vishny, Agency Problems and Dividend Policies around the World, 55 Journal of Finance 1 (2000). LLSV construct several different proxies for the level of dividends a firm pays out. They examine the dividend over cash flow ratio, the dividend over earnings ratio, and finally the dividend over sales ratios across the different countries. The firms in LLSV's sample are obtained from the Worldscope Database and consist primarily of large listed firms. See id. at 9. LLSV eliminate firms trading in socialist countries and Luxembourg as well as firms listed in countries with mandatory dividend policies. Financial firms and firms with at least partial government ownership are also excluded. Finally, LLSV exclude firms with negative net income or cash flow in 1994 as well as firms with missing financial data for their sample period.

[134] They also divide countries based on whether they are above or below the median shareholder protection score.

[135] LLSV term this hypothesis the "outcome" model. LLSV's results therefore are inconsistent with the alternative hypothesis that firms may voluntarily pay dividends to develop a reputation as pro-shareholder (termed the "substitute" model).

[136] To the extent the outcome model is true, see supra note 135, LLSV argue that in countries with strong investor protections, shareholders will choose to have strong growth companies retain their earnings and not payout

(controlling for cross-correlation between error terms for firms in the same country) using firm-level dividend payouts as the dependent variable. They report that firms from civil law countries and firms with low investor protection scores again pay a lower level of dividends. Moreover, high growth firms in common law countries (or alternatively, countries with a higher investor protection score) pay out significantly lower dividends.[137] LLSV thus conclude that their evidence is supportive of the hypothesis that "the quality of legal protection of investors is important for dividend policies as it is for other key corporate decisions".[138]

Studies also examine the relationship of legal protections and valuation. LLSV (2000b) focus on the relationship between the presence of controlling shareholders and corporate valuation.[139] Using the same group of 27 wealthy countries from LLS (1999),[140] LLSV 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 who controls over 10 percent of the votes of the firm").[141] They then test three hypotheses: (1) "Firms in more protective legal regimes should have higher Tobin's q" valuation scores due to the increased value for minority shareholders;[142] (2) "Firms with higher cash flow ownership by the controlling entrepreneur should have higher Tobin's qs";[143] and (3) "the effect of the entrepreneur's cash flow ownership on valuation is lower in countries with good

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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"). Id. at 27. LLSV use the past five years historical sales growth rate for firms as a proxy for firms with high future growth potential. See id. at 16. LLSV also report that for countries with a high antidirector rights score, the dividend payout is again significantly *lower* for high growth firms. See id.

[137] See id. at 19-22.

[138] Id. at 27.

[139] See Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert Vishny, Investor Protection and Corporate Valuation (working paper 2000) (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=227583).

[140] See supra notes 116-123 and accompanying text.

[141] Id. at 11.

[142] Id. at 7. They define Tobin's q as follows: "Our measure is Tobin's q computed for the most recent fiscal year available, typically 1995. The denominator of q is the book value of assets. The numerator is the book value of assets minus the book value of common equity and deferred taxes plus the market value of common equity." Id. at 14. LLSV also write that "[t]o reduce the weight of outliers, we censor Tobin's q at the 5th and 95th percentiles by setting extreme values to the 5th and 95th percentile values, respectively." Id. at 15.

[143] Id. at 9. In addition, LLSV also test the hypothesis that "[f]irms with better investment opportunities should have higher Tobin's qs". Id.

investor protection."[144] As in their other studies, LLSV use a dummy variable for whether a firm comes from a country with a common law or civil law origin as a measure of legal protection for minority investors. They also use their measure of antidirector rights for a country.[145] LLSV report first that firms with a controlling shareholder from a common law country have higher Tobin's q measures of valuation compared with firms with a controlling shareholder from civil law countries.[146] LLSV then fit a series of country random effects models with industry-adjusted Tobin's q as the dependent variable.[147] 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.[148] LLSV report that coming from a common law jurisdiction has a statistically significant positive impact on Tobin's q (at the 5% confidence level), providing support for LLSV's hypothesis that legal protections for minority shareholders result in increased valuations for firms. In addition, the cash flow rights variable also has a significant positive impact on Tobin's q (at the 10% confidence level) although the interaction term between investor protection and cash flow rights is insignificant.[149]

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[144] Id. at 10. LLSV exclude all foreign affiliates of firms, banks, and financial firms from their sample. See id.

[145] See id. at 14.

[146] See id. at 17. They also note, however, the sales growth rates are higher in common law countries and that, therefore, the difference in Tobin's q values may be due to differences in available investment opportunities. See id.

[147] See id. at 18. Tobin's q is adjusted using the worldwide industry average. LLSV also write that "This specification uses both within and between country variation in cash flow ownership to estimate its effects on valuation, but does not treat firms in a given country as independent observations. Instead, standard errors are adjusted to reflect the cross-correlation between observations due to common country components." Id.

[148] See id. at 18.

[149] See id. at 19. A similar pattern is reported when the antidirector rights score is substituted for the common law dummy variable as the measure of investor protection levels. See id.

Black (2001) also provides a test of the importance of corporate governance protections for the market valuation of a company.[150] Black looks to Russia, a country with a well-documented lack of good corporate governance protections for investors.[151] Using a small sample of 16 "major" Russian firms from 1999, Black assembles two independent sets of investment banker assessments of the firms. First, he obtains from the Brunswick Warburg investment bank a ranking for each firm of the level of corporate governance protection.[152] The corporate governance ranking is a function of the subjective evaluation of Brunswick Warburg as to the level of disclosure, and the possibility of share dilution through new issuance of shares, asset stripping and transfer pricing, and dilution through merger or restructuring among other factors.[153] Second, Black turns to Trioka Dialog, another Russian investment bank, to obtain an assessment of each firm's actual market capitalization over their potential western market capitalization (the "value ratio").[154] Trioka Dialog uses multiples of assets, capacity, and revenue to gauge the potential market capitalization of each firm in the West.[155] Black reports a strong correlation between the natural log of the value ratio and the governance ranking.[156] Multiples of assets, capacity, and revenue, however, may only crudely capture the potential valuation of a firm. For example, companies with high growth prospects may enjoy a large valuation even with a low level of hard assets or sales. Employing the asset-to-valuation ratio

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[150] See Bernard Black, Does Corporate Governance Matter? A Crude Test Using Russian Data, 149 U. Penn. L. Rev. 2131 (2001). For a more detailed study on the same subject using a larger sample of 21 Russian firms see Bernard Black, The Corporate Governance Behavior and Market Value of Russian Firms, 2 Emerging Markets Review (forthcoming 2001).

[151] See id. at 2135-36.

[152] See id. at 2136-38.

[153] See id.

[154] See id. at 2139-41.

[155] See id.

[156] Black uses a variety of correlation tests, including the Pearson product-moment correlation, the Spearman rank order correlation and the Kendal t-b correlation coefficient. In all these tests, a strong correlation exists between high levels of corporate governance protections and a high value ratio. Black recognizes that his tests omit any control variables (such as industry) but states that his small sample size makes such tests difficult to estimate without running into over-determination problems. See id. 2146. Black does estimate an ordinary least squares model (with the natural log of the value ratio as the dependent variable) using three types of corporate governance protections as independent variables (disclosure, self-dealing, and other risks). He finds that only self-dealing risks (related to poor self-dealing related corporate governance protections) is correlated with a lower value ratio. See id. at 2147.

obtained for a high growth company and applying this to the assets of a low growth company (even in the same industry) to obtain a predicted valuation therefore may result in an overestimate of valuation (conversely, underestimates are possible as well). Black's results, nonetheless, are consistent with LLSV's finding of the strong relationship between legal protections for minority investors and financial development.

Focusing directly on the magnitude of private benefits of control, Nenova (2000) provides a broad cross-country examination (using the premium for control as a proxy for these private benefits).[157] Nenova constructs a model for the value of control as a share of total firm value (which she terms the "vote value"), allowing her to put forth the following hypotheses: "The [vote value] depends positively on the probability distribution in time of a successful control contest, and negatively on the quality of the legal environment, on costs of holding and financing a large block of shares, and on excess security benefits of the limited over the multiple-voting shares."[158] Using a sample of 661 dual-class firms from 18 countries (obtained from Datastream),[159] Nenova then reports that the (unadjusted) premium for control varies greatly across different countries – ranging from a low of –5.03% in Finland to a high of 36.42% in Mexico.[160] Categorizing the countries in her sample according to legal origin, she reports that Scandinavian civil law countries have the lowest vote value (0.5%) closely followed by common law countries (4.5%). German civil law countries have somewhat higher vote values (16.2%) and French civil law countries have the highest vote values (25.4%). Nenova then estimates OLS regressions with the vote value as the dependent

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[157] See Tatiana Nenova, The Value of Corporate Votes and Control Benefits: A Cross-country Analysis (working paper, 2000) (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=237809). Nenova's study therefore expands upon the single country studies of dual stock voting premiums. See supra Part II.A.

[158] Id.

[159] Nenova selects only firms with at least two publicly-traded classes of stock with differential voting rights (relative to cash flows) and where both classes are listed on a domestic exchange (and traded during the period from January 1 to December 31, 1997).

[160] In calculating the control premium, Nenova averages weekly share prices from 1/1/97 to 12/31/97. Nenova explains that the existence of a negative unadjusted premium may be due to differences in dividends (with the limited voting shares obtaining more dividends) among other reasons.

variable and uses country dummies and a series of controls for differences in dividend policies and secondary market liquidity for the dual class stocks among other explanatory variables. Interpreting the coefficients on the dummy variables as the average vote values (by country), Nenova reports that the highest vote values are in civil law countries (including Mexico with estimates ranging from 46% to 51% of firm value). Scandinavian civil law origin countries and the U.S. have the lowest mean vote values (at near 1%). Interestingly, the U.K. is considerably higher than the U.S. at 9% to 10% of firm value.[161] Nenova finally estimates OLS regressions (adjusting coefficients for within-country correlation) using the vote value as the dependent variable and measures for the general quality of the legal framework for investors, the level of takeover protections,[162] the presence of power-concentrating charter provisions,[163] the probability of a takeover contest,[164] among others as explanatory variables. She reports that variables related to a stronger legal environment are negatively and significantly related to the vote value level.[165]

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[161] Coffee uses the low levels of private benefits imputed from Nenova's results within the Scandinavian civil law origin countries to question the relationship between civil law legal origin as put forth in the LLSV line of papers and reduced welfare of minority investors. See John C. Coffee, Jr., Symposium, Do Norms Matter? A Cross Country Evaluation, 149 U. Penn. L. Rev. 2151, 2162-63 (2001) (asserting that "the assumed superiority of common law to civil law represents a gross oversimplification."). Instead, Coffee puts forth the possibility that norms may help explain differences in performance across countries. See id.

[162] Nenova writes: "The [takeover protection] index averages the following 0/1 indicators of investor protection during a corporate control contest: (1) 1 if the legal code requires a control contestant to treat all classes in a 'fair and equitable' manner, in particular to offer all classes the same tender price, zero otherwise (2) 1 if the legal code requires a buyer of a large or majority block to pay minority shareholders the same price as for the block shares, zero otherwise (3) 1 if the takeover code precludes a small minority from holding up a majority shareholder with 90% or more of the corporate shares, zero otherwise, and (4) the level of ownership at which a dominant vote-owner is legally required to make an open market bid for all shares. The last component is re-scaled from 0 to 1, with lower thresholds (e.g., 10%) decreasing the takeover rules index, and a value of zero if there is no such provision in the law." Id.

[163] Nenova writes: "The index of power-concentrating Charter provisions averages six 0/1 indicators that have an impact on the voting power distribution of corporate shareholders." Id.

[164] Nenova uses the Shapley Value (a similar manner as in Zingales (1994)) as a measure for the probability of a takeover. As alternative measures for the probability of a takeover, Nenova uses "a Herfindahl index of ownership concentration, the voting stake of the incumbent dominant vote-owner, the cumulative voting stake of the five largest vote-owners, and a majority ownership dummy" and finds similar results. Id.

[165] Among other things, Nenova reports that the higher her measure of minority investor-friendly takeover rules, the lower the vote value (and therefore the private benefits of control). Similarly, the more power-concentrating the charter provisions, the higher the vote value. Using LLSV (1998)'s measure for rule of law, efficiency of the judiciary, and antidirector rights, Nenova also uncovers a significant relationship between stronger protections for minority investors and a lower vote value.

2. Criticisms of Law and Finance

The LLSV and related studies demonstrate a significant relationship between stronger legal protections for minority shareholders and creditors and the size of the external capital markets, the absence of controlling shareholders, higher dividend payments, increased valuation, and reduced private benefits of control. What remains somewhat unclear, however, is the causality of the relationship. It may be possible, for example, that a greater level of financial development (and the corresponding larger population of investors) may actually cause the enactment of laws providing for stronger investor protections. LLSV respond that while current measures of investor protections may be endogenous with financial development, the legal origin of a country (rooted sometimes hundreds of years in the past) is more exogenous and therefore less subject to causality-related criticism.[166]

One way to cast light onto the causality issue is to focus on the aspects of the common law that may generate good investor protection regimes. LLSV (1999) investigate the connection between legal origins and the quality of government in a particular country, using a large cross-section of countries (varying from 47 to 152 countries depending on their specific test).[167] LLSV estimate a series of regressions relating various measures of government quality[168] (as the dependent variable) against economic,[169] political (including legal origin),[170] and cultural determinants[171] (as the

[166] See LLSV, supra note 85, at 8-9 (noting that "because legal families originated before financial markets had developed, it is unlikely that laws were written primarily in response to market pressures.").

[167] See Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert Vishny, The Quality of Government, 15 J. L. Econ. & Org. 222, 234 (1999).

[168] LLSV use several measures of governmental quality (drawn primarily from the 1990s), including proxies for the degree of government intervention, the level of government efficiency, the output of public goods, the size of the public sector, and the level of democracy and political rights. See id. at 234-38.

[169] To measure for economic well-being, LLSV use a country's per capita income. See id. at 244-45.

[170] As another proxy for political determinants, LLSV look to the level of ethnic heterogeneity in a country. See id. at 230-31 (noting that "[i]n 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….").

[171] For culture, LLSV hypothesize that "hierarchical religions" (including Catholicism, and Islam) result in inferior quality governments. See id. at 232-33.

explanatory variables).[172] LLSV report that legal origin has a significant impact on the quality of government performance. Countries with a socialist legal tradition are generally more interventionist, less efficient, and provide for poorer infrastructure quality (although the level of education is relatively high) compared with common law countries.[173] French civil law countries are also more interventionist, have less efficient governments and produce lower levels of public goods compared with common law countries.[174]

Mahoney (2001) puts forth a possible theoretical link between common law countries and economic success.[175] He argues that while common law and civil law countries both provide for enforcement of contracts and property rights (as well as providing compensation for tortuous harms),[176] common law countries evolved out of a tradition of fragmenting governmental authority designed to secure such rights from governmental interference.[177] To test the relationship between legal origin and overall economic growth, Mahoney performs an OLS regression using the average annual rate of real per capita GDP growth (measured from 1960-92) for a sample of 102 countries

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[172] See id. at 244-261. LLSV also alternatively include controls for the geographical latitude of the country. See id. at 244.

[173] See id. at 261. LLSV state that the results with respect to socialist countries is "consistent with the obvious political story that socialist policies serve to enhance the power of the State." Id. at 261.

[174] See id. LLSV also report that "the German and Scandinavian evidence – while consistent with the political theory of institutions – is not nearly as striking as that for countries using French law." Id. at 262.

LLSV report that per capita income has a strong (and statistically significant) positive relationship with government performance. See id. at 245. They note, nevertheless, that the causal relationship between higher per capita income and good government performance is unclear. See id. LLSV relate that ethnic heterogeneity is negatively and statistically significantly correlated with government performance in regressions excluding per capita income and geographical latitude. See id. The statistical significance of the relationship, however, disappears once per capita income and latitude independent variables are added to the regression. LLSV also provide evidence from their regressions that the fraction of Catholic and Muslim affiliations with the population of a country correlates significantly with lower levels of government performance; the significance of the relationship, however, disappears when per capita income and latitude variables are introduced into the regressions. See id. at 262. LLSV conclude that their results provide strong evidence for the view that "[g]overnment performance is surely in part determined by economic development, but it is also shaped by systematic variation in the histories of individual countries." Id. at 265.

[175] See Paul G. Mahoney, The Common Law and Economic Growth: Hayek Might be Right, 30 J. Leg. Stud. 503 (2001).

[176] See id. at 506.

[177] See id. at 507. In particular, Mahoney notes that the judiciary in common law countries enjoy greater authority and independence than the judiciary in civil law countries (particularly under the French civil law tradition). See id. at 511-12. Mahoney, nevertheless, notes that the civil law traditions in Germany and Scandinavia differ from France in providing for a stronger judicial system and corresponding protection of individual liberty. See id. at 513.

as the dependent variable.[178] In the regression, he includes a dummy variable for whether the country derives out of a common law tradition among other explanatory variables.[179] He finds that coming from a common law country increases the rate of real per capita GDP growth by 0.71% annually compared with non-common law countries (significant at the 1% confidence level).[180]

Another way to respond to the question of causality is to examine the precise mechanism through which legal protections might generate increased financial development (and thereby economic growth).[181] Levine (1999) examines the link between legal protections and financial intermediary development within a country, using a sample of 77 countries over the 1960 to 1989 time period.[182] Levine estimates a series of regression models with financial intermediary development as the dependent variable. For each regression, he includes a measure of creditor rights[183] as an explanatory variable as well as a control for the log of per capita income. Levine reports a statistically significant relationship between higher levels of creditor protection and greater levels of financial intermediary development.[184] Levine then re-estimates his models using a measure

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[178] Mahoney's sample of countries excludes Middle Eastern countries as well as socialist countries. See id. at 514.

[179] Mahoney also includes the initial real per capita GDP, the initial rate of enrollment in primary education, the annual rate of population growth, and the average investment share of GDP. See id. at 515.

[180] See id. at 516. Mahoney performs additional specifications of his model including control for geographical region and religion among others and finds that the common law dummy variable again is correlated positively and significantly with higher economic growth. See id. at 516-17. Mahoney includes more direct measures of a country's legal protections for private rights – including judicial quality, security of property rights, and contract enforcement – using legal origin (common, French civil, and German civil with Scandinavian civil as the base case) as an instrumental variable to control for endogeneity problems. See id. at 521-22. He states that "[t]he instrumental variables results also suggest that the strong association between secure property and contract rights and growth is causal, and not simply a consequence of simultaneity." Id. at 523.

[181] Other studies link the strength of a country's institutional environment to growth. See Paulo Mauro, Corruption and Growth, 110 Q. J. Econ. 681 (1995) (finding that higher levels of corruption in a country has a statistically significant relationship with reduced investment and lower economic growth).

[182] See Ross Levine, Law, Finance, and Economic Growth, 8 Journal of Financial Intermediation 8, 12 (1999). Levine uses four indices of financial intermediary development: (1) the ratio of liquid liabilities (currency as well as demand and interest-bearing liabilities of bank and non-bank financial intermediaries) to GDP, (2) the ratio of bank credit to the sum of bank credit plus the domestic assets of the central bank; (3) the ratio of private sector credit to total domestic credit (not including credit to banks); and (4) the ratio of private sector credit to GDP. See id.

[183] Levine measures creditor rights based on the presence of an automatic stay rule on assets upon filing for reorganization, whether the incumbent managers are allowed to manage the firm pending the resolution of reorganization, and whether secured creditors are ranked first in the distribution of proceeds. See id. at 16.

[184] See id. at 17-18. The most significant relationship is between the priority order of secured creditors and financial intermediary development. See id. at 18. Levine re-estimates his regression models using the national legal

of the risk that the government may modify its contractual obligations[185] in place of the level of creditor rights protection as an explanatory variable. He reports a statistically significant positive relationship between lower contract risk and higher levels of financial intermediary development.[186] Levine lastly examines the relationship of financial intermediary development with overall real per capita GDP growth in his sample countries. The regression model he employs uses real per capita GDP growth as the dependent variable and financial intermediary development now as the explanatory variable.[187] He reports a positive and statistically significant relationship between financial intermediary development and real per capita GDP growth.[188] Levine concludes that "the results are consistent with the view that legal and regulatory changes that boost financial intermediary development will induce a rapid acceleration in long-run economic growth."[189]

Demirguc-Kunt and Maksimovic (1998) (DM) test the hypothesis that large financial markets and a strong legal environment result in firms turning to external markets more frequently

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origin (English, French, German, and Scandinavian) as instrumental variables to control for possible endogeneity between the creditor rights protections and financial intermediary development. He obtains similar qualitative results. See id. at 19.

[185] See id. at 20-21. Levine's measure of government contract risk is averaged over the 1982-1995 time period and is obtained from the International Country Risk Guide. See id. at 21 n.5.

[186] See id. at 22. Levine also examines the quality of information disclosed through company reports obtained from a Center for International Financial Analysis and Research study conducted in 1990. See id. Re-estimating his models using the disclosure quality measure instead of the creditor rights protection variable, Levine reports that disclosure quality is positively and statistically significantly related to financial intermediary development. See id. at 23-24.

[187] In addition, Levine includes a controls for, among others, initial per capita GDP, initial secondary school enrollment, degree of ethnic diversity, ratio of government consumption to GDP, the inflation rate, and the ratio of exports plus imports to GDP. See id. at 27. To control for possible endogeneity between financial intermediary development and real per capita GDP growth, Levine uses his various creditor rights, contract risk, and disclosure quality measures as instrumental variables (to create an "exogenous" financial development level measure). Levine also uses the country's legal origin as alternative instrumental variable to control for endogeneity. See id. at 29-30.

[188] See id. at 30-31.

[189] Id. at 33. In a separate paper, Levine also examines the relationship between legal protections for creditors and banking development. See Ross Levine, The Legal Environment, Banks, and Long-Run Economic Growth, 30 J. Money, Credit and Banking 596 (1998). Levine reports that the stronger legal rights for creditors and more rigorous enforcement (of contracts) are related significantly to the development of the private banking sector (measured by the ratio of "credit allocated by commercial and other deposit-taking banks to the private sector divided by GDP.") Id. at 598-604. Evidence also exists that German civil law legal origin promotes bank development. See id. at 604. Levine also calculates an exogenous measure of bank development using both the level of formal creditor protections and enforcement as well as legal tradition as instruments. See id. at 607-10. He reports that this exogenous level of bank development is related significantly to several different measures of economic growth (implying that bank development may help cause greater economic growth). See id.

to fund growth.[190] They first note that firms capable of financing growth internally will not be affected by the absence of external means of raising capital. Only firms that must turn to external capital sources to finance growth will face an inability to pursue all profitable investment opportunities.[191] DM compare the maximum possible growth without turning to external sources of financing (or with only limited external financing) as determined using a financial planning model against the actual observed growth across countries with different legal environments as well as differentially developed capital markets.[192] DM's data set consists of firms from 30 countries (consisting of both developed and developing countries).[193] DM find that in 24 out of the 30 countries, the level of observed growth for the majority of firms exceeds the level of growth possible through internal financing (assuming dividends payouts are maintained). For firms in such countries, some amount of external financing is thus required to achieve the level of observed growth.[194] DM then regress the proportion of firms in each country whose growth is in excess of the predicted internal growth rate (as the dependent variable) against the development of the country's stock market (measured as the ratio of market capitalization to GDP) and the level of

[190] See Asli Demirguc-Kunt and Vojislave Maksimovic, Law, Finance, and Firm Growth, 53 Journal of Finance 2107 (1998). In a related paper, Stijn Claessens and Luc Laeven present evidence that firms in a weaker law and order environment will tend not only to obtain less external financing but also to invest less in intangible assets (substituting into tangible fixed assets). See Stijn Claessens and Luc Laeven, Law, Property Rights, and Growth (working paper, 2001) (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=270644).

[191] See Demirguc-Kunt and Maksimovic, supra note 190, at 2109.

[192] See id. at 2110. The financial planning model DM use assumes that the assets to sales ratio remains constant. They also assume that the firm's profit rate per unit of sales remains constant as sales increase. Finally, they assume that the economic depreciation of assets is equal to the accounting depreciation reported in the firm's financial statements. Given these assumptions, DM are able to calculate a variety of growth rates based on whether (a) the firm must rely solely on internal financing and maintain its dividend, (b) the firm reinvests all its earnings and obtains enough short-term credit to maintain the ratio of short-term debt to assets, and (b) the firm does not pay dividends and obtains enough short-term and long-term debt to maintain a constant total debt to asset ratio. See id. at 2110 – 12.

[193] DM obtain their countries from IFC's Corporate Finance database as well as the Global Vantage database where the countries individually had at least 35 firms. DM's data from developed countries extends from 1983 to 1991. For developing countries, data extends from 1980 to 1988. See id. at 2114 – 15.

[194] For each country, DM use two other measures of possible growth (based on short-term and then both short-term and long-term sustainable debt financing) to calculate the proportion of firms where the observed growth requires additional external financing beyond sustainable short-term and long-term debt. See id. at 2116-17. They find that once short-term and long-term sustainable debt financing is taken into account, fewer firms require additional financing. See id.

market activity (measured as the stock market turnover ratio).[195] They also include a "Law and Order" score (based on the degree of legal protection for property rights in each country) as an independent variable in their regressions, among other variables.[196] They report from their regressions that a high score in the Law and Order variable is correlated with a high proportion of excess growth. Although subject to the criticism that their financial planning model may not accurately capture the ability of a firm to finance growth internally (and thus may either under or overestimate a firm's ability to grow through external financing),[197] their results nevertheless provide some evidence consistent with the hypothesis that a strong legal environment leads firms that require external financing to obtain funds.[198]

Wurgler (2000) also provides evidence on the mechanism through which strong investor protections benefit a country.[199] Wurgler examines 65 nonsocialist countries, tracking data on up to 28 three-digit ISIC manufacturing industries in these countries.[200] He develops a measure of investment growth in a particular industry (based on the "growth in industry gross fixed capital formation"[201]) as well as a measure of the amount of investment opportunities in an industry (based on the growth in value added within the industry).[202] For each country in his sample, Wurgler estimates a separate regression model relating investment growth as the dependent variable to

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[195] See id. at 2121.

[196] Among control variables, DM include the rate of inflation, the ratio of government subsidies to GDP, and the ratio of market values to book values as well as the growth rate of the real GDP per capita to control for differences in investment opportunities across countries. See id. DM also include two direct measures of a firm's use of external capital. These include the proportions of increases in total assets they find financed by long-term debt or newly issued shares. See id. at 2121.

[197] See supra note 192 (describing DM's financial planning model).

[198] See id. at 2123. DM also find that an active stock market (with a high turnover of stock) is positively correlated with excess growth – but that market capitalization of the stock market variable is not significant. See id. As well, the coefficient on the size of the commercial banking sector variable is also positive and significant. See id.

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

[200] ISIC-3 manufacturing industry codes are an international classification standard related approximately to Standard Industrial Classification 2-digit industry codes. See id. at 191.

[201] Id. at 194.

[202] Wurgler defines value added as "the value of shipments of goods produced (output) minus the cost of intermediate goods and required services (but not including labor), with appropriate adjustments made for inventories of finished goods, work-in-progress, and raw materials." Id. at 191.

investment opportunities as the explanatory variable.[203] Wurgler then uses the elasticity coefficient resulting from the model as a measure for the ability of the country to shift investment resources quickly into industries that have growth opportunities. He tests whether the presence of a developed financial market (measured using the ratio of a country's equity and credit markets over GDP) is correlated with this elasticity coefficient, finding a significant positive correlation – consistent with the hypothesis that countries with more developed financial markets are better able to exploit investment opportunities.[204] To assess the mechanism through which a financial market results in better capital allocation, Wurgler estimates a series of regression models using the country-level investment elasticity measure as the dependent variable. He includes a measure of minority shareholder and creditor protection derived from LLSV (1998) as an explanatory variable.[205] Wurgler reports a significant and positive relationship between legal protections and the elasticity of investment.[206] In particular, stronger legal protections seem associated with a greater ability to block additional investments in declining industries. Wurgler speculates that "[t]his could reflect the

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[203] See id. at 194 ("I assume that optimal investment implies increasing investment in industries that are 'growing' and decreasing investment in industries that are 'declining.'"). Wurgler notes a possible reverse causality issue to the extent investment causes contemporaneous changes in value added. He notes, however, that "[p]rior literature has found . . . that fixed capital does not become productive until an average of two years after the investment decision has been made . . . ." Id. at 195.

[204] See id. at 202. Wurgler confirms the correlation finding with several different regressions (using the country elasticity measure as the dependent variable and various measures of financial development as the explanatory variables). See id. at 202-04. He also divides the industries in his sample between growing and declining industries and finds that a financial development is associated with "both with increasing investment in growing industries and with decreasing investment in declining industries." Id. at 205.

[205] The measure is equal to a score from 0 to 10 based on the sum of LLSV (1998)'s antidirector rights and creditor rights scores multiplied by LLSV's rule of law measure. See id. at 198. Wurgler also uses a measure of the synchronicity of stock prices within a country (from Morck, Yeung, and Yu (2000), *infra* note 217) as an explanatory variable under the theory that a lower synchronicity measure indicates more firm-specific information being incorporated into stock prices. See id. at 207. In addition, the fraction of an economy's output derived from state-owned enterprises is also used as an explanatory variable under the assumption that state intervention will result in more politically determined allocation of capital. See id. at 208-09.

[206] See id. at 209. Wurgler reports a strongly negative (and significant) relationship between synchronicity of prices in a market and the elasticity of investment, providing evidence that "stock market prices are useful guides to investment and not entirely an economic sideshow." Id. at 207. He reports a significant and negative relationship between state-ownership enterprises and the elasticity of investment. See id. at 209. When a control for the level of financial development and per capita GDP are added to the model, however, the statistical significance of the state-owned enterprises and legal protection coefficients disappears. See id.

greater ability of minority investors to exert pressure to invest efficiently in countries where their rights are protected, pressure that limits the inefficient reinvestment of free cash flows."[207]

Johnson, Boone, Breach, and Friedman (2000) (JBBF) examine whether the impact of the Asian financial crisis (from 1997-98) among the so-called "emerging market" countries was more severe in countries with weaker corporate governance protections for investors.[208] They construct a simple model of the incentives of managers to engage in expropriation under which managers weigh the benefits from keeping resources within a firm (based on the rate of return within the firm) against the costs of engaging in expropriation (higher corporate governance protections lead to greater costs for opportunistic managers). The key insight from their model is that managers with substantial ownership in a firm may rationally choose to keep money in the firm so long as the expected return from the investment is high enough. But as a firm's returns drop, managers may become more inclined to engage in expropriation. Thus, JBBF hypothesize that "institutions matter most when an economy experiences a downturn."[209] Implicit in their model is the assumption that managers removing assets from the firm do not reinvest the assets in enterprises with similar returns but rather simply consume the assets.[210] Where managers in fact re-invest expropriated assets in other enterprises providing a similar rate of return as the managers' firm, the incentives of managers to engage in expropriation of private benefits will not vary with firm performance.

To test their hypothesis, JBBF examine 25 emerging market countries.[211] They estimate regression models with dependent variables based on two measures of the severity of financial crisis

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[207] Id. at 209.

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

[209] Id. at 151.

[210] See id. at 145.

[211] See id. (noting that "our sample of 25 includes almost all the countries regarded as 'emerging' by the International Finance Corporation, The Economist, J.P. Morgan, Goldman Sachs, and Flemings Research.").

(the drop in the nominal exchange rate and the drop in stock market valuation).[212] For explanatory variables, they include (in separate regressions) variables related to the efficiency of the legal system, corruption, rule of law, and the strength of corporate governance taken largely from LLSV's prior studies.[213] They report that judicial efficiency, reduced corruption, and rule of law are positively and statistically significantly correlated with a reduced drop in the nominal exchange rate.[214] In addition, they report that LLSV (1998)'s measure of antidirector rights used in interaction terms with judicial efficiency, corruption, and rule of law are positively and statistically significantly related to a reduced drop in the normal exchange rate.[215] JBBF conclude that their "evidence suggest that corporate governance in general, and the de facto protection of minority shareholder rights in particular, matters a great deal for the extent of exchange rate depreciation and stock market decline in 1997-98."[216]

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[212] JBBF use two measures of financial crisis: (1) the change in the nominal exchange rate from the end of 1996 to January 1999 (approximating the end of the Asian financial crisis) and (2) a measure of the largest drop in stock market valuation (in 1998) for the emerging market countries. They also use values at the end of 1998 as an alternative end point in calculating changes in stock market valuation. Their models assume that the rates of return across firms in different countries are identical and that controllers of firms have identical levels of ownership interests. In addition, the models assume that the magnitude of the financial shock affecting each country is identical. With these assumptions, differential levels of financial performance during the crisis will turn (under their model) on the level of investor protection across countries. See id. at 153.

[213] See id. at 163. In addition, they include a control for macroeconomic differences across countries (the country's foreign exchange reserves) and a dummy variable for whether the emerging market country is from East Asia. See id. at 173.

[214] See id. For the regression models using the change in stock market values as the dependent variable, JBBF report that while the judicial efficiency variable is not significant, the reduced corruption, rule of law, and corporate governance variables are all positively and statistically significantly correlated with a lower drop in stock market value. See id. at 181. Introducing a control for the log GDP per capita results in a loss in statistical significance for all of the explanatory variables (although they remain jointly significant). See id. at 184. JBBF use a measure of corporate governance develop by Flemings Research for emerging markets in which "country specialists [are asked] to consider 'the disclosure of information, transparency of ownership structures, management and special interest groups, adequacy of the legal system, whether the standards that are set are actually enforced, and if the boards of companies are independent and the rights of minority shares are upheld.'". Id. at 163.

[215] See id. at 174. On the other hand, when JBBF introduce the log of GDP per capita (measured for 1994) as a control variable, the judicial efficiency variable loses statistical significance. They also write that the "corruption, rule of law, and corporate governance [variables] are jointly significant with log GDP per capita (none of the variables are individually significant.)" Id. at 179. JBBF speculate that: "These results suggest that while corporate governance variables have some effects independent of the level of non-financial institutional development, there is also substantial overlap." Id. at 179.

[216] Id. at 185.

Morck, Yeung, and Yu (2000) (MYY) examine the degree with which stock prices move together in an economy.[217] The more synchronicity in stock price movements, they argue, the less that changes in stock prices within an economy reflect firm-specific information (resulting in less informative stock market prices). They report that synchronicity of stock market prices is strongly negatively correlated with the per capita GDP of countries. MYY then fit a series of regression models with the logistic transformation of various measures of stock price synchronicity as the dependent variables.[218] The models include the log of per capita GDP as an explanatory variable.[219] They report that the log of GDP remains negatively and significantly related to synchronicity.[220] MMY then hypothesize that, among other explanatory factors, the presence of strong legal protections for property rights may explain lower levels of synchronicity. Weak legal protections, for example, may decrease incentives on the part of arbitrageurs to research firm-specific information, creating a "space" for noise trading and thereby resulting in more correlated market-wide movements in stock prices.[221] To test this hypothesis, MMY re-estimate their regression for synchronicity, adding a measure for good government.[222] They report that good government is

[217] See Randall Morck, Bernard Yeung, and Wayne Yu, The Information Content of Stock Markets: Why Do Emerging Markets Have Synchronous Stock Price Movements, 58 J. Fin. Econ. 215 (2000).

[218] See id. at 229-39. MYY use two measures of synchronicity: (1) "the fraction of stocks moving together in the average week of 1995" and (2) "the average R2 of firm-level regressions of bi-weekly stock returns on local and U.S. market indexes in each country in 1995." Id. at 223.

[219] A control for the log of the number of stocks listed (to control for the size of the market), among other controls, is also added to the model. See id.

[220] See id.

[221] See id. High levels of synchronicity may also represent the risk (highly correlated across all stocks) of government expropriation. See id. at 242-43. MMY also speculate that weak legal protections may allow firms to engage in "income shifting" where strong firms would subsidize weaker firms in a group, leading to more correlated stock prices. Id. at 254. MMY also write that: "Rational risk arbitrageurs, knowing that they cannot predict where firm-specific abnormal profits will come to rest, should thus invest fewer resources in predicting firm-specific abnormal profits, and focus on market-wide plays." Id.

[222] MMY's good government measure is based on the sum of LLSV (1998)'s corruption, risk of expropriation of private property, and risk of government repudiation of contracts measures. See id. at 243.

negatively and significantly related to synchronicity – consistent with their "create space" hypothesis.[223]

Limited support exists therefore that greater legal investor protections (and enforcement) lead to financial intermediary development, increased external financing (on the part of companies that require such financing), a greater capability on the part of firms to exploit investment opportunities in a country, an enhanced ability to withstand economic downturns (as in the Asian financial crisis), and more informative securities market prices. Despite such support, more anecdotal and historical evidence cast a less supportive view on the causal link between increased legal investor protections and financial development.

Addressing the causality issue, Cheffins (2000) provides one response to the law matters school: it did not in Great Britain.[224] Cheffins notes that Great Britain and the United States are the two most prominent examples in the world today of countries with dispersed ownership corporations. Cheffins 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.[225] While the English judicial system offered a stable and honest means of dispute resolution,[226] Cheffins argues that other aspects of the British legal system did not provide

[223] See id. at 244-45. MMY also examine whether a "threshold" effect exists in the impact of good government on synchronicity. After dividing up their sample of countries into two groups based on the mean of the good government score, MMY find that synchronicity in countries with low good government scores is not correlated with the log of per capita GDP or with good government. See id. at 251. They interpret this result as "consistent with the existence of a threshold level of institutional development associated with relatively asynchronous stock pricing." Id. MMY also report that in countries with above-average good government scores, synchronicity is negatively correlated with good government, "though this effect is significant only in one-tailed tests." Id. at 251.

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

[225] See id. at 466.

[226] See id. at 468-69.

much protection for minority investors through most of the early 20th century.[227] 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.[228] 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.[229] While the legal regime in Great Britain eventually provided increased levels of minority investor protection—particularly in the form of disclosure requirements—Cheffins concludes that "[o]n balance, however, the law probably did not have a major impact on the shape of the U.K.'s system of ownership and control."[230]

Coffee (2001) also questions the causal relationship between legal origin and economic performance.[231] Coffee writes that: "[T]he cause and effect sequence is backwards. Much historical evidence suggests that legal developments have tended to follow, rather than precede economic change."[232] For evidence, Coffee relates evidence of a growing present day "equity culture" in Europe without accompanying legal reform or a wholesale move toward common-law standards.[233] Coffee then examines the historical growth of public securities market in the U.S. and the U.K. for further support of his thesis. 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.[234] Despite the lack of a minority investor-friendly legal environment, both the U.S. and the U.K. successfully developed liquid and thick securities markets. In the case of the U.S.,

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[227] Among other things, Cheffins mentions voting rights, preemptive rights, the duty of loyalty, derivative suits, appraisal rights, and insider trading as areas where minority investors enjoyed few legal protections. See id. at 469-71.

[228] See id. at 472-73.

[229] See id. at 473-75 (noting the the LSE would "make 'searching' inquiries concerning a proposed share offerings and the personnel connected with the company.").

[230] Id. at 483.

[231] Coffee, supra note 94.

[232] Id.

[233] See id. at 12-19.

[234] See id. at 25.

Coffee points to the need on the part of railroads for capital as the driving engine behind financial innovation.[235] 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.[236] In comparison, Coffee describes the history of the Paris Bourse as one filled with a common theme of strong government intervention.[237] Coffee writes that "the natural consequence of this intrusive governmental regulation of private economic activity was arguably to stifle innovation and, in particular, any effort at self-regulation."[238] Coffee also describes the experience of German securities markets as one involving a high degree of "antagonist" government intervention.[239]

Not only may causality run the opposite direction from financial development to the creation of legal investor protections, but other exogenous factors may exist that determine both the level of legal protections (and enforcement) and the degree of financial development.[240] Licht,

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[235] See id.

[236] See id. at 34-39. Coffee notes that several path dependent factors may have led the NYSE in particular to innovate through the provision of investor protections. Among other factors, Coffee contends that the NYSE's limit on the number of broker members "encouraged the growth of large, diversified financial services firms…that had a stronger reason to favor self-regulation that protected the value of its seats." Id. at 35. As well, the NYSE's fixed commission structure led the NYSE to define itself as the exchange for primarily high-volume, high-quality issuers, segmenting the securities market in the U.S. by quality. See id. at 36.

[237] See id. at 45-51 (observing that "knowing the historic French tendency toward centralization and strong government regulation, the ideal of self-regulation may have seemed both alien and infeasible to them—if it were ever considered at all."). Coffee notes that the Paris Bourse was "a publicly administered monopoly, and its *agents de change* had the status of civil servants." See id. at 46. In its role as a monopoly, the Paris Bourse then became "subject to an immense, self-imposed handicap: The Bourse's agents de change were permitted to act as commission brokers only and never to function as dealers or principals" reducing the liquidity available on the Bourse. Id. at 46. Coffee also details how the Société Générale de Crédit Mobilier, an investment bank founded under Napoleon III, eventually failed "not from a normal financial collapse, but rather from a liquidity crisis occasioned by the government's refusal, prodded by the Bank of France, to allow Crédit Mobilier to issue additional debentures." Id. at 46-47.

[238] Id. at 50.

[239] Id. at 52. As one example, Coffee relates how the German legislature, in response to price manipulation scandals involving the German commodities markets, instituted reform that retarded the development of the markets. See id. at 56 (noting that "the process seemed to anticipate the same angry legislative response that later occurred in the United States following the crash of 1929, culminating in the enactment of the federal securities laws in the early 1930s. The difference was that the German legislation effectively eclipsed the market.").

[240] See also Coffee, supra note 161, at 2155-56 (suggesting that "specific legal protections identified by [LLSV] are really proxies for some deeper, but hidden, characteristic of common law legal systems").

Goldschmidt and Schwartz (2001) (LGS) argue that culture and not the background legal tradition provides a better explanation for differences in investor protections across countries.[241] LGS use surveys of urban school teachers from different nations to determine the cultural score for each nation.[242] Based on the surveys, they partition countries into six cultural groupings (English Speaking, Western European, Eastern European, Far Eastern, Latin American, and African).[243] Using LLSV (1998)'s antidirector rights score for minority investor protections in a country, LGS then examine whether cultural groupings better explain variation in the antidirector rights score. In comparing common law against civil law countries from the Far Eastern cultural group, LGS report that the antidirector rights score is significantly higher for the common law subset of countries, consistent with the hypothesis that "legal origin dominates cultural affiliation with regard to anti-director rights".[244] Examining creditor rights, on the other hand, LGS find more support for their cultural hypothesis. Using LLSV (1998)'s creditors right score for individual countries,[245] LGS report that outside of the Far Eastern cultural region no differences in creditor protections exist

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[241] See Amir N. Licht, Chanan Goldschmidt, and Shalom H. Schwartz, Culture, Law, and Finance: Cultural Dimensions of Corporate Governance Laws (Working Paper 2001) (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=277613). They write that "[c]ultural values represent the implicitly or explicitly shares, abstract ideas about what is good, right, and desirable in a society." Id. at p. 6. See also Rene M. Stulz and Rohan Williamson, Culture, Openness, and Finance (working paper, 2001) (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=263507) (relating evidence that "a country's principal religion helps predict the cross-sectional variation in creditor rights better than a country's openness to international trade, its language, its income per capita, or the origin or its legal system."). Stulz and Williamson, however, do not find evidence that religion are language is more important than a country's legal tradition (common law versus civil) in explaining shareholder rights. See id.

[242] 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." LGS, supra note 241, at 11. The surveys involve a ranking of 45 values that have common meaning across cultures. From the survey rankings, they then assign country scores for a number of different cultural value dimensions. The dimensions are as follows: harmony, embeddedness, mastery, affective autonomy, intellectual autonomy, and egalitarianism. See id. at 11-12.

[243] See id. at 12.

[244] See id. at 20. LGS also report that English Speaking countries (all of which are common law countries) have the highest mean antidirector rights score. See id. at 19. LGS, nevertheless, resist the hypothesis that legal origins dominate cultural factors, stating instead that "in a separate work we find that general compliance with formal legal rules (a 'law and order' tradition) in the East Asian cultural region is significantly lower than in English speaking and Western European countries. This finding could indicate that company law on the books plays only a minor role in determining shareholder protection in practice in East Asian countries." Id. at 22.

[245] See supra notes 97-103 and accompanying text.

among the other regions despite differences in legal origin.[246] LGS note that "[m]ost of the common law countries in LLSV's sample that score very high on [creditor rights] belong either to the Far Eastern or to the African cultural regions."[247] While it is unclear why culture should matter more for bondholders in contrast with stockholders, LGS's results nevertheless cast some doubt on the importance of legal regimes (as compared with most culture-based factors).

Finally, even if causality does in fact run from the law to financial development, LLSV and others may focus on the wrong areas of the law. Coffee (1999a) 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.[248] Coffee points out that the U.S. and U.K., both common law countries, are quite different in the enforcement mechanisms employed to protect investors and the level of judicial activism.[249] As well, despite their different recent economic experiences,[250] both the Czech Republic and Poland come from the same legal tradition based on German civil law.[251] Instead, Coffee emphasizes the importance of securities market regulation noting 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.[252] As the Article discusses later,[253] however, evidence exists that given the choice, many issuers within Europe simply opt for their own private level of securities disclosure (above that of more formal legal securities disclosure requirements), rebutting at least in part the significance of

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[246] See id. at 22.

[247] Id. at 23. LGS also study the relationship between anti-director and creditor rights and the cultural value dimensions of Harmony and Uncertainty Avoidance, finding a high degree of correlation. See id. at 30.

[248] See Coffee, supra note 4.

[249] See id. at 6-7. Coffee notes that despite formal legal differences (including the possibility of a class action and contingency fees only in the U.S.), the U.S. and U.K. may have experienced "functional convergence". Id. at 8.

[250] See infra text accompanying notes 421-426 (describing Poland's relatively benign experience with privatization compared with the Czech Republic).

[251] See id. at 16.

[252] See id. at 17. Coffee also notes that "international convergence is today proceeding more rapidly at the securities market level than at the corporate level." Id. at 9.

[253] See infra text accompanying notes 400-405.

securities regulatory protections in Europe. Moreover, corporate law still remains important as a direct impediment to managerial self-dealing and other forms of opportunism. Coffee's point that puzzles remain why the specific legal provisions that LLSV focus upon should matter for investors (compared with other perhaps more salient protections), nevertheless, remains valid.[254]

In summary, while statistical evidence provides support for the view that common law regimes may lead to a more conducive environment for capital markets and ultimately economic growth, anecdotal and historical-related evidence provides some reason to doubt this relationship. The causality between the legal environment and capital markets may in fact run both ways and development within a particular country may embody several successive "generations" of legal developments and capital market growth. Given the possibly complex relationship between the legal regime and capital market development, the next Part examines how policymakers should use the law matters empirical evidence in crafting policy reform.

III. Developing Strong Securities Markets

Even if we assume that strong protections for minority investors is causally related to financial development, policymakers then face a daunting problem: how to generate strong legal protections and even more importantly, the necessary institutions and norms behind such protections. Countries do not come with a clean slate but instead start with a pre-existing set of laws, institutions, and norms. Subsequent change may therefore only be feasible within the framework set under the country-specific environment (and thus follow path dependence).[255]

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[254] See supra note 94.

[255] See, e.g., Ronald J. Gilson, Corporate Governance and Economic Efficiency: When Do Institutions Matter?, 74 Wash. U. L.Q. 327, 329-30 (1996) ("Initial conditions, determined by fortuitous events or factors traditionally viewed as non-economic, such as culture or politics, can move the system down a particular path. Later deviation from that path may be extremely difficult despite the existence of alternatives that, absent transition costs, would be more efficient.").

Several approaches are available to policymakers in the face of path dependence (albeit with varying effectiveness). First, policymakers may attempt to change the formal legal regime directly within a particular country. Such a change may involve importing specific legal provisions modeled on the law of the United States and other countries. Country reform may also involve an attempt to adjust the norms of the country and to develop institutions to protect investors (both regulatory and private). Harmonization of legal protections across multiple countries also represents a type of legal change impacting all participating countries contemporaneously.

Both LLSV (1999) and Mahoney (2001) can be read as providing a somewhat pessimistic outlook for the prospects of civil law origin countries reforming their investor protections to spur financial development. Purely "surface" legal reforms that enact nominal protections for investors may not achieve much real protection in civil law countries with a longstanding tradition of government intervention and weak judicial protections for private orderings. LLSV (1999), for example, write that the French experience is consistent with the hypothesis that "the state-building intent incorporated into the design of the French legal system translates, many decades later, into significantly more interventionist and less efficient government, less political freedom, and evidently less provision of basic public goods."[256] To the extent culture is in fact at the root of differences in legal protections across countries, reform becomes even less likely.[257] Path dependence in legal regimes therefore may undermine the adoption of new legal rules wholesale from another country or through harmonization.[258] Section A discusses evidence on the efficacy of direct reforms aimed at corporate governance.

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[256] LLSV, supra note 271, at 261.

[257] See LGS, supra note 241, at 33. For an expansion on the cultural path dependence argument see Amir N. Licht, The Mother of All Path Dependencies: Toward a Cross-Cultural Theory of Corporate Governance Systems, 26 Del. J. Corp. L. 147 (2001).

[258] See Lucian Arye Bebchuk & Mark J. Roe, A Theory of Path Dependence in Corporate Ownership and Governance, 52 Stan. L. Rev. 127 (1999) (arguing that path dependence in countries will limit the amount of convergence in corporate law regimes); Black, supra note 6, at 840 ("The cultural preconditions for strong or weak securities markets can also be self-reinforcing. In a strong market, good disclosure and limited self-dealing become self-

Second, rather than focus on specific components of reform, policymakers may take a different approach and train their efforts on adjusting the competitive environment in which the country operates. Once regulators face competitive pressure—whether from product market competition in the industries in which domestic firms operate, competition in the financial markets, or from regulatory competition to the extent securities market participants have the ability to opt into different legal protections—competition itself will provide a strong force for change.[259] Section B assesses the desirability of increasing regulatory competition as a means of spurring countries to developing their own country-specific reforms aimed at increasing investor protections.

A. Evidence on Direct Reform Efforts

Direct reforms can take many different forms. Countries can choose to deploy legal protections transplanted from another country. Countries may also choose to harmonize their regulations with other countries seeking to establish a unified form of regulation. Changes in the background social norms and institutions perhaps hold out the most promise of changing ultimately how investor protections are implemented in a country (and ultimately how business is conducted). It is unclear, however, exactly how to shift a country's social norms and institutions. Commentators have suggested student exchanges with the U.S. and the development of new U.S.-style law and

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reinforcing norms because they are how most businesspeople behave, regulators can aggressively pursue the few departures from the norm, and there is political support for the funding to maintain the enforcement that reinforces the cultural norm. In a weak market, weak disclosure and extensive self-dealing become self-reinforcing norms.").

[259] Black and Coffee, for example, note that the presence of U.S. institutional investors in Great Britain affected the voting habits of British financial institutions. See Bernard S. Black and John C. Coffee Jr., Hail Britannia?: Institutional Investor Behavior Under Limited Regulation, 93 Mich. L. Rev. 1997, 2084 (1994). U.S. institutions that owned shares in British companies would—following their practice in the United States—routinely vote their shares. British institutions, on the other hand, had no such voting tradition. Despite this no-vote norm, Black and Coffee observed that British institutions are now casting their votes more frequently because "if they do not vote, foreign-held shares will carry disproportionate weight in the final tally." Id.

business schools within a country.[260] Educational reforms, however, may not be effective and will suffer from a significant lag even if effective.

Evidence exists, moreover, that imposing a new legal regime on another country is unlikely to provide effective legal reform.[261] The SEC, for example, for years engaged in a campaign to get countries around the world to outlaw insider trading.[262] Enforcement, on the other hand, has proven more elusive. Bhattacharya and Daouk (2002) provide evidence on the frequency and effectiveness of insider trading prohibitions across the world.[263] 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.[264] 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, Bhattacharya and Daouk also report a marginally significant and negative relationship with the cost of capital. Once a control for

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[260] See infra note 421 (noting a proposal to increase student exchanges between the U.S. and Russia). Black also advises that: "Another important long-term step, if reputational intermediaries are weak or few in number, is to establish or strengthen business schools (for investment bankers and accountants) and law schools (for securities lawyers and regulators)." Black, supra note 6, at 848. Black, nevertheless, recognizes that the payoff will take "decades". Id.

[261] On the other hand Coffee has written: "[W]here legal forces exist to protect the minority shareholder, an institutional and cultural infrastructure—composed of such important actors as security analysts, rating agencies, and business journalists—soon follows." See John C. Coffee, Jr., The Future as History: The Prospects for Global Convergence in Corporate Governance and Its Implications, 93 Nw. U. L. Rev. 641, 696 (1999).

[262] See Harvey L. Pitt & David B. Hardison, Games Without Frontiers: Trends in the International Response to Insider Trading, 55 Law & Contemp. Probs. 199, 204-06 (1992) (discussing how Switzerland and Japan both adopted insider trading prohibitions under pressure from the United States).

[263] See Utpal Bhattacharya and Hazem Daouk, The World Price of Insider Trading (forthcoming Journal of Finance, 2002) (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=200914).

[264] Bhattacharya and Daouk identify countries with a stock exchange through internet searches. They then determine the presence of insider trading laws and whether enforcement has ever taken place through inquiries made both to the stock exchanges and to government

the degree of financial liberalization of a country's equity market is included in the regression,[265] however, the coefficient on the presence of formal insider trading laws is no longer significant.[266] Bhattacharya and Daouk conclude "the establishment of insider trading laws…is not associated with a reduction in the cost of equity. It is the difficult part—the enforcement of insider trading laws—that is associated with a reduction in the cost of equity in a country."[267]

Moving outside of insider trading prohibitions, evidence exists more generally on the low efficacy of simply transplanting laws from one country into another. Pistor, Raiser, and Gelfer (2000) (PRG) 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.[268] PRG's sample of transition economies include Russia and primarily Eastern European countries tracked from 1990 to 1998. PRG first examine a

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[265] Bhattacharya and Daouk use a dummy variable for financial liberalization that equals 1 for the first month (and thereafter) after the official liberalization date obtained from Geert Bekaert and Campbell Harvey, Foreign speculators and emerging equity markets, 55 J. Fin. 565 (2000).

[266] Bhattacharya and Daouk also perform a series of panel time-series regressions with country fixed-effects using the natural log of the ratio of market volume to market capitalization (a proxy for liquidity) as the dependent variable. They report that both the presence and enforcement of insider trading laws are positively and statistically significantly related to higher levels of liquidity. As an additional test to control for risk differences across countries, they estimate a simplified international asset pricing model. Where insider trading does not have an incremental effect on the cost of equity, the authors note that the presence of insider trading prohibitions (and enforcement) should be orthogonal to the residuals of their model. They then perform a panel time-series regression with country-fixed effects using the residuals from the international asset pricing model as the dependent variable. They report that the coefficient on the presence of insider trading laws (used as an explanatory variable in the model along with controls for liquidity, liberalization, and foreign exchange factors) is statistically insignificant. The presence of at least one insider trading enforcement action, in contrast, has a negative and statistically significant effect on the cost of equity.

[267] See id. See also Arturo Bris, Do Insider Trading Laws Work? (working paper, 2000) (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=248417) (examining the ability of insiders to profit from trades based on inside information related to an acquisition). Bris employs a data sample of 5,099 acquisitions in 56 different countries and estimates a regression model with insider trading profits as the dependent variable. The model includes, among others, measures for the liquidity of the stock, the size of the target firm, and country characteristics (including the quality of the legal system and measures of shareholder protections used in LLSV (1998) and the location and religions of the country). From the regression model, Bris reports a statistically significant increase in insider trading profits with the enforcement of insider trading prohibitions. Bris hypothesizes that insider trading prohibitions may increase market liquidity, providing insiders a greater ability to disguise their trades and profit from insider trading. In contrast, Bris also reports a statistically significant negative relationship between the degree of enforcement toughness and the level of insider trading profits in jurisdictions that enforce insider trading prohibitions. Bris also reports that insider trading profits are higher in "(i) more corrupt countries, (ii) countries with less efficient judicial systems, (iii) countries where the enforceability of contract is harder." Id. Countries with a legal tradition stemming from France or Spain also have higher insider trading profits.

[268] See 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).

variety of indices designed to capture the level of formal legal protections for minority shareholders.[269] They report that from 1992 to 1998, the levels of all their measures of formal minority shareholder protection increase substantially from below the world average to above the average, primarily due to transplants.[270] To test whether formal legal provisions or legality is important to the development of capital markets, PRG then examine a number of measures of legality, including measures for (a) the rule of law,[271] (b) the effectiveness of corporate and bankruptcy law,[272] and (b) a survey of corporate opinions on "the ability of the legal system to protect private property rights and enforce contracts".[273] As a preliminary matter, PRG note that "the high levels of legal protection achieved by 1998 are not mirrored in similarly high ratings for law enforcement."[274] PRG then estimate an OLS model using the ratio of stock market capitalization to GDP as the dependent variable.[275] For explanatory variables, PRG use measures of legality as well as indices for the level of formal legal protection given minority shareholders.[276] 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.[277] They conclude that: "The most important lesson from this paper is that a key aspect of weak

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[269] PRG include indices related to the ability of shareholders to exert influence over a corporation, the ability of shareholders to exit the corporation (e.g., by selling their shares), the presence of legal restrictions against managers as well as restrictions aimed at controlling shareholders, and the level of stock market integrity (including, for example, whether a formal independent agency supervises the stock market).

[270] PRG also construct a number of measures for creditor rights and find a similar increase in the level of formal legal protections.

[271] PRG write that for the rule of law "we use an expert assessment reported annually for 1996-1998 by the Central European Economic Review." Id.

[272] PRG write that "the effectiveness index is taken from the EBRD Transition Report, which uses survey data to rank countries according to the effectiveness of legal reforms in the area of corporate and bankruptcy law." Id.

[273] Id. PRG write that "the [] index is taken from the World Business Environment and Enterprise Performance survey, implemented by EBRD in 20 transition economies during May-June 1999." Id.

[274] See id.

[275] They also run separate regressions using the ratio of private sector debt to GDP as the dependent variable. See id.

[276] To control for endogeneity between stock market capitalization and the level of legal protection, PRG use a two-stage least squares model with "the lagged values of the legal indices as instruments for the current level of law on the books."

[277] PRG, nevertheless, report that their variable for a country's stock market integrity ("measuring the quality of securities markets regulations") has "marginal significance".

corporate governance in transition – namely the absence of external finance – cannot be solved alone by even radical improvements in the legal framework for the protection of shareholder and creditor rights."[278]

Berkowitz, Pistor, and Richard (2000) (BPR) conduct a study to determine the importance of the path through which a country obtained its laws.[279] 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.[280] BPR then estimate a series of OLS models with the various LLSV measures for the strength of legality in a particular country as the dependent variables.[281] 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 (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. Moreover, the coefficients on the legal origin dummy variables were both small in magnitude and generally insignificant, supporting their hypothesis that the transplant effect is

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[278] Id. Bernard Black also argues that institutions necessary for strong securities markets are not easily transportable across countries. See Black, supra note 6, at 816-17 ("The most basic institutions--including culture and honest, competent courts, regulators, and prosecutors--are the hardest to transplant.").

[279] See Daniel Berkowitz, Katharina Pistor, and Jean-Francois Richard, Economic Development, Legality, and the Transplant Effect (Working Paper 1999) (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=183269).

[280] 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.

[281] 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.

stronger than the legal origin effect identified in the LLSV work in determining the level of legality in a country.[282]

Francis, Khurana, and Pereira (2001) (FKP) provide evidence that employing timely and transparent accounting standards alone may not result in greater development of financial markets.[283] Using a sample of 31 countries,[284] FKP first test the relationship between the degree of investor protection (as proxied through the country's legal origin) and a country's overall market capitalization and capital market liquidity, reporting that common law countries have significantly higher levels of market capitalization and liquidity.[285] FKP then link the degree of accounting timeliness and transparency and the demand for auditing services with a country's legal origins.[286] They estimate a series of OLS model with measures for accounting timeliness and transparency as well as measures for the demand for auditing services as dependent variables and a dummy variable for a civil law origin country as well as a control for a country's wealth (based on the country's GNP in 1990) as explanatory variables.[287] They report that civil law countries are significantly related to lower levels of accounting timeliness and transparency as well as a reduced demand for auditing

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[282] BPR also investigate the relationship between their transplant variables and economic development, estimating an OLS model with the log of GNP per capita as the dependent variable. Using a composite transplant variable, a measure of legality, and legal origin dummy variables as the independent variables in the model, they find that the transplant variable is not significantly related to the log of GNP per capita. Instead, legality itself is negatively and statistically significantly related. They conclude from this that the transplant effect they identify works only indirectly (through its impact on legality) to affect economic development.

[283] See Jere R. Francis, Inder K. Khurana, and Raynolde Pereira, Investor Protection Laws, Accounting and Auditing Around the World (Working Paper 2001) (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=287652).

[284] The 31 countries represent a subset of the 49 countries initially examined in LLSV (1998). Data limitations in the Global Vantage database limits their sample to the 31 countries they examine. See id.

[285] For stock market capitalization, FKP use the ratio of total stock market capitalization over GDP (measured in 1990). FKP measure stock market liquidity as the "total value of market trading for 1990, as a percentage of a country's gross domestic product..."

[286] FKP state that accounting timeliness "represents the degree to which a country's national accounting standards are accrual-based. Timeliness is measured using variables that represent the degreee to which national standards in a country depart from cash-based or tax-oriented rules, and hence is accrual-based and more likely to measure economic income in a timely manner." FKP also state that accounting transparency "is the extent to which accounting information is publicly disclosed, and is measured with a disclosure index developed by the Center for International Financial Analysis and Research". Id.

[287] FKP use two measures for the amount of auditing services provided within a country: (1) the country-level spending on auditing services and "the market share in a country held by the elite international Big-Five accounting firms". Id.

services. FKP then put forth the hypothesis that countries with higher levels of investor protections generate more developed capital markets with a larger clientele of outside investors. Such outside investors demand more accurate and timely accounting to keep tabs on inside managers, leading to more developed accounting standards. In contrast to FKP's hypothesis, causality may actually work in reverse: more timely and transparent accounting standards may help create the environment necessary to develop a robust capital market. To test causality, FKP focus on the subset of civil law origin countries. They estimate an OLS model with measures of financial market development (including market capitalization and liquidity) as dependent variables and a dummy variable for civil law origin as well as interaction terms between civil law origin and measures for accounting timeliness and transparency as well as auditor demand (all determined for 1990). FKP report that none of the interaction terms are significant, leading them to state that their findings "reject the conjecture that high-quality accounting (and enforcement through auditing) might substitute for weak investor protection in civil law countries." For robustness, FKP re-estimate their model using data taken from 1998 and interaction terms between civil law origin and measures for the extent to which companies within a country have adopted international accrual-based accounting standards.[288] Although evidence exists that a correlation exists between the relatively large fraction of firms that have adopted international accounting standards in Switzerland and Italy and larger market capitalization, no such association exists in the remaining 17 out of 19 civil law countries in their sample[289] – leading FKP to view international harmonization efforts in accounting rules (absent underlying changes in investor protection) with some skepticism.

In summary, policymakers have directed much effort toward implementing direct reforms within specific countries designed to bolster the legal protections provided for minority investors. Moreover, regulators across several countries (under the rubric of the International Organization of

[288] In particular, FKP focus on accrual-based IASC standards. See id.
[289] See id. at 23.

Securities Commissions and the International Accounting Standards Committee) have worked to implement harmonized accounting standards for use in cross-border listings.[290] The empirical results to date, however, cast considerable doubt on the efficacy of merely transplanting laws or imposing reform from top-down harmonization efforts. Such results are not surprising given the important interactions formal laws have with the institutions, norms, and enforcement apparatus in a particular country.

B. Regulatory Competition

The possibility of path dependence and the difficulty of affecting legal reform through transplants of formal legal systems, nevertheless, does not lead to the conclusion that certain countries (in particular, non-common law tradition countries) are doomed to low levels of investor protection and weak capital markets. Hansmann and Kraakman (2001), for example, argue against path dependence.[291] They point out that substantial world convergence on corporate law has already occurred: at the end of the 19th century the corporate form had become dominant in "every major commercial jurisdiction," providing for limited liability, shared ownership, and separate legal personality for a corporation among other things.[292] Looking at modern day convergence, Hansmann and Kraakman contend that increasing competition in product and financial markets will lead shareholder-oriented corporate governance "to win the competitive struggle on the margins, confining other governance models to older firms and mature product markets."[293] Hansmann and

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[290] See Samuel Wolff, Implementation of International Disclosure Standards, 22 U. Penn. J. Int. Econ. L. 91 (2001); see also SEC Concept Release: International Accounting Standards, Release Nos. 33-7801, 34-42430, 17 C.F.R. pts. 230, 240 (Feb. 16, 2000), available at http://www.sec.gov/rules/concept/34-42430.htm (decribing the SEC's position with respect to international accounting standards).

[291] See Henry Hansmann and Reinier Kraakman, The End of History for Corporate Law, 89 Geo. L.J. 439 (2001). But see notes 255-258 and accompanying text (discussing the presence of path dependence in corporate law).

[292] See Hansmann and Kraakman, supra note 291, at 439-40.

[293] Id. at 451. Hansmann and Kraakman contend that alternative models of corporate governance have failed (including manager, labor, and state-oriented models). See id. at 443-47. Hansmann and Kraakman also use the "force of logic" and argue that the greater efficiencies possible with a shareholder-oriented model of corporative governance

Kraakman also note that increasing public share ownership across the world creates an interest group in favor of shareholder-oriented corporate law.[294] Weingast (1995) similarly puts forth the theory that limited government—strong enough to protect private property rights but able to commit not to confiscate private wealth—is a requirement of a "thriving" market.[295] Weingast, in particular, argues that markets do well under a form of federalism where "political decentralization of economic authority [] induces competition among lower political units" and "federalism's restrictions [are] self-enforcing."[296]

Competition among countries, moreover, may not necessarily result in formal convergence over legal provisions across countries. Commentators have observed that functional convergence may arise instead – whereby formally different institutions and laws provide functionally similar protections for investors.[297] Gilson (1996) for example observes that: "Path dependency makes

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will lead to convergence. Id .at 449. The (recent) superior economic performance of countries following a shareholder-oriented model, they contend, may also lead to convergence. See id. at 450.

[294] See id. at 452-53. In response to the argument that insiders in countries with high levels of private benefits of control may resist a shift in the regime toward shareholders, Hansmann and Kraakman write "[t]he essentially feudal norms we now see in many patterns of industrial ownership will be displaced by social values that place greater weight on social egalitarianism and individual entrepreneurship, with the result that there will be an ever-dwindling group of firms dominated by controllers who place great weight on the nonpecuniary returns from presiding personally over a corporate fiefdom." Id. at 463.

[295] See Barry R. Weingast, The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development, 11 J. L. Econ. & Org. 1 (1995).

[296] Id. at 6. As evidence, Weingast points to China (among other examples) during the 1990s compared with Russia, stating: "Critical to China's economic success, the new decentralization affords local governments considerable discretion over economic policy. In many areas, officials have used this authority to create markets and entrepreneurial enterprises, and it is these areas that are experiencing the most significant growth." Id. at 22.

[297] Although detailed statistical evidence on the level of functional convergence is lacking, Kaplan (1994) provides some evidence on functional convergence between the U.S. and Japanese corporate governance systems. See Steven N. Kaplan, Top Executive Rewards and Firm Performance: A Comparison of Japan and the United States, 102 J. Pol. Econ. 510 (1994). Using a data sample of 119 of the largest Japanese industrial firms and 146 of the largest U.S. companies in 1980, Kaplan compares the sensitivity of top management turnover to various performance measures. See id. at 513-14. Kaplan reports that non-standard turnover in Japan (where the president does not remain a "representative" director) is significantly related with performance. See id. at 524. Similarly, CEO-turnover in the U.S. is significantly correlated with performance. See id. at 528. Using similar regressions for the turnover among the pool of top directors, Kaplan finds that both U.S. and Japanese firms are sensitive to performance; moreover, the sensitivities in the U.S. compared with Japan are not statistically different. See id. at 529. See also Steven N. Kaplan, Top Executives, Turnover, and Firm Performance in Germany, 10 J. L. Econ. & Org. 142 (1994) (providing evidence that outsiders become more active during periods of poor stock performance for German companies acting to change personnel in both the supervisory and management boards).

institutions matter, but selection acts to reduce the functional significance of path dependent institutional differences."[298]

The present amount of competition among countries is already considerable. Corporations compete in numerous product markets around the world. Competitive global capital markets allow money to flow to jurisdictions providing higher returns (and potentially value-increasing regulatory protections).[299] While products and capital are mobile, however, businesses (and labor) often are not. Businesses may seek to obtain the regulatory protections of another country through a securities offering in the desired country.[300] Nevertheless, the business will still remain under the jurisdiction of its home country and thus remain subject to duplicative and potentially conflicting investor-related regulation from the home country.[301] Moreover, businesses in certain countries remain subject the threat of governmental expropriation of firm resources.[302] Even where a business chooses to follow the laws of another country (through a securities listing in that country for example), investors seeking to apply the laws of the other country may face enforcement difficulties.[303] Rather than focusing limited political capital on generating direct reforms, therefore,

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[298] Gilson, supra note 255, at 334. See also Coffee, supra note 261, at 657 ("Functional convergence may well trump formal convergence, but the open question that [Gilson's] analysis leaves unresolved is how far functional convergence can proceed before it encounters inflexible legal barriers.").

[299] For an argument that competition from global securities markets has already impacted securities regulation inside the United States see James D. Cox, Premises for Reforming the Regulation of Securities Offerings: An Essay, 63-SUM Law & Contemp. Probs. 11 (2000) (stating that "competition is evident in nearly every decision the SEC has reached in the past two decades."). Coffee notes that in today's global economy, companies face pressure to achieve large scale economies, typically through equity mergers. See Coffee, supra note 261, at 677-78. Companies governed under regimes that provide only poor protection for minority investors then may face a disadvantage, lacking the ability to use their shares effectively to acquire other companies (to the extent their share price reflects the lack of such protections).

[300] For example, foreign companies that raise capital inside the United States must do so pursuant to the federal securities laws. For a discussion of the regulatory impact of different methods of accessing the U.S. capital markets see Coffee, infra note 305.

[301] Businesses, of course, may attempt to exit completely from a country. Nevertheless, following an exit strategy may require large transaction costs and result in a loss of access to (in-country) markets even where feasible.

[302] For an example see Bernard Black, Reinier Kraakman, and Anna Tarassova, Russian Privatization and Corporate Governance: What Went Wrong?, 52 Stan. L. Rev. 1731, 1735 (2000) ("In Russia, that environment includes a punitive tax system, official corruption, organized crime, an unfriendly bureaucracy, and a business culture in which skirting the law is seen as normal, even necessary behavior.").

[303] As well, public enforcement officials may be reluctant to enforce a country's laws on a foreign company where only foreign investors are harmed. On the other hand, to the extent a country's laws are valuable for investors, an

policymakers may wish to introduce more choice in the regulatory regimes available to companies. Harmonization, for example, may follow the model of securities regulation in the European Union (EU), providing a minimum floor of regulatory standards but then allowing firms portability in the regulations above this floor that apply to their securities offerings.[304] Jurisdictions (and private providers of investor protections such as securities exchanges) in a competitive regulatory environment will then tailor their regulatory offerings to attract new issuers (that desire strong protections to convince investors to part with their money at the highest possible price).

Providing for regulatory competition may not necessarily result in a race-to-the-top. A separating equilibrium may result as different issuers may desire varying levels of protections for their specific needs. For example, a large issuer with alternative means of bonding its credibility (including a long-term reputation) may not require as much formal regulatory protections compared with a startup company.[305] And, moreover, some regimes may seek to cater to already established companies with groups of controlling shareholders (or managers), resulting in weak investor

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issuer will have strong incentives to increase the likelihood of enforcement, through the placement of assets within the country for example. See, e.g., Stephen J. Choi, Assessing Regulatory Responses to Securities Market Globalization, 2 Theoretical Inquiries L. 613, 638-39 (2001). But see Black, supra note 6, at 830 (discussing the possibility of "depositing assets in an interest-bearing escrow account in that country that will be available to satisfy a court judgment" but then contending that such a strategy will "increase capital-raising costs" and only fractionally deter managers to the extent only the assets deposited represent only a fraction of the funds raised). Firms, nevertheless, may already have substantial (operational) assets in a number of different countries. Such firms, therefore, may credibly select from any one of these countries under a regulatory competition system.

[304] More radical proposals exist to allow full regulatory competition without a minimum floor. See Stephen J. Choi & Andrew T. Guzman, Portable Reciprocity: Rethinking the International Reach of Securities Regulation, 71 S. Cal. L. Rev. 903 (1998); Romano, supra note 50.

[305] See, e.g., Stephen J. Choi and Andrew T. Guzman, National Laws, International Money: Regulation in a Global Capital Market, 65 Fordham. L. Rev. 1855, 1874-82 (1997). Even with competition, home countries (and the exchanges within the home country) may enjoy some degree of "home field" advantage. See id. For an argument that competition may generate a separating equilibrium among securities exchanges (based on the level of investor protections provided) see John C. Coffee, Jr., The Coming Competition Among Securities Market: What Strategies Will Dominate? (working paper, 2001) (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=283822); see also Jonathan Macey and Hideki Kanda, The Stock Exchange as a Firm: The Emergence of Close Substitutes for the New York and Tokyo Stock Exchanges, 75 Cornell L. Rev. 1007 (1990) (making the argument that many functional substitutes exist for the various services offered through a securities exchange and that therefore exchanges operate in a highly competitive environment).

protection regimes, leading to more separation among regimes.[306] Nevertheless, to the extent competition at least opens up the possibility that new firms are able to obtain desirable levels of investor protections (even while leaving older firms behind), investors and society as whole are better off compared with the present mandatory system of regulation.[307]

Theoretical arguments exist, of course, against regulatory competition. In making their choice with respect to regulatory protections for investors, corporations may ignore the benefit to third parties.[308] In addition, corporations may attempt to hoodwink unsophisticated and uninformed investors that may place too low value on investor protections.[309] Regulatory competition may lead to a proliferation of different and incompatible disclosure standards.[310] Managers of corporations

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[306] Coffee, for example, has noted that controlling shareholders will resist any legal reform that shifts value away from the controlling shareholders and toward pre-existing minority shareholders. See Coffee, supra note 261, at 657-59.

[307] In the alternative, to assist some (if not all) firms interested in making the shift toward shareholder-oriented corporate law in a country where the status quo is not shareholder friendly, Hansmann and Kraakman suggest that the law may be applied on an optional basis "without disturbing the older, established firms by establishing separate [shareholder-oriented] institutions that apply only to new firms." Hansmann and Kraakman, supra note 291, at 464.

[308] See supra note 9 (discussing positive externalities from more accurate securities prices).

[309] See David S. Ruder, Reconciling U.S. Disclosure Policy with International Accounting and Disclosure Standards, 17 Nw. J. Int'l L. & Bus. 1, 9 (stating that "[i]t is difficult to imagine how an investor would be able to judge the effectiveness of different regulatory regimes, much less quantify that knowledge in a manner allowing the investor to change the purchasing or selling price of a particular security. ").

In the United States, the SEC has repeatedly stated its position that protection of investors is its primary purpose. See Arthur Levitt, *A Question of Integrity: Promoting Investor Confidence By Fighting Insider Trading*, 12(4) Insights 17, 18 (1998) (stating while Chairman of the SEC that "Investor protection is our legal mandate. Investor protection is our moral responsibility. Investor protection is my top personal priority."). A large part of the problem with securities is the large informational disadvantage that investors find themselves with respect to issuers. Reputational intermediaries (such as underwriters in a securities offering) provide one possible solution, bonding the credibility of an issuer with the intermediaries own good name. See, e.g., See Reinier H. Kraakman, Gatekeepers: The Anatomy of a Third- Party Enforcement Strategy, 2 J.L. Econ. & Org. 53 (1986); Stephen Choi, Market Lessons for Gatekeepers, 92 Nw. U. L. Rev. 916 (1998). Black, in response, has made the argument that "bogus investment bankers" may be able to free ride on the reputation of high quality intermediaries, reducing the incentive of all intermediaries to build up a good reputation. See Black, supra note 6, at 788-89. Note that Black's argument assumes that investors are unable to distinguish (at least to some degree) among the Goldman Sachs-type investment banks from other lesser-known intermediaries.

[310] See James D. Cox, Regulatory Duopoly in U.S. Securities Markets, 99 Colum. L. Rev. 1200, 1211-17 (1999) (arguing that different accounting standards may leave investors unable to make comparative judgments). It is important to note, however, that the world presently has no one standard form of disclosure. Moreover, nothing presents a standard from arising even in a world of competition. In the area of state competition over corporate law, Romano has made the observation that competition in fact has led to a standard – the law of Delaware. See Romano, supra note 50, at 2394. Moreover, private intermediaries may function to provide standardization. See id.

On a related note, Coffee (1999b) argues against more choice in the applicable securities regime for firms within the United States. See Coffee, supra note 261, 691-97. While recognizing the benefits of allowing foreign companies to choose U.S. style securities regulation through a listing on a U.S. exchange, Coffee nevertheless contends that "[f]irms listed on the same market have a greater independency". Id. at 691. In particular, Coffee notes that

may also seek to abuse any available choice through the selection of legal regimes that cater to the managers' own desire to extract private benefits of control.[311]

Despite his observation that market pressures resulted in the growth of private sources of investor protection in the United States and Great Britain during the late 19th century, Coffee (2001) also provides an argument in favor of direct and mandatory regulation.[312] He draws a link between "nascent" self-regulation and eventual mandatory regulation that codifies the earlier self-regulatory rules.[313] Coffee contends that self-regulation can only take a country so far. For Coffee, the evidence from LLSV's body of work demonstrates that "the persistence and growth of such markets are closely correlated with a strong system of regulation that sustains investor confidence."[314] Institutions with good initial private incentives to protect investors may lose this incentive over time as the institutions gain market power and become monopolists.[315] Coffee therefore asserts: "While markets can arise in the absence of a strong, mandatory legal framework, they neither function optimally nor develop to their potential in the absence of mandatory law that seeks to mitigate the risks of crashes."[316] Coffee, for example, notes that governments may enjoy a comparative advantage over private institutions in providing investigation, enforcement, and the provision of

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network externalities may exist when firms list on the same market. As more firms come under the same regulatory regime, inter-firm comparison becomes easier. Investors may more readily compare firms under the same accounting disclosure regime. See id. at 694. Coffee also notes that even if translation is possible between different regimes, such translation is often costly. See id. at 694 n.201. Similarly, allowing foreign firms to follow a reduced disclosure regime may result in a competitive disadvantage for home firms. Coffee adds: "In short, 'high-trust' markets are injured by the introduction of 'low-trust' firms." Id. at 696.

311 See Jeffrey N. Gordon, The Mandatory Structure of Corporate Law, 89 Colum. L. Rev. 1549, 1573 (1989) (discussing the problem of managers forcing firms in a mid-stream shift to reincorporate into a state corporate law regime providing laws more favorable to the managers); Lucian Ayre Bebchuk, Federalism and the Corporation: The Desirable Limits on State Competition in Corporate Law, 105 Harv. L. Rev. 1435, 1456-85 (1992) (arguing the state competition in corporate law will lead managers to reincorporate into jurisdictions providing pro-manager rules for "significantly redistributive issues").

312 See Coffee, supra note 94.

313 See Coffee, supra note 94, at 60.

314 Id. at 65.

315 See id.

316 See id. at 66.

sanctions (including criminal penalties).[317] Coffee ends then by walking a fine line. On the one hand, he applauds private ordering compared with the alternative of too stringent government intervention (in the case of 19th century Germany and France);[318] on the other, he remains skeptical of the market and argues in the end that maximization of shareholder value requires some form of government intervention in the form of mandatory regulation.[319]

Of course, government regulators themselves are not perfect. And those that advocate for more mandatory regulation must contend against arguments that regulators may seek their own private ends (and indeed may become captured by those they seek to regulate).[320] Moreover, regulators may make mistakes[321] and have a bias toward increasing the importance and size of their own regulatory function rather than maximize investor welfare.[322] As with most difficult theoretical questions, empirical evidence can often provide insights. Although international evidence on the value of regulatory competition is scarce, a large body of evidence from the value of state competition for corporate charters exists.[323] Indeed, the "good" corporate law to which LLSV and

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[317] See id. The fact that the government may have a comparative advantage in providing certain services, however, does not necessarily lead to the conclusion that government regulation must be mandatory. Through an opt-out regime, for example, governments may provide enforcement, among other services, only to those companies that desire such services. To cover the costs of such services, moreover, nothing stops governments from charging a fee. To the extent a company values receiving the "bonding" from having stringent government protections apply to their securities, the company will pay the fee willingly.

[318] See supra notes 237-239 and accompanying text.

[319] See id. at 76.

[320] *See, e.g.*, George J. Stigler, *The Theory of Economic Regulation,* 2 BELL J. ECON. 3 (1971); Gary S. Becker, *A Theory of Competition Among Pressure Groups for Political Influence*, 98 Q.J. ECON. 371 (1983). Regulators may also seek to maximize the size and scope of their agency (as a means of increasing their own influence).

[321] Romano, for example, writes: "One particularly egregious example of the SEC's problematic disclosure policies will serve to underscore the point that it would be a profound mistake to presume that the SEC gets things right. The SEC prohibited for decades the disclosure of projected earnings. Such information, however, is far more valuable to investors than the accounting information the SEC required, because stock value is a function of future cash flows not historical data. The SEC modified its position in 1979 to permit the disclosure of projections within a safe harbor rule, but even today the agency's approach is still quite guarded when it comes to such disclosures." Romano, supra note 50, at 2378-79.

[322] *See* WILLIAM A. NISKANEN, JR., BUREAUCRACY AND REPRESENTATIVE GOVERNMENT 36–42 (1971). See also Macey, supra note 11, at 924 (providing a public choice explanation for the SEC's continued existence despite its obsolescence).

[323] For a survey of state competition in corporate law that contends the evidence is consistent with the view that competition does not maximize shareholder welfare (in particular for takeover-related issues) see Lucian Bebchuk, Alma Cohen, and Allen Ferrell, Does the Evidence Favor State Competition in Corporate Law? (forthcoming California Law Review, 2001).

others point to (and encompassed within their antidirector rights measure)[324] is the product of regulatory competition among states within the U.S.[325] Although not conclusive, the empirical evidence points at least toward the possibility that greater levels of regulatory competition may serve as a more effective means of ensuring present (and ongoing) reform of investor protection related laws than efforts at direct changes in governmental policies and cultural norms.

1. Evidence from State Incorporations

Romano (1985) provides a test for why firms reincorporate into Delaware.[326] She starts with an examination of whether states in fact are responsive to changes in the corporate law of other states. Focusing on four statutory changes that took place during the 1960s (dealing with indemnification, mergers, appraisal rights, and antitakeover statutes),[327] Romano constructs a responsiveness variable based on the number of years it took for the state to adopt a statute (dated from the first state's adoption).[328] She estimates a univariate regression between the responsiveness variable (as the dependent variable) and the fraction that franchise taxes represents of total tax collection in the state (as the explanatory variable) determined during the 1950s to avoid endogeneity problems, finding a positive and statistically significant relationship – consistent with the hypothesis that states that depend more on franchise taxes are more willing to adjust their corporate law regime. Romano then shifts gears and focuses on why firms reincorporate. She collects a sample of 465

[324] See supra text accompanying notes 88-93 (describing LLSV's antidirector rights measure).

[325] But see supra text accompanying notes 248-252 (describing Jack Coffee's argument that securities regulation is more central that state corporate law in protecting investors). See also Coffee, supra note 161 (asserting the possibility that norms may help explain the difference in performance across countries).

[326] See Roberta Romano, Law as Product: Some Pieces of the Incorporation Puzzle, 1 J. L. Econ. & Org. 225 (1985). In a later work, Romano surveys the empirical literature related to reincorporation. See Romano, supra note 78, at 494-504.

[327] Romano reports that the number of states adopting provisions related to one of these four areas increases over time (after the first adoption by a state) according to a S-shaped diffusion curve. See id. at 234-35.

[328] See id. at 237.

firms that reincorporated after 1960.[329] Romano reports that 82 percent of the firms in her sample relocated to Delaware.[330] For each firm, Romano also collected information on their stated reason for relocation, including among others the desire to conduct an IPO, engage in a merger and acquisition program, and to obtain antitakeover protection. Romano then performed an event study gauging the stock market reaction to the first public announcement of different reincorporations depending on the stated motivation.[331] She finds that the market reaction is positive (even for antitakeover motivated reincorporations), but statistically significant only for merger and acquisition-related reincorporations.[332] Romano concludes that firms actively seek to reincorporate into Delaware and that Delaware is responsive to the needs of such firms.[333]

Daines (2001) takes a different approach in assessing the merits of state competition for corporate charters.[334] Daines constructs a large cross-sectional sample of 4,481 exchange-traded U.S. corporations between 1981 and 1996.[335] He focuses on the Tobin's q score as a metric for valuation.[336] Daines tests whether firms that incorporated in Delaware have a higher Tobin's q value compared with non-Delaware firms. He finds that Delaware firms have a significantly higher mean Tobin's q than firms located outside of Delaware. To control for other possible causes for different

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[329] See id. at 242-43.

[330] See id. at 244.

[331] See id. at 273-65.

[332] See id.

[333] Romano hypothesizes that Delaware provides a stable, predictable, and comprehensive set of corporate law rules. See id. at 280. The large number of firms already incorporated in Delaware, moreover, makes it more likely that Delaware courts will decide cases important for corporations. See id. at 277. Romano also makes the argument that the higher fraction that franchise taxes represents of Delaware's overall tax revenues bonds Delaware to being particular responsive to the needs of corporations. See id. at 280. Moreover, attorneys in Delaware that make a living off of incorporations provide an in-state political force to ensure that Delaware remains responsive. See id. For an argument that Delaware state corporate law in fact is indeterminate see Ehud Kamar, A Regulatory Competition Theory of Indeterminacy in Corporate Law, 98 Colum. L. Rev. 1908 (1998).

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

[335] Daines omits regulated utilities, banks, and financial firms "because the corporate governance of such firms differs due to significant federal regulation and because rules governing the takeovers of such firms are determined by the state in which they operate." Id.

[336] Tobin's q is defined in Daines' study to equal the market value of equity and debt divided by the book value of the firms assets. To the extent the firm is worth more as a going concern relative to its book assets, it will have a relatively higher Tobin's q score.

Tobin's q values across firms, Daines estimates an OLS regression with Tobin's q as the dependent variable and a dummy variable for whether a firm is located in Delaware as the primary explanatory variable. Across several different permutations of control variables,[337] he finds that the coefficient on the Delaware state dummy variable is both significant and positive.[338] Daines notes that the magnitude of the Delaware coefficient is large, resulting in $12 million additional value in 1996. Daines hypothesizes that one reason for the heightened valuation of firms incorporating in Delaware experience is the relatively permissive approach Delaware takes toward takeovers.[339] 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).[340]

In contrast to the evidence from Romano (1985) and Daines (2001), Bebchuk and Cohen (2001) present more pessimistic evidence on the value of state corporate law competition

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[337] As controls, he includes explanatory variables for a firm's return on assets, R&D/assets, degree of diversification, as well as log of net sales and two-digit SIC code.

[338] Moreover, estimating the model for each year individually in his sample results in a significantly positive coefficient on the Delaware dummy variable for 12 out of the 16 years. Daines performs a series of robustness checks. Among other things, he re-estimates his model using industry-adjusted measures of Tobin's q and independent variables. He finds a similar statistically significant positive coefficient on the Delaware state dummy variable. Daines also estimates his model using management ownership data using a smaller set of firms and finds similar results.

[339] Daines mentions other factors behind Delaware's dominance including a relatively certain corporate law regime, an expert court (the Court of Chancery) devoted to dealing with corporate law matters, a state whose revenues are 20% derived from incorporation fees and there may credibly commit to maintaining a high quality regime, and a state where the interests of employees and others are not important to the extent most corporations are operated out-of-state.

[340] Daines controls for various other factors that may lead a firm to face a takeover bid (including a low Tobin's q score, firm size, profitability, leverage, and market/book ratio) in a logit model. He finds in the logit model that even after controlling for these other factors, incorporation in Delaware is correlated with an increased probability of facing a takeover bid. Daines performs a series of robustness checks on his results. He first re-estimates his logit model on the probability of facing a takeover bid using an estimated Tobin's q value rather than the actual Tobin's q to control for the possible simultaneity bias resulting from the probability of a takeover leading to a higher Tobin's q. Using this two-stage model, Daines once again finds that incorporation in Delaware is correlated with a significant increase in the probability of facing a takeover bid. Daines then notes that a possible alternative hypothesis would be that already high value firms simply choose Delaware as their state of incorporation. Noting that Tobin's q values for a firm are not significantly correlated with a past Tobin's q values, Daines constructs a subsample of "mature" firms that were public for at least 15 years in 1995 (and have not reincorporated). Using the Tobin's q least squares model described above, Daines finds that for the sample of mature firms (where Daines assumes the initial selection bias should not impact the later year Tobin q values) Delaware incorporation again correlates with higher Tobin's q values. Daines also re-estimates the Tobin's q model for firms conducting an IPO from 1990-1997 using firm fixed effects and proxies for underwriter quality at the time of the IPO. He finds that incorporation in Delaware is again both positively and significantly correlated with Tobin's q.

(particularly for legal provisions—such as antitakeover statutes—directly related to the ability of managers to engage in opportunism).[341] 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.[342] They report: "Other than Delaware, which is huge 'importer,' there are only 2 other states that have a significant net inflow of companies – Maryland and Nevada…."[343] 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. To test the importance of antitakeover statutes to the incorporation decision, they estimate a logit model with a dummy variable for whether a company incorporates in-state or not as the dependent variable and dummy variables for the presence of antitakeover protections as the explanatory variables.[344] They 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.[345]

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[341] See Lucian Ayre Bebchuk and Alma Cohen, Firms' Decisions Where to Incorporate (working paper, 2001) (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=296492). For an argument that state competition for corporate charters may lead to a race-to-the-bottom with respect to legal provisions dealing with the redistribution of wealth from shareholders to managers see Bebchuk, supra note 311, at 1456-85.

[342] The data set is assembled from Compustat for the end of 1999.

[343] Id.

[344] Bebchuk and Cohen focus on several different antitakeover statutes including: (1) control share acquisition statutes; (2) fair price statutes; (3) business combination statutes that prevent a freezeout for up to three years post-takeover; (4) business combination statutes that prevent a freezeout for more than three years post-takeover; (5) statutes endorsing the use of a poison pill; and (6) constituency statutes allowing managers to take into account the interests of non-managers in defending against a takeover. They also include control for various company characteristics, demographic characteristics of the state in which the firm is located, a dummy variable for whether the company is located in Delaware, among other control variables.

[345] As an alternative, Bebchuk and Cohen include in their model an antitakeover statute index aggregating the number of different types of antitakeover statutes present in a state and report similar qualitative results. Bebchuk and Cohen also fit an OLS regression with the log of (1 + the number of out-of-state incorporations) as the dependent variable for all states except Delaware. Using similar explanatory variables from the logit model, they report that "the results clearly indicate that offering a stronger antitakeover protection is helpful also in attracting out-of-state incorporations." Looking at migration patterns of companies, Bebchuk and Cohen report that "[w]ithin the group of companies not located or incorporate in Delaware, the migration of companies to out-of-state incorporation increases (at 99% confidence) the level of the antitakeover index that governs these companies."

Bebchuk and Cohen also identify "excessive" antitakeover protections in several states: "Pennsylvania and Ohio adopted statutes that enabled the 'disgorgement' or 'recapture' of all the short-term profits made by a hostile acquirer, thus discouraging potential hostile bidders. Massachusetts adopted a statute that mandated a staggered or

2. State Antitakeover Legislation

Bebchuk and Cohen (2001) provide evidence that regulatory competition may prove deleterious only if one accepts the assumption that antitakeover statutes are harmful to shareholder welfare. And, if they are correct, the prevalence of antitakeover statutes in many states (including Delaware) further provides evidence against the benefits of regulatory competition.[346] On the other hand, managers may seek antitakeover statutes to the extent such statutes provide managers with bargaining power through which managers may negotiate for a higher takeover premium for its shareholders.[347]

While mixed, at least some empirical studies on antitakeover statutes point to a negative market reaction to the passage of such statutes.[348] Ryngaert and Netter (1988), for example, focus on the impact of Ohio's 1986 antitakeover law on the shareholder welfare of Ohio corporations.[349]

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classified board, which has a strong antitakeover force." Including these excessive protections in their logit model and OLS models, however, does not result in a statistically significant effect.

[346] States, for example, may implement antitakeover devices as a means of entrenching managers, intent on expropriating private benefits of control. For a description of the managerial entrenchment hypothesis with respect to state antitakeover legislation see Jonathan M. Karpoff and Paul H. Malatesta, The Wealth Effects of Second-Generation State Takeover Legislation, 25 Journal of Financial Economics 291, 301 (1989). Managers represent a distinct and highly interested group with the resources to influence state legislators. Moreover, a particular state may look forward to charitable contributions made by corporations – at the direction of the managers – to benefit citizens of the particular state. See id. Shareholders, on the other hand, are often out-of-state and dispersed (and thus lack the individual incentive to expend resources to affect the legislative outcome).

[347] See id.

[348] A wide variety of studies focus on state antitakeover legislation not covered in this paper. For a survey see Roberta Romano, The Genius of American Corporate Law 60-67 (1993). Other approaches besides looking at stock market reactions to antitakeover legislation are possible. Studies, for example, have looked at the level of R&D expenditures and capital expenditures in firms both before and after antitakeover legislation. As with the event study approach, no definitive result has emerged from examining R&D and capital expenditures. Compare L. K. Meulbroek, M. L. Mitchell, J. H. Mulherin, J. M. Netter, and A. B. Poulsen, Shark Repellents and Managerial Myopia: An Empirical Test, 98 Journal of Political Economy 1108 (1990) (finding that R&D expenditures as a ratio of sales decrease for firms the year after the passage of antitakeover legislation) with William N. Pugh, Daniel E. Page, John S. Jahera, Jr., Antitakeover Charter Amendments: Effects on Corporate Decisions, 15 Journal of Financial Research 57 (1992) (reporting that R&D and capital expenditures as a ratio of sales in firms are significantly increased in the year following the passage of antitakeover legislation relative to the enactment year).

[349] See Michael Ryngaert and Jeffry M. Netter, Shareholder Wealth Effects of the Ohio Antitakeover Law, 4 J. L. Econ. & Org. 373 (1988). Ryngaert and Netter note that Ohio's 1986 changes expanded the considerations directors may take into account in resisting a takeover to include the "long-term" interests of its shareholders. See id. at 375. As well, the Ohio statute explicitly enabled corporations to implement poison pills. See id. Ryngaert and Netter also note that the law "had the indirect effect of signaling the intentions of Ohio lawmakers. The willingness of the Ohio

They collect a sample of 54 firms that were incorporated in Ohio.[350] Ryngaert and Netter divide their sample into those firms with an inside ownership interest of at least 30 percent (for a total of 17 firms) and those without such a controlling interest (37 firms).[351] Ryngaert and Netter perform an event study using the market model to calculate abnormal returns. Their focus is on the date (November 19, 1986) on which it became clear that the Ohio antitakeover statute was "to become law", arguing that newspaper accounts on prior days "leave some doubt as to the actual form of the legislation."[352] Using a variety of event windows going back to the first public trading day after the earliest public mention of legislative action (November 10, 1986), they find for the time period from November 10 to 20 a statistically significant abnormal return of –3.64% for non-controlled firms.[353] In comparison, for the same November 10 to 20 event window, firms with a controlling shareholder (and thus less likely to be affected by the antitakeover statute) experienced only a –0.59% insignificant abnormal return.[354] From this evidence, Ryngaert and Netter conclude: "Presumably, market participants predicted that these restrictions on takeovers (or the Ohio regulatory climate) were detrimental to the shareholders of [Ohio] firms."[355]

Margotta, McWilliams, and McWilliams (1990) provide an opposing study to Ryngaert and Netter.[356] They first question the choice on the part of Ryngaert and Netter to use those Ohio incorporated firms with a 30% or greater block as a control group, arguing that even firms with a 30% block may face a takeover risk. They then question the particular event window that Ryngaert

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government to act quickly to aid Goodyear indicated that in future control contests for Ohio firms, a bidder should consider the state's reaction." Id. at 375.

[350] See id. at 377. The sample of firms are obtained from Moody's Industrial Manual and are all incorporated in Ohio. See id.

[351] See id. They note that firms with a controlling interest may not face much danger from a hostile takeover and thus not be affected by Ohio's antitakeover statute. See id.

[352] Id. at 378.

[353] See id. at 380. For the period from Nov. 18 to 20, they find only a –2.08% abnormal return (again statistically significant). See id.

[354] See id.

[355] Id. at 383.

[356] Donald G. Margotta, Thomas P. McWilliams, Victoria B. McWilliams, An Analysis of the Stock Price Effect of the 1986 Ohio Takeover Legislation, 6 Journal of Law, Economics, and Organization 235 (1990).

and Netter select, opting instead for a broader event window including the signing of the Ohio bill into law by the Ohio state governor (from November 7 to 24, 1986).[357] Using this expanded event window, they find that Ohio firms as a group did not experience a statistically significant negative cumulative abnormal return relative to the market model (due to a significant positive market reaction upon the enactment of the Ohio legislation not covered in the Ryngaert and Netter study's event window).[358]

Karpoff and Malatesta (1989) expand upon the single state studies with an event study encompassing all the so-called "second-generation" antitakeover statutes passed from 1982 to 1987 (encompassing 40 state takeover legislative events with unique press dates covering 26 states).[359] They focus on the set of all firms listed on the NYSE or AMEX as of January 1, 1980 that are incorporated in one of the 26 states they examine.[360] Karpoff and Malatesta also examine a separate sample of all firms listed on the NYSE or AMEX as of January 1, 1980 that have their headquarters in one of the 26 states that they examine (limited to the top ten firms ranked by 1985 total sales).[361] Using a market model, they estimate abnormal 2-day returns around the first press announcement of the antitakeover legislation for each firm within their two samples. They find that for a sample of firms incorporated in one of their 26 states of interest, the announcement of antitakeover legislation resulted in a small (–0.294%) but statistically significant negative reaction to the news.[362] Moreover,

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[357] See id. at 238-39, 245 (noting that "the November 7-24 window provides an especially good measure of the total impact of the legislation, since newspaper announcements and legislative activity occur regularly over this time period.).

[358] See id. at 246.

[359] See Karpoff and Malatesta, supra note 346, at 291. The second-generation antitakeover statutes they examine include, among others, control share acquisition statutes, fair price statutes, and freeze-out statutes. See id. at 293-300.

[360] See id. at 304-05.

[361] See id.

[362] See id. at 308. The sample of headquarter firms provided similar event study results. See id. at 309.

for the subset of firms that had no pre-existing poison pill or private antitakeover charter amendment, the reaction was larger (–0.388%) and statistically significant.[363]

Pugh and Jahera (1990) examine the market reaction to state antitakeover legislation across four different states: Ohio, Indiana, New Jersey, and New York.[364] As with Karpoff and Malatesta (1989), Pugh and Jahera focus on second-generation antitakeover legislation, including freeze-out provisions and control-share acquisition statutes. For each state, they perform 2 and 3-day window event studies for the introduction date, the date of passage by the two branches of the state legislature, and the date the governor signs the legislation into law. Their sample consists of firms incorporated in the four states and listed on either the NYSE or AMEX.[365] For their event studies, they calculate excess returns using one of ten CRSP control portfolios (ranked based on the previous year's Scholes-Williams beta).[366] They find evidence of significant excess negative returns in Indiana and New York at the date of introduction of antitakeover legislation.[367] In contrast, in Ohio and New Jersey, Pugh and Jahera find no significant excess returns for any of the four event dates.[368] Aggregating the returns for firms in all four states, they find a significant negative market reaction to

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[363] See id. Note that for the sample of firms in the state of incorporation sample that did have a poison pill or antitakeover charter amendment, the reaction was reduced and insignificant. See id. Karpoff and Malatesta also hypothesize that legislative events that occur later in time may exhibit a reduced market reaction to the extent the market in the later years expects legislators to side with managers (based on earlier antitakeover legislation). To test this hypothesis, they divide their two samples into those firms prior to January, 1986 and those after December 1985. Contrary to the hypothesis, however, they find that the magnitude of the abnormal return and the statistical significance are both greater in the later time period. See id. at 314-15.

Karpoff and Malatesta also test the impact of the Supreme Court's landmark CTS Corp. v. Dynamics Corp. of America decision on April 21, 1987. See id. at 316-20. They find no abnormal reaction among either incorporated or headquartered samples for the CTS Corp. decision. See id. at 319. They do, however, find a significant negative market reaction for a companion later opinion handed down on April 27, 1987 where the Supreme Court ruled that a lower court should reconsider its finding that Ohio's antitakeover statute violated the Constitution in light of the CTS Corp. decision. Karpoff and Malatesta, nevertheless, downplay the significance of the results given the lack of reaction to the earlier CTS Corp. opinion itself. See id. at 320.

[364] See William N. Pugh and John S. Jahera, Jr., State Antitakeover Legislation and Shareholder Wealth, 33 J. Fin. Res. 221 (1990).

[365] See id. at 222. They exclude, among other firms, firms where insiders have over 30 percent control over the firm (as obtained from Disclosure Inc.). See id.

[366] See id. at 223.

[367] See id. at 228.

[368] See id.

the introduction of legislation.[369] The result, however, is sensitive to the event window chosen. As well, when Pugh and Jahera aggregate firms without an antitakeover amendment in the corporate charter, they do not find any significant negative reaction.[370] They conclude that "there is too little evidence to argue that antitakeover legislation harms shareholders of potential takeover targets."[371]

The event study evidence on antitakeover statutes is therefore somewhat mixed.[372] Policymakers may nevertheless wish to consider the possibility that midstream shifts in regulatory regimes involving antitakeover statutes (and other provisions that deal with redistributive issues between managers and shareholders) may pose a problem for regulatory competition. Policymakers, for example, may consider allowing only firms that initially offer securities to investors (and therefore have good incentives to maximize shareholder welfare at the time of such an offering)[373] greater freedom in selecting regulatory protections. On the other hand, policymakers must weigh the possibility that the potential negative effects from mandatory regulation may outweigh even the negative impact of managerial opportunism in midstream shift decisions.[374]

3. Exchange Listing Decisions

The decision on the part of firms to list on a particular securities exchange provides some support for the view that market pressures may lead firms to adopt voluntarily (through the listing requirements of an exchange) strong protections for investors. While firms may seek to cross-list on

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[369] See id. at 229.

[370] See id.

[371] Id. at 230.

[372] See also John Pound, On the Motives for Choosing a Corporate Governance Structure: A Study of Corporate Reaction to the Pennsylvania Takeover Law, 8 J. L. Econ. & Org. 656, 671 (1992) (providing evidence that firms that chose not to opt out of Pennsylvania's state antitakeover laws are "firms that have a higher level of principal-agent slack, that are making poor decisions with current resources (whatever their level), and that are consequently undervalued by the market."); Samuel H. Szewczyk and George P. Tsetsekos, State Intervention in the Market for Corporate Control, 31 J. Fin. Econ. 3, 4, 11 (1992) (performing an event study on the market impact of that passage of Pennsylvania's antitakeover statute in 1990 and reporting for a sample of 56 firms that shareholders of Pennsylvania firms lost $4 billion from the significant negative abnormal return of 9.09% calculated for the entire legislative period).

[373] See Jensen & Meckling, supra note 7, at 305-307.

[374] See supra notes 9-11 and accompanying text.

the exchange within another country to gain entry into segmented capital markets, raise their visibility, and curry government favor among other reasons,[375] several commentators have noted that companies may seek to list on an exchange precisely to obtain the protections for minority investors concomitant with such listings.[376]

Providing a statistical analysis, Reese and Weisbach (2000) 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).[377] Reese and Weisbach compare the country of origin for each non-U.S. firm, distinguishing among firms from English common law, French civil law, German civil law, and Scandinavian civil law traditions. They 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.[378] Conditional on cross-listing into the United States, as well, firms from a French civil law tradition are more likely to list on NASDAQ

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[375] For a description of the motivations behind listing on a foreign exchange see Lee H. Radebaugh, Gunther Gebhardt, and Sidney J. Gray, Foreign Stock Exchange Listings: A Case Study of Daimler-Benz, 6 J. Int'l Fin. Mgmt & Accting 158, 159-61 (1995).

[376] See Paul Mahoney, The Exchange as Regulator, 83 Va. L. Rev. 1453, 1457-60 (1997). See also Coffee, supra note 261, at 692 ("By entering the U.S. markets, a foreign issuer may thus be able to make an equity offering that could not be made in its home market. But the reason that it cannot sell equity in its home market may be the fear that its controlling shareholders will expropriate much of the minority's investment. Migration to the United States and its greater legal protections thus may constitute a bonding strategy to solve this problem."). Coffee has expanding on the bonding argument in John C. Coffee, Jr., The Coming Competition Among Securities Markets: What Strategies Will Dominate (working paper, 2001) (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=283822), arguing the competition among securities exchanges will result in at least some exchanges opting to provide strong investor protections to attract issuers (and investors). In making his argument, Coffee provides a survey of empirical studies looking at exchange listing decisions. See id.

The number of issuer cross-listings (particularly into the United States) has risen dramatically over the past decade. Coffee notes evidence that the number of American Depositary Receipts increased from 352 ADR programs in 1990 to 1,800 ADR programs in 1999. See id. Anecdotal evidence also exists that Israeli companies, in particular, have sought to raise capital through initial public offerings on NASDAQ. See, e.g., Edward Rock, Greenhorns, Yankees and Cosmopolitans: Venture Capital, IPOs, Foreign Firms and U.S. Markets, 2 Theoretical Inquiries L. 711 (2001).

[377] See William A. Reese, Jr. and Michael S. Weisbach, Protection of Minority Shareholder Interests, Cross-listings in the United States, and Subsequent Equity Offerings (working paper, 2000) (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=194670). Reese and Weisbach compiled their sample from the Bank of New York and direct listings obtained from the NYSE and Nasdaq websites and from the National Quotation Bureau's Pink Sheets. All of the data used in the Reese and Weisbach study are from June, 1999. See id.

[378] 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.

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[379] (for resale in the PORTAL market).[380] To examine further the decision to cross-list inside the U.S., Reese and Weisbach estimate a logit model (conditional on cross-listing inside the U.S.) for the decision to list on an organized exchange versus listing on the OTC or pursuing a Rule 144A offering using various measures of the level of minority shareholder protection in the firm's home country as well as the log of the home country's GNP as a control.[381] They report that French and Scandinavian civil law countries are significantly more likely to list on an organized exchange compared with cross-listed firms from English common law countries. 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 (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

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[379] See Rule 144A, Securities Act. Technically, securities in a Rule 144A offering are first sold by the issuer pursuant to a private placement exemption under Regulation D of the Securities Act. See Regulation D, Securities Act. Rule 144A then protects resales of such securities to Qualified Institutional Buyers (generally large financial institutions). See Rule 144A, Securities Act.

[380] See Hal S. Scott & Philip A. Wellons, International Finance: Transactions, Policy, and Regulation 83-84 (4th ed. 1997) (describing the PORTAL resale market for securities offered under Rule 144A).

Reese and Weisbach relate that 46.6% of the cross-listed firms from French civil law countries list on an organized exchange in the U.S. compared with only 35.7% of the firms from English common law countries (difference significant at the 1% confidence level). See Reese and Weisbach, supra note 377. Two caveats exist for their results. First, their results are sensitive to the specific country of origin. Removing India (an English common law country with a particular low rate of U.S. cross-listing), for example, reduces the statistical significance of their results. Second, German civil law countries have the lowest level of U.S. cross-listing despite their lower investor protection score compared with English common law countries. See id.

[381] The dependent variable of the logit model equals 1 if the firm lists on the NYSE or Nasdaq and 0 if the firm lists on OTC or falls under Rule 144A. The measures of the level of home country shareholder protection include (1) the legal origin (English common law, French civil law, etc…) of the home country, (2) the home country's index of "antidirector" rights taken from LLSV, (3) a measure of the home country's accounting standards based on the 1990 annual reports, and (4) a measure of the efficiency an integrity of the home country's judicial system (tracked by Business International Corp.). Due to a lack of data, Reese and Weisbach fail to include controls for firm size or performance in their logit models. See id.

offerings post-listing generally for all firms and in particular for firms that list on an organized exchange inside the U.S.[382] 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).[383] An alternative hypothesis, nevertheless, may explain the rise in equity offerings after a cross-listing into the United States: companies may seek to list inside the U.S. to raise investor awareness and to benefit from the liquidity within the U.S. capital markets. To test this alternative hypothesis, Reese and Weisbach examine the distribution of the post-cross-listing equity offerings. They report that for the entire sample of post-cross-listing equity offerings, 456 occurred *outside* the U.S. (representing $367.1 million) while 194 occurred inside the United States (representing $185.1 million)—evidence inconsistent with the awareness and liquidity hypotheses.[384] 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.[385]

Doidge, Karolyi, and Stulz (2001) (DKS) hypothesize that controlling shareholders of firms in countries with weak investor protections will choose not to list in the U.S. (and face the higher

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[382] The entire sample of cross-listed firms increased from 114 to 167 equity offerings during the pre to post-cross listing time periods. The sample of cross-listed firms on an organized U.S. exchange increased from 44 to 100 during the pre to post-cross listing time periods. See id.

[383] Reese and Weisbach also fit a Tobit model using the total proceeds of equity offerings post-cross-listing as the dependent variable fit to a Weibull distribution (due to the truncated nature of the dependent variable). They restrict their sample to only firms that cross-listed on an organized exchange. As explanatory variables they include measures of minority shareholder protections in the home country as well as the log of the home country's GNP as a control. They report that "countries with poor protection of shareholder rights as measured by antidirector rights, accounting standards, and the judicial system each are likely to issue more equity after cross-listing". See id.

[384] See id.

[385] They report that the difference is significant at the 1% confidence level. To provide a multivariate test, Reese and Weisbach also estimate a logit and two-tailed Tobit models using, respectively, post-cross-listing offerings into the U.S. versus outside the U.S. as the dependent variable and the proportion of proceeds from all of a firm's post-listing equity issues that take place outside the U.S. For explanatory variables, they include various measures of shareholder protections and the log of the home country GNP as a control. They report that "all three of the civil law legal system dummies, as well as the anti-director rights, accounting standards, and judicial system variables are significantly different from zero … [suggesting] that a higher fraction of offerings are done outside the U.S. when shareholder protections are weaker." Id.

level of minority investor protections within the U.S.) unless they benefit from higher growth opportunities (made possible by the increased ability to raise capital due to a U.S. listing).[386] To test their hypothesis, DKS examine the difference in Tobin's q valuation for foreign firms that cross-list in the U.S. compared with foreign firms (from the same country) that choose not to cross-list. Their sample consists of firms from the Worldscope database screened to include only those non-financial firms with more than $100 million total assets and from countries which LLSV (1998) track, among other criteria, giving a sample of 714 firms cross-listed in the U.S. and 4,078 firms not listed in the U.S. DKS report that cross-listed firms have a 16.5% greater Tobin's q ratio compared with non-cross-listed firms from the same country (the cross-listing premium). The cross-listing premium, moreover, is equal to 36.5% for those cross-listed firms that choose to list on an exchange in the U.S. (as opposed to firms that conducted a Rule 144A offering or that are listed over-the-counter in the U.S.). DKS then estimate a series of regression models using Tobin's q as the dependent variable and a dummy variable for cross-listing in the U.S. as the explanatory variable. For controls, DKS include firm-specific[387] and country-level variables.[388] DKS report that the cross-listing premium persists even with the various controls they employ (and is higher for cross-listings on a U.S. exchange, particularly for firms that raise equity capital at or after the time of the listing). DKS then re-estimate their Tobin's q regression model with the addition of interaction terms between the dummy variable for cross-listing into the U.S. and both growth opportunities and the LLSV antidirector rights index (among other variables).[389] They report that Tobin's q increases with the cross-listing and growth opportunities interaction term (corresponding to a higher cross-listing

[386] See Craig Doidge, G. Andrew Karolyi, and Rene M. Stulz, Why are Foreign Firms Listed in the U.S. Worth More?, NBER Working Paper No. 8538 (2001) (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=286963).

[387] Firm-specific variables include proxies for growth opportunities.

[388] Country-level variables include dummy variables for the legal tradition (from LLSV (1998)) of the firm's country, an index for the accounting standards of the country, and a measure of the liquidity of the domestic stock market among others.

[389] DKS use the two-year sales growth and the median industry-level Tobin's q for a firm as proxies for growth opportunities.

premium for firms with greater growth opportunities) and decreases with the cross-listing and the LLSV antidirector rights index interaction term (indicating that firms coming from countries with relatively weak minority investor protections receive a greater cross-listing premium).[390] Moreover, when an interaction term between the growth opportunities of a firm, cross-listing in the U.S., and antidirector rights is included in the model, DKS report a negative and significant coefficient – consistent with the hypothesis that "expected sales growth is valued more highly for firms listed in the U.S. and that this effect is greater for firms from countries with poorer investor rights".[391]

4. Voluntary Disclosure

Several studies exist on corporate level decisions to disclose information voluntarily due to market pressures.[392] On the one hand, the fact that firms disclose some information voluntarily does not mean that firms are disclosing the same amount and type of information that a benevolent regulator taking into account all societal needs would require. On the other hand, evidence of voluntary disclosure does provide evidence that the fears of those who criticize regulatory competition—the race to the bottom—are unfounded. At worst, we have a race to the middle.

Meek, Roberts, and Gray (1995) (MRG) examine the factors that are related to voluntary disclosure on the part of multinational corporations.[393] Their sample consists of 226 multinational

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[390] DKS explain the negative coefficient on the cross-listing and LLSV antidirector rights interaction term as follows: "[F]irms from countries with better shareholder protection list when their growth opportunities are weaker than firms from countries with weaker shareholder protection, so investors value more those firms that overcome the challenge and list in the U.S." DKS also report that the dummy variable for cross-listing alone no longer remains significant; DKS take this result to mean "the interactions explain the cross-listing premium".

[391] To control for the possibility that firms from countries with high Tobin's q tend to cross-list more often inside the U.S. than firms from low Tobin's q countries, DKS re-estimate their regression model with a first stage endogenous Heckman selection model, among other robustness checks. Controlling for country characteristics, they report that the dummy variable for cross-listing in the U.S. is again positive and significant.

[392] See also text accompanying notes 73-77 (discussing Benston (1969)'s study of voluntary disclosure near the enactment of the federal securities laws).

[393] See Gary K. Meek, Clare B. Roberts, and Sidney J. Gray, Factors Influencing Voluntary Annual Report Disclosures By U.S., U.K., and Continental European Multinational Corporations, 26 J. Int'l Bus. Stud. 555 (1995). In a companion study, the authors focus on the voluntary disclosures of large, multinational companies from just the U.S. and the U.K. See Sidney J. Gray, Gary K. Meek, Clare B. Roberts, International Capital Market Pressures and Voluntary

companies from the U.S., U.K., and Continental Europe (limited to France, Germany, and the Netherlands).[394] For each multinational company in their sample, they examine the 1989 annual report and calculate a ratio of the total number of voluntarily disclosed items over the total number of possible voluntary items.[395] They then estimate an OLS model with the voluntary item disclosure ratio as the dependent variable. For explanatory variables, MRG include firm size (measured with 1989 total revenues), country of origin and whether the company is listed on exchanges in multiple countries, among others.[396] MRG report that all multinational companies engage in statistically significant amounts of voluntary disclosure.[397] In addition, the level of disclosure related to strategic information is positively and significantly related to both the home country and region (Continental European companies disclose more) and multinational exchange listing status.[398] The level of nonfinancial disclosure is positively and significantly related to the home country and region (Continental European companies again disclose more) and the size of the company.[399] MRG also relate that financial information disclosure is positively and significantly related to the size of the company and multinational exchange listing.[400]

Annual Report Disclosures by U.S. and U.K. Multinationals, 6 J. Int'l Fin. Mgmt & Accting 43 (1995). After controlling for the degree of multinational business activity and firm size, they find significant evidence of increased voluntary disclosure on the part of firms that list their securities internationally. See id. at 60. They find also that "there are clearly variations in the levels of voluntary disclosures among information types…[and] the disclosure of nonfinancial information would seem to be very much a function of national influences." Id.

394 See MRG, supra note 393, at 560-61. MRG define multinational companies to include only companies with at least 10% of sales from nondomestic sources and total sales above U.S. $500 million. See id.

395 See id. at 562. To measure voluntary disclosure, MRG start with a checklist of 128 potential voluntary items of disclosure. They then assess the requirements of stock exchanges as well as both governmental and private standard setters in the U.S., U.K. and Continental Europe, eliminating from their initial list any required information item from any of these sources. MRG's final checklist consists of 85 items that they subdivide into strategic, nonfinancial, and financial related information. See id. at 561.

396 MRG also include as controls: industry group, financial leverage, the ratio of sales outside the companies' home country to total sales, and profitability. See id.

397 See id. at 567-68.

398 See id. at 565-68.

399 See id.

400 See id. In addition, British companies tend to disclose lower levels of financial information voluntarily compared with U.S. or Continental European companies. See id. See also G.K. Meek and S.J. Gray, Globalization of Stock Markets and Foreign Listing Requirements: Voluntary Disclosures By Continental European Companies Listed on the London Stock Exchange, 20 J. Int'l Bus. Stud. 315, 316 (1989) (finding evidence of voluntary disclosures on the part

Jackson and Pan (2001) examine the value of regulatory competition in Europe.[401] Focusing on the European Union, Jackson and Pan focus on the impact of competition among countries to set securities regulatory standards on the level of securities disclosure. The EU securities regulatory system is based on both minimum standards across all member countries combined with mutual recognition.[402] Jackson and Pan's empirical method involves a series of 50 in-depth interviews with lawyers, investment bankers, and regulatory officials based in Europe.[403] From these interviews, Jackson and Pan report that few companies in Europe actually take advantage of mutual recognition. Instead, European equity offerings typically occur through private placements to institutional investors (who then enjoy the ability to resell immediately to retail investors).[404] Significantly, Jackson and Pan report that the interviewees stated that the quality of the (voluntary) disclosures under the European private placements generally is higher than the formal disclosure requirements of E.U. member countries, generally following U.S. disclosures for private placements.[405] As explanation, they report a typical interviewee response was that "'the market requires' the higher level of disclosure."[406] Although Jackson and Pan's study is subject to the criticism that their sample of interview respondents may not be representative of the population of securities professionals (only those that chose to respond)[407] and that respondents may not have answered with full candor

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of 28 companies from Sweden, the Netherlands, Germany and France that were listed on the London stock Exchange in 1986).

[401] See Howell E. Jackson and Eric J. Pan, Regulatory Competition in International Securities Markets: Evidence from Europe in 1999—Part I, 56 Bus. Law. 653 (2001). See also Romano, supra note 50, at 2374 ("European firms listing in London typically comply with the higher United Kingdom disclosure requirements rather than with the lower ones of their home countries, although they need not comply with U.K. rules under the European Community disclosure directives.").

[402] See id. at 661. Jackson and Pan explain that under mutual recognition, "[i]f a host member state has a more stringent set of requirements than an issuer's home state, the issuer can select and rely on the more lenient requirements of the home state to gain access in the host state's market." Id. at 663.

[403] See id. at 671.

[404] See id. at 681-82. Such European private placements are referred to as "International-Style Offerings". See id. at 681.

[405] See id. at 685-86.

[406] Id. at 686.

[407] Jackson and Pan write that "[i]n approaching a number of prospective interviewees, a disproportionate number of our initial contacts were alumni of Harvard Law School. . . . Our actual interviewees, however, received their

to their questions, their evidence is nevertheless consistent with the more statistical studies of voluntary disclosure (as in Meek, Roberts, and Gray (1995)).

Approaching the issue of voluntary disclosure from the perspective of investors, Dahlquist and Robertsson (1999) provide evidence that investors tend to invest in foreign firms where the amount of information available is greater.[408] They examine all listed firms in Sweden from 1991 to 1997, tracking the fraction of total equity directly held by foreign investors.[409] They employ a multivariate regression model with a dependent variable based on foreigner holdings in a particular Swedish firm relative to the market portfolio.[410] Using a pooled regression with fixed effects for years, they find a positive and significant relationship between foreign ownership and size (the log of market capitalization) and the current ratio (defined as the ratio of current assets over current liabilities).[411] They also report a negative and significant relationship between foreign ownership and dividend yield.[412] Dahlquist and Robertsson speculate that size may proxy for the amount of information available on the firm. To test this hypothesis, they re-estimate their regressions with the addition of variables related to the firms' size of exports (relative to total sales), turnover in the capital market, ownership concentration, and listing on a foreign stock exchange. They find that foreign ownership is positively and significantly related to the size of exports and the presence of a listing on a foreign exchange (both proxies for information available to foreigners on the firm),

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legal training at a much wider range of U.S. law schools." Id. at 671 n.54. Jackson and Pan, nevertheless, conduct interviews at "eight of the ten leading advisers to issuers by deal value, eight of the thirteen leading advisers to issuers by deal numbers, nine out of ten of the leading advisers to issuers by deal value, and nine of the ten leading advisers to lead underwriters by deal number." Id. at 672.

[408] See Magnus Dahlquist and Goran Robertsson, Direct Foreign Ownership, Institutional Investors, and Firm Characteristics, 59 J. Fin. Econ. 413 (2001). For a discussion of the "home bias" that investors face in deciding whether to apportion their investment dollars at home or abroad see K.K. Lewis, Trying to Explain Home Bias in Equities and Consumption, 37 J. Econ. Lit. 571 (1999).

[409] See id. at 419.

[410] See id. at 426.

[411] See id. at 426-27.

[412] See id.

leading them to state: "The overall evidence is consistent with the conjecture that informational asymmetries may be the driving force behind the biases in foreigner's holdings."[413]

5. Privatization within Former Communist Countries

For those in favor of greater freedom on the part of securities professionals and issuers to select a package of desired investor protections, the experience of privatization stands as a possible rebuttal. Several legal commentators, in particular, have written on the problems facing minority investors in the wake of mass privatizations.

Black, Kraakman, and Tarassova (2000) (BKT) discuss the problems with Russia's mass privatization program from the early 1990s.[414] They characterize the program as involving "shock therapy," involving the "rapid decontrol of prices, freeing of markets, and privatization of industry."[415] BKT describe at length how mass privatization in Russia led to the separation between control and rights to residual cash flow in post-privatized Russian firms.[416] Moreover, those in control further solidified their control position and blocked subsequent legal reform through the corruption of government officials.[417] BKT relate the weaknesses in both norms and institutions

[413] Id. at 429. Dahlquist and Robertsson also find that foreign ownership is positively and significantly correlated with the amount of turnover in the securities markets (a measure of liquidity). See id. at 429. In addition, foreign ownership is negatively associated with high ownership concentration. See id. On the other hand, Dahlquist and Robertsson further examine how domestic institutional investors allocate their investment and find that large firm size is an important factor. See id. at 431-35. The size effect, they conclude, may therefore represent more of an institutional investor phenomenon rather than a foreign investor phenomenon. See id. at 439.

[414] See Bernard Black, Reinier Kraakman, and Anna Tarassova, Russian Privatization and Corporate Governance: What Went Wrong?, 52 Stan. L. Rev. 1731 (2000).

[415] Id. at 1739.

[416] A key feature of Russian privatization was that the government lacked the power to force privatization on managers and thus had to bribe the managers with heavily discounted shares. See id. at 1740. In addition, often privatization occurred through auctions – but the actual auction process was heavily corrupt. See id. at 1744-45. The result of the mass privatization in Russia, therefore, was the concentration of control in the hands of a few particularly skilled at engaging in bribes and other forms of theft. See id. at 1746-47. Moreover, the use of vouchers in the privatization process ensured widespread minority shareholder ownership. See id.

[417] See id. at 1747 ("As the kleptocrats' power grew, many bought TV stations, newspapers, and other media outlets to promote the election of friendly politicians, and blunt public criticism of their activities.").

within Russia from the perspective of minority investors.[418] Having successfully painted a gloomy portrayal of Russia's experience with privatization, BKT are less successful in putting forth a comprehensive alternative path toward privatization. In addition to advocating a slower more staged approach to privatization as well as privatization mechanisms that result in concentrated ownership (involving, for example, auctions for cash and sales to foreign investors), they focus on the importance of building institutions and creating a more conducive business environment.[419] Certainly the presence of such institutions would have made some difference in the case of Russia. But the real challenge is how to achieve such institutions. BKT contend that Russia must take a "serious, top-down effort"[420] but leave largely unanswered the question of what may motivate Russian officials to take such an effort.[421]

Coffee (1999a) provides a comparison of privatization in the Czech Republic and Poland.[422] Coffee characterizes privatization in the Czech Republic as "rushed" before the country could develop regulatory controls over their securities markets and minority investor protections.[423] Hundreds of private investment funds arose in the Czech Republic and an active securities market developed within the country.[424] Due to a lack of transparency within the Czech Republic's securities market as well as agency problems between the managers of the investment funds and the disperse investors, problems arose rapidly cumulating in the downfall of the Vaclav Klaud Government and the passage of several securities-related reforms.[425] Poland, on the other hand,

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[418] See id. at 1754-63. Such weaknesses include a corrupt judiciary, the lack of expertise with respect to business, accounting, and detecting fraud, the presence of government subsidies to nonprofitable businesses, and a confiscatory tax system (leading many to hide their transactions and bribe tax officials among others). See id.

[419] See id. at 1778.

[420] Id. at 1798.

[421] One possibility BKT suggest would be to invite more Russian students into the United States to learn about U.S.-style law and accounting (or, alternatively, to establish western style law and business schools in Russia). See id. at 1801-02. BKT also mention the utility of increasing product market competition as a means of decreasing the amount of rents available to controllers seeking to loot their companies. See id. at 1800.

[422] See Coffee, supra note 4.

[423] Id. at 10.

[424] See id. at 11.

[425] See id. at 12-14.

took a more cautious approach, forcing its citizens initially to invest in a series of state-sponsored investment funds.[426] Although the approach in Poland initially resulted a thin securities market, Coffee provides evidence that the Warsaw Stock Exchange grew rapidly.[427]

The unfortunate experiences with mass privatization in several former-communist countries, nevertheless, do not provide direct evidence on the efficacy of market pressures to generate strong private and regulatory protections for investors. Key to the failure of mass privatization is the non-market based fashion in which they took place. Coffee, for example, characterizes privatization as an exception from the well-known argument that issuers will seek to maximize share value (through the adoption of valuable investor protections) at the time they sell their shares.[428] Particularly for voucher privatization, resulting in the widespread distribution of shares, no market mechanism exists to tie the incentive of those in control with the firm to the interests of such widespread shareholders.[429] Of course, in Russia and other formerly communist countries, a market solution may not have been possible due to the background high levels of corruption.[430] As well, political constraints on sales to foreigners coupled with a lack of capital resources on the part of domestic residents make market auctions of assets difficult if not impossible.[431] Given these constraints, proposals for "staged" privatization as well the use of intermediary state-operated funds (as in

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[426] See id. at 11. Commenting on privatization in Slovenia, Rado Bohnic and Stephen Bainbridge contend that because much of Slovene corporate shares end up in the hands of state-controlled funds, the danger exists that political goals rather than shareholder wealth maximization goals will drive corporate decisions. See Rado Bohnic and Stephen Bainbridge, Corporate Governance in Post-Privatized Slovenia, 48 American Journal of Comparative Law 49, 64 (2001).

[427] See Coffee, supra note 4, at 11-16 (noting that "[the Warsaw Stock Exchange's] overall market capitalization now exceeds that of the Prague Stock Exchange.").

[428] See id. at 4. & n.12; see also supra note 7 (citing Jensen and Meckling).

[429] Coffee writes "neither contract with shareholders nor pledge a reputational capital that they have carefully built up over years or service; rather, managers and shareholders are thrown together as legal strangers." Id.

[430] BKT note that even where the outright sale of the entire firm to managers willing to maximize overall value may result in more wealth, two factors stand in the way of this solution. First, the controllers (lacking ownership of 100% of the shares) capture only partial benefits from such a sale. Second, even where the controllers could be bought off, the past expropriation of value often will result in non-transparent accounting, making it difficult for potential buyers to value the firm. Moreover, BKT write that "[p]otential buyers will discount heavily claims about true value by controllers who have proven themselves untrustworthy by expropriating minority shareholders." See BKT, supra note 414, at 1751.

[431] See id. at 1735, 1739-40.

Poland) to own and operate privatized firms at least in the short-run may result in more effective privatization programs.[432] In countries connected with the global capital markets, nevertheless, money will flow to investments offering the highest returns (taking into account the level of information and protection of investors). Even without a large and robust capital market, the desire on the part of issuers seeking to raise capital at the highest price possible will lead to strong pressures to develop institutions and other means of protecting investors.

V. Conclusion

Substantial evidence exists that the law does matter. Given the comparative advantage governments enjoy in investigating and enforcing investor protections, it is no surprise that the empirical evidence supports the view that the law matters. The fact that the law matters, however, is only a starting point. The more central question we face is how to generate good law. Empirical evidence exists pointing to the existence of path dependence in how law develops. Countries from a common law tradition tend to take a non-interventionist approach to private arrangements. It is no coincidence that in such countries, the market generated many forms of private protections for the interests of investors. In contrast, countries with a civil law tradition (particularly French civil law) generally follow a more interventionist approach to the financial markets.

Merely pointing to elements of a strong securities market does not address the more difficult question of how to get countries to embrace such elements.[433] Evidence exists that transplanting American-style law into another country without taking into account the background culture and legal structure of the country is not effective. Moreover, spurring government regulators into action may not result in desired protections. Government regulators, for example, may just as well intervene in a manner that is detrimental to the welfare of investors and the overall capital markets.

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[432] See id. at 1783-87.

[433] See Black, supra note 6, at passim.

The presence of path dependence, nevertheless, does not relegate civil law (and other) countries to remaining without strong investor protections. In Europe, for example, many civil law countries today are rapidly developing large and active populations of investors. New markets—such as Neuer Markt in Germany (a subsidiary of the Deutsche Bourse)—have arisen that have made investor protection one of their strongest selling points.[434] Why have these changes occurred? Competitive pressure from market forces provides one explanation. Securities professionals in Europe make "U.S.-style" disclosures because investors want these disclosures.[435] Empirical evidence within the United States, moreover, points not to a race-to-the-bottom among states for U.S. corporate law but rather—although not uniformly—to shareholder wealth maximization. Of course, the empirical results are not definitive and further research is warranted. Nevertheless, policymakers should at least consider the possibility that rather than harmonization or internal reform measures, simply opening up a country to competition (whether product, financial, or regulatory) may have the greatest positive impact on investor welfare and the development of financial markets. Moreover, unlike specific regulatory reforms, instituting a policy of competition creates an on-going pressure toward innovation and responsiveness in regulation toward the needs of market participants. Rather than stifle competition through the imposition of mandatory rules and harmonization of legal protections across countries, policymakers may instead wish to expend their limited political capital in establishing policies to foster regulatory competition within their borders and among different countries.[436]

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[434] See Vanessa Fuhrmans, Playing By the Rules: How Neuer Markt Gets Respect, Wall St. J., Aug. 21, 2000 at C1 (noting that the Neuer Markt portrays itself as "the most regulated market in Europe"). Although the Neuer Markt's market capitalization grew rapidly, it has recently experienced both scandals and a large drop in this market capitalization. Partly due to pressure from some of Neuer Markt's own "top companies," the exchange has sought to institute even tighter regulations. See Neal Boudette and Alfred Kueppers, Frustrated Neuer Markt Members Push for Tightening Listing Rules, Wall St. J., July 11, 2001, at C-12.

[435] See Jackson and Pan, supra note 401, at 685-86.

[436] For articles discussing possible methods of fostering regulatory competition see supra note 304.