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Title
Questioning "law and finance" US stock market development, 1930-70

Permalink
https://escholarship.org/uc/item/9wf8k8gm

Journal
Business History, 55(4)

ISSN
0007-6791 1743-7938

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Publication Date
2013-06-01

DOI
10.1080/00076791.2012.741974

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UNIVERSITY OF CAMBRIDGE
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PAPER NO. 14/2012

JUNE 2012

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Questioning "Law and Finance": US Stock Market Development, 1930-70

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An important tenet of a burgeoning "law and finance" literature is that stock market development is contingent upon corporate law offering ample protection to shareholders. This paper addresses this claim, using as its departure point developments occurring in the United States between 1930 and 1970. We show that, contrary to what the law and finance literature would predict, the US lacked during this period and throughout the 20th century generally corporate law that provided extensive protection to shareholders. We also point out that while federal securities legislation introduced in the mid-1930s bolstered investor protection, this reform effort did not energize the stock market in the manner implied by law and finance analysis.

Keywords: law and finance; corporate law; Delaware; stock market; securities regulation

JEL codes: G38, K22, N12

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Introduction

A "law and finance" literature oriented around quantitative comparative analysis of the relationship between national legal institutions on the one hand and corporate governance and financial systems on the other has recently achieved academic prominence.[1] A key finding of this literature has been that "law matters", in the sense that various aspects of national legal systems shape economic outcomes. An important tenet of the law and finance literature is that corporate law – the rules which govern the rights and duties of directors, senior executives and shareholders – matters in the sense it does much to explain how durable and robust equities markets can develop in the face of information asymmetries, potential managerial agency costs and possible extraction of private benefits of control by powerful shareholders.[2]

"Law and finance" has become prominent in large measure because of an important forward-looking normative message: countries must enact suitable laws to have well-developed financial markets.[3] Law and finance methodology can also have, however, a significant historical dimension and be relevant for a single country. For instance, the corporate law-oriented version of the law matters thesis can potentially offer insights into whether a country is likely to develop a stock market-oriented corporate economy and, if so, when. Law and finance thinking implies that the enactment of corporate legislation providing significant stockholder protection will typically be a pre-condition for the development of a robust equity market.

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1 For an overview of the literature and its popularity, see Armour *et al.*, "How Do Legal Rules", 582-85.

2 See Roe, "Corporate Law's", 236-37; Enriques, "Do Corporate Law Judges", 766-67.

3 Cheffins, "Dividends as a Substitute", 1280; Milhaupt and Pistor, *Law and Capitalism*, 20.

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This paper uses the law and finance research program as the departure point for examining historical developments in the United States, with particular emphasis on the period between 1930, immediately following the stock market crash of 1929, and 1970. At first glance, arrangements in the US fit well with the corporate law version of the law matters thesis, since the US has both a stock market-oriented corporate economy (i.e. well developed equity markets by global standards) and a legal regime that reputedly provides substantial protection for investors.[4] In fact, viewed historically the inter-relationship between the growth of US equity markets and law is different from what might be anticipated, given the law and finance literature.

Equities markets were undoubtedly much better developed in the US in 2000 than in 1900. Law and finance logic implies corporate law would have been shareholder-friendly over the same period. In fact, a Delaware-dominated competition between states to supply laws managers wanted reputedly steadily eroded the legal protection afforded to investors. Moreover, while cross-country empirical tests of the law matters thesis initially proceeded with the US being assigned a high score for the quality of its corporate law, re-coding implies that, paradoxically for a country with a stock market-oriented corporate economy, US corporate law does a mediocre job of protecting stockholders.

Perhaps another body of law provided the necessary protections. New Deal reform of securities law – a body of law closely related to corporate law that governs the issuance of securities to the public, disclosure by companies already publicly traded and aspects of share dealing – was explicitly designed to enhance the protection of US investors. Law and finance logic implies that federal intervention in the mid-1930s should have prompted equities markets to flourish. Instead, for the next couple of decades the stock market was sickly. In

[4] Black, "The Core Institutions", 1568-69; Cross and Prentice, *Law and Corporate Finance*, 51, 128, 216-17.

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1948 the president of Westinghouse Electric Corporation dubbed the stockholder "the forgotten man."[5] The *Wall Street Journal* referred the same year to "capital malnutrition."[6] A stockbroker complained in a 1953 interview "Almost every industry in America has at least doubled or tripled in volume in the past 20 years. But security sales are stuck in the same rut."[7] In addition, between the mid-1930s and mid-1960s publicly traded companies subject to the least federal regulation – those with shares traded "over-the-counter" as opposed to on a stock exchange – grew rapidly in comparison to their better regulated stock market counterparts.[8]

This paper analyzes the foregoing aspects of the inter-relationship between law and US stock market development, illustrating in so doing that the "better law → better stock market" trajectory implied by the law and finance literature fails to account satisfactorily for how matters progressed during the middle decades of the 20th century. Given the prominence of US equities markets, the influential nature of law and finance research, and the puzzling historical aspects of the inter-relationship between law and stock market development in the US, it might be anticipated that the relevant issues would have already garnered considerable academic attention. This has not been the case. A few papers have examined the "law matters" thesis in the context of the historical development of equities markets in the US, but

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5 George A. Mooney, "Incentives to Invest Capital", *New York Times*, 29 September 1948.

6 "Capital Malnutrition", *Wall Street Journal*, 11 March 1948.

7 William G. Moore, "Drop of 30% in N.Y. Stock Exchange Volume Spurring Brokers to Change Their Outlook", *Wall Street Journal*, 30 October 1953.

8 We develop this point below in our discussion of federal securities regulation below.

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these have focused primarily on the opening decades of the 20th century.[9] Very little has been said about the decades following the stock market crash of 1929,[10] which this paper covers.

The paper proceeds as follows. First, we set the stage for our analysis by using various statistical measures to show that stock market development was stultified in the US for at least a quarter-century following the 1929 Wall Street crash. Second, we deploy the "anti-director rights index" (ADRI), which has achieved prominence in the law and finance literature as a means for quantifying the level of protection corporate law affords to investors, to show, contrary to what the law and finance logic implies, corporate law did not provide extensive protection to investors as the stock market rebounded from its 1929 nadir. Third and finally, we show that federal reform of securities law failed to energize the development of equities markets in the manner law and finance analysis implies it should have done.

US Equities Markets 1930-70

Throughout much of the 20th century the global economy was in the midst of a "great reversal" which resulted in countries being less financially developed in various ways in 1980 than they were in 1913.[11] Data Rajan and Zingales (2003) provide on the ratio of gross domestic product to aggregate stock market capitalization and initial public offerings (IPOs) indicate the pattern applied to the US equities market, once due allowance is made for the bull market of the 1920s and to a lesser extent for a stock market resurgence that began in the 1950s and continued in the 1960s before petering out in the 1970s (Figures 1, 2).

Figure 1: Aggregate stock market capitalization/GDP ratio, United States, 1913-80

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9 Coffee, "The Rise of Dispersed", 24-39; Cheffins, "Law as Bedrock", 7-12; O'Sullivan, "Expansion of the US Stock Market", 526-31.

10 For an exception, see Greenstone, Oyer and Vissing-Jorgensen, "Mandated Disclosure".

11 Rajan and Zingales, "The Great Reversals", 6-7.

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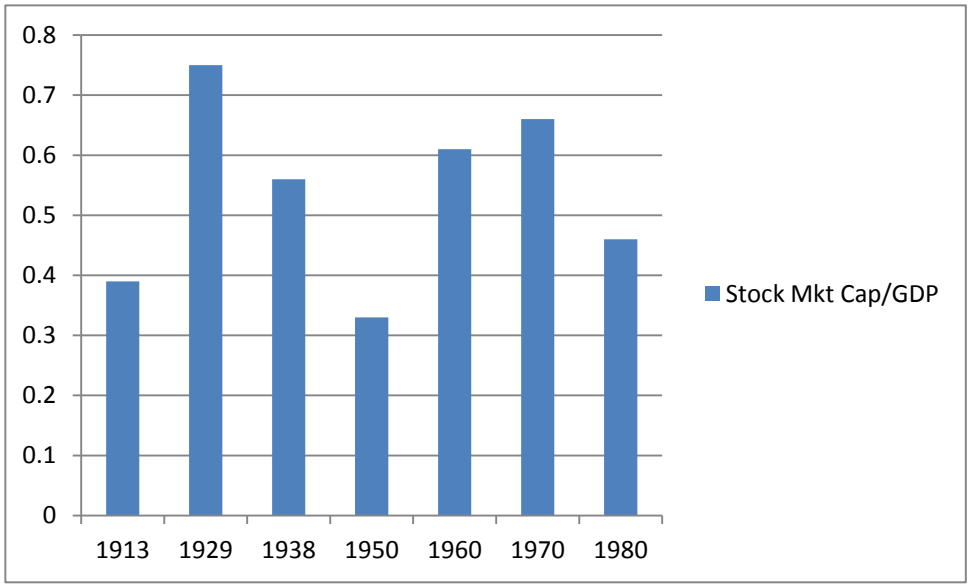
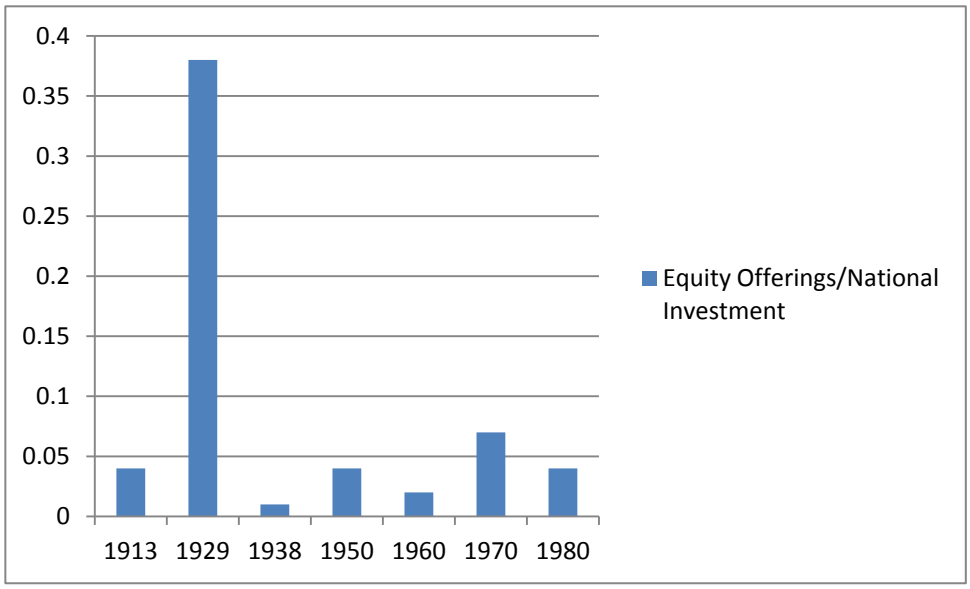


Source: Rajan and Zingales (2003, p. 15)

Figure 2: Funds raised through public equity offerings by domestic companies, normalized by total national investment, United States, 1913-80



Source: Rajan and Zingales (2003, p. 17)

Data Goldsmith (1985) offers on the percentage of national assets composed of corporate stock confirms the same basic historical trend (Figure 3). Equity markets slumped

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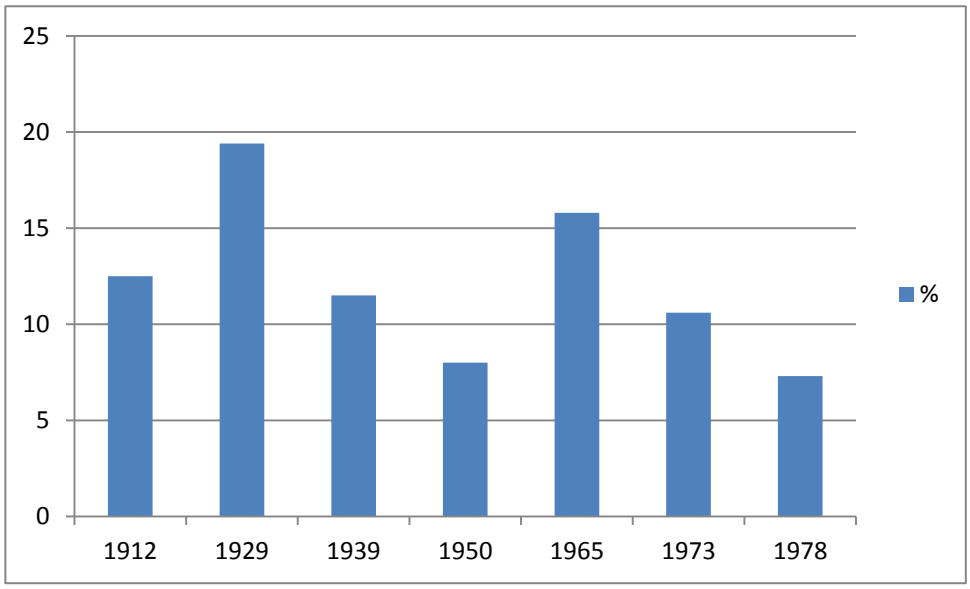
dramatically in importance between 1929 and 1950 before regaining prominence, albeit somewhat temporarily, by the mid-1960s.

Figure 3: Corporate stock as a proportion of US national assets, 1912-78



Source: Goldsmith (1985, p. 301)

Trends concerning the number of individuals owning shares in the US also demonstrate that the stock market was an economic afterthought for at least a quarter-century after the 1929 crash. Until the New York Stock Exchange commissioned the Brookings Institution in 1951 to undertake a first shareholder census, no one had a clear idea of the actual number of people in the US who owned shares.[12] Conservative estimates of the stockholder population when the great bull market of the 1920s drew to a close range from 3 million to 5 million,[13] but a 1935 study of security markets by the Twentieth Century Fund estimated the number of stockholders was between 7 million and 9 million in 1929 (Danielan, 1935, p. 50). According to this study this figure rose to between 10 million and 12 million in

[12] "A Census of Capitalists", *New York Times*, 6 October 1951; Sobel, *The Last Bull Market*, 17.

[13] Sobel, *The Big Board*, 252; Perkins, *Wall Street*, 135.

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1932, a surprising trend given the 1929 stock market crash, but *New York Times* studies of stockholder lists of major corporations confirmed the number of stockholders did continue to grow until the tide turned in 1933.[14]

The Brookings Institution's initial stockholder census, published in 1952, pegged the number of individuals who owned shares in publicly owned US corporations at 6.5 million.[15] It correspondingly appears the number of stockholders flat-lined and maybe even fell between the early 1930s and the early 1950s, despite the US population increasing from 123 million in 1930 to 151 million in 1950. Stock market participation then grew dramatically through the remainder of the 1950s and during the 1960s. Follow-up studies by the New York Stock Exchange indicated the number of stockholders was 8.6 million in 1956, 12.5 million in 1959, 15 million in the spring of 1961, 17 million by the end of that year, 21.5 million in 1966, and 25 million by 1968.[16] This surge occurred in tandem with growing institutional participation in the stock market, as the proportion of US corporate stock held by pension funds, mutual funds and insurers rose from 7.4% in 1950 to 12.1% in 1960 and again to 28.5% in 1970.[17]

Additional empirical data unavailable prior to the mid-1930s but available on a year-to-year basis thereafter confirm the stultification of US equity markets up to the 1950s. The federal Securities and Exchange Commission (SEC) has compiled and published annually since 1935 the total value of shares of companies eligible for trading on each stock market registered with the Commission as a national stock exchange and provided an aggregate

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14 Danielan, "Ownership of Securities", 52; "Spread of Stocks Among Public Lags", *New York Times*, 5 March 1933; "Owners of Stock Off 0.94% in 1933," *New York Times*, 4 March 1934.

15 Kimmel, *Share Ownership*, 89.

16 Sobel, *The Last Bull Market*, 22, 47, 206; Sobel, *The Big Board*, 196, 243, 307.

17 O'Sullivan, *Contests for Corporate Control*, 156.

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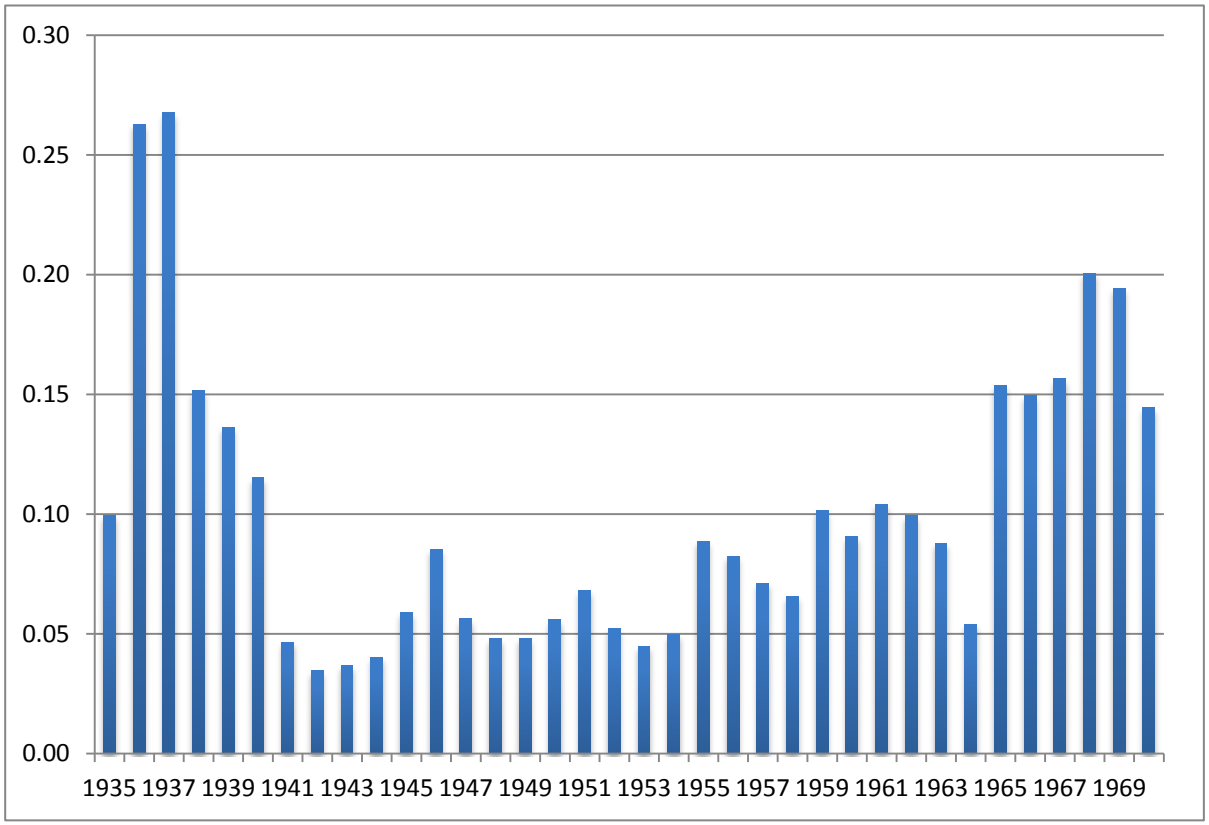
figure for all such exchanges.[18] When normalized by reference to GDP, the total stock value for all exchanges was higher in the 1930s than might be expected given the chaotic stock market conditions during that decade. Otherwise, though, the data show US stock markets were quiescent during the 1940s and the first half of the 1950s (Figure 4).

Figure 4: Total stock value of national stock exchanges as a proportion of GDP, 1935-70



Sources: S.E.C. annual reports, 1935-70 (total stock value); Statistical Abstract of the United States: http://www.census.gov/compendia/statab/hist_stats.html (GDP) (last visited 6 June 2012).

IPO data compiled by Gompers and Lerner (2003) also illustrate the extent to which US equities markets were in the doldrums. According to their dataset of IPOs occurring between 1935 and 1972 that were underwritten with the services of an investment banker and

[18] The compiling of this material has been required by the Securities Exchange Act of 1934, 48 Stat. 881, § 6.

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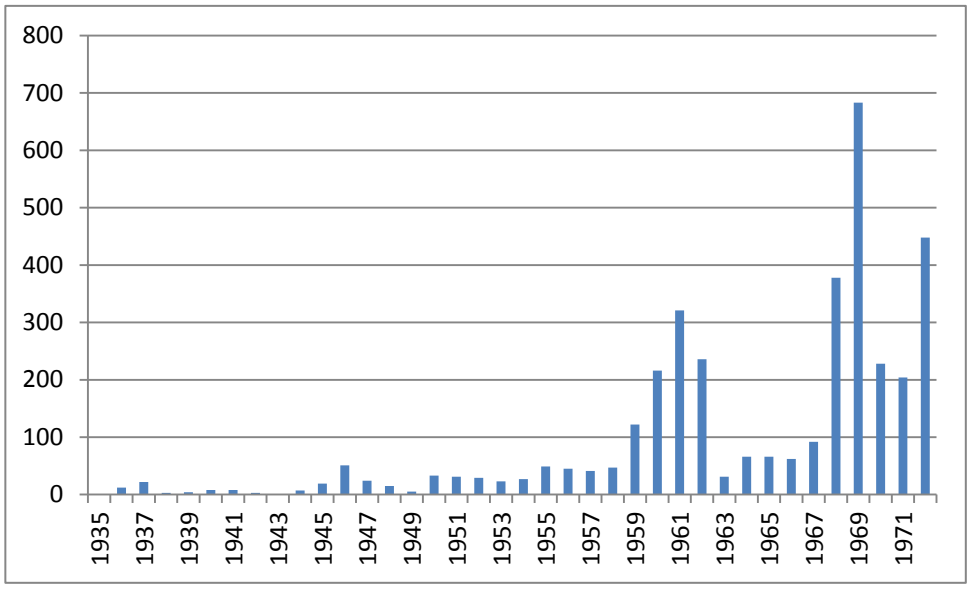
fully registered with the SEC, the 1930s, 1940s and 1950s were pretty much a write off for IPOs (Figure 5). There indeed were more IPOs in 1969 alone (683) than there were in all the years between 1935 and 1959 (613).

Figure 5: Annual number of IPOs (underwritten and registered with the SEC), 1935-72



Source: Derived from Gompers and Lerner (2003, p. 1360, Table 1).

Data the SEC published annually from 1936 onwards on the number of companies with securities traded on national stock exchanges provides further confirmation that US equity markets stagnated from the 1930s through to the 1950s. From 1937 to 1945 the number of issuers declined each year (the large increase between 1936 and 1937 was likely due to improved data collection) (Figure 6). The number of issuers then remained largely unchanged until 1950, from which point the total increased steadily (the SEC did not provide data on the number of issuers between 1953 and 1955).

Figure 6: Number of issuers listed on national stock exchanges/number of national stock exchanges, 1936-70

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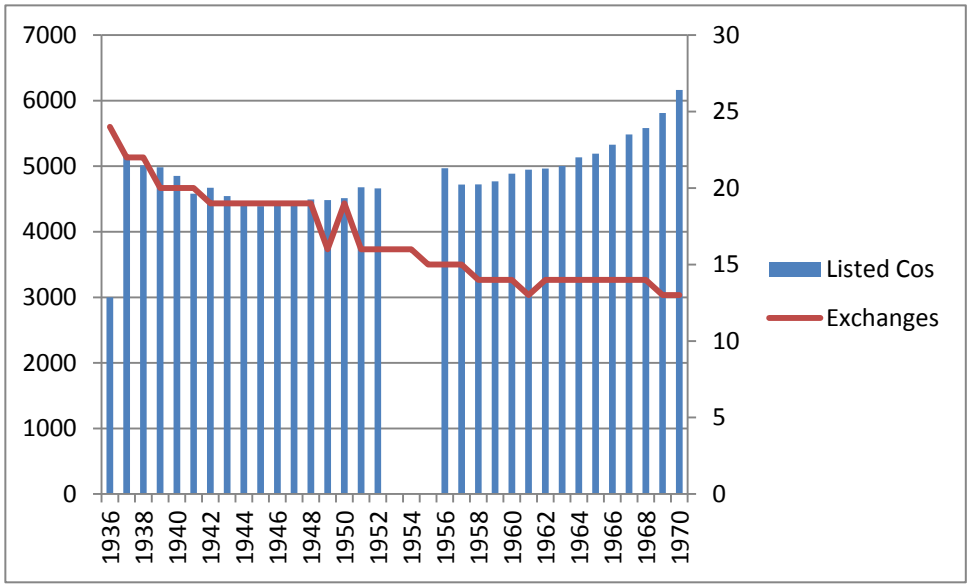

Sources: S.E.C. annual reports, 1936-70

The data on the number of issuers presented in Figure 6 was calculated by aggregating the number of companies listed with each stock exchange without making allowances for companies having their shares traded on more than one stock exchange. Nevertheless, the data displayed in Figure 6 should provide a reasonably accurate time trend because this form of double-counting would have existed for all years. For instance, the ratio of share volume in multiply traded issues to total volume on seven major regional exchanges was 50% in 1944 and 54% in 1953.[19] Consolidation of stock market trading on fewer exchanges may nevertheless have meant the actual number of companies with shares listed for trading on a national stock exchange grew more quickly in the 1950s and 1960s than Figure 6 indicates. With the number of national stock exchanges operating and providing data dropping steadily between 1936 and 1970 (Figure 6) double counting would have become less prevalent over time unless multiply traded issues became more common on stock exchanges that continued to operate.

[19] Walter, *The Role of Regional*, 24.

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The Anti-Director Rights Index and the Measurement of the Quality of Corporate Law Over Time

In the US corporate law is largely a matter for the states, with those operating a corporation having the option of incorporating in a state and being governed by its corporation laws even though the corporation lacks a physical presence there.[20] The conventional wisdom concerning the evolution of state corporate law can be summarized as follows.[21] In the 19th century, due to concerns about potentially irresponsible corporate behaviour, states imposed significant constraints on those running corporations, regulating closely powers exercisable by corporations, share capital structures and the issuance of equity not paid for in full ("watered stock"). In the late 1880s, however, New Jersey began a "race", subsequently won by Delaware, to make available legislation that would be attractive to corporate decision-makers. To win the prize -- revenue generated by incorporation fees and corporate franchise taxes -- "chartermongering" states changed their laws to reduce constraints on managerial freedom of action, a process which reputedly meant that shareholder rights were substantially diminished.[22] There has been intense scholarly debate as to whether the competition for incorporations was ultimately a shareholder-friendly "race to the top" instead of a manager-focused "race to the bottom".[23] However, the general

[20] Romano, *The Genius of American*, 1.

[21] See, for example, Hurst, *The Legitimacy of the Business Corporation*, 69-75, 84, 89-90; Horowitz, *The Transformation of American Law*, 77-93.

[22] O'Sullivan, "Expansion of the US Stock Market", 529; Hurst, *The Legitimacy of the Business Corporation*, 88-90; Cary, "Federalism and Corporate Law", 663-70.

[23] Compare Cary, "Federalism and Corporate Law", 66 ("race to the bottom") with Romano, *The Genius of American*, 14-25 ("race to the top").

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consensus is that state competition for incorporation market share simultaneously enhanced managerial flexibility and eroded shareholder rights.[24]

The received wisdom concerning the evolution of US corporate law does not sit comfortably with law and finance logic. If corporate law that protects shareholders well is a pre-condition for strong equities markets, and if state competition was progressively eroding shareholder rights throughout the 20th century, then the stock market oriented corporate economy for which the US is renowned becomes something of a mystery. For the period prior to the 1929 stock market crash Coffee (2001, pp. 25-39) argues that stock markets flourished in the US because of enlightened New York Stock Exchange self-regulation and prudent oversight by investment bankers, whereas O'Sullivan (2007, pp. 534-37) cites rapid growth in the number of prospective investors prompted by a prosperous economy and unprecedented demand for capital among industrial companies. The period after the 1929 stock market crash remains, however, largely unexplored.

A way to come to terms with the historical inter-relationship between law and stock market development in the US is to draw upon law and finance methodology to ascertain the extent to which corporate law in fact provided protection to shareholders as the 20th century progressed. An innovative (and controversial) feature of the law and finance research program is an emphasis on quantification ("leximetrics"), with law being reduced to numerical values to facilitate statistical analysis of its impact.[25] With respect to corporate law, various indices have been developed but the most popular is the anti-director rights

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24 O'Sullivan, "Expansion of the US Stock Market", 528.

25 Lele and Siems, "Shareholder Protection", 17-18.

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index La Porta, López-de-Silanes, Shleifer and Vishny (LLSV) first deployed in the late 1990s.[26]

The ADRI has six variables: 1) the ability to mail in a proxy vote; 2) the absence of a requirement that shareholders deposit shares before a shareholder meeting, rendering them non-transferable ("no block"); 3) the availability of cumulative voting, which permits minority shareholders to "bundle" their votes and thereby increases the likelihood they can elect their representatives to the board of directors; 4) mechanisms offering relief to minority shareholders who have been oppressed or unfairly prejudiced; 5) rules obliging a company to give existing shareholders a right of first refusal when new shares are issued ("pre-emptive" rights) and 6) the ability of shareholders owning 10 per cent or more of a company's shares to call an extraordinary shareholders' meeting. LLSV awarded countries "0" or "1" with respect to each variable, depending on how each country's company law dealt with each issue. This meant the maximum score any country could receive was "6", though "5" in fact was the highest score LLSV awarded (La Porta *et al.*, 1998, p. 1128).

The ADRI suffers from important limitations. The index fails to take into account key topics such as powers shareholders have to remove directors, the scope shareholders have to exercise managerial powers and the legality of takeover defences.[27] The ADRI is also coded without regard for how law interacts with market practice, meaning scores awarded do not reflect the manner in which companies use their corporate constitutions to deal with

[26] See La Porta *et al.*, "Law and Finance". On the popularity of the index, see Lele and Siems, "Shareholder Protection", 18.

[27] Lele and Siems, "Shareholder Protection", 20-21; Vagts, "Comparative Company Law", 601.

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topics the index addresses.[28] Moreover, the ADRI does not account for litigation mechanics, an important point to consider when determining how corporate legislation operates.[29]

While the ADRI does not constitute a flawless measure of the quality of corporate law, it nevertheless is a well-accepted metric. Over a hundred academic papers have used the ADRI to test theories concerning the interaction between law and markets.[30] Also, while the ADRI, with its small number of variables reducible to scores of "0" or "1", likely is better suited for deployment for multi-country cross-sectional analysis than for measuring change over time in a particular country, it has been used to quantify how corporate law evolved in both Britain and Germany through the 20th century.[31] Correspondingly, deducing what ADRI score US corporate law would have merited going back through time constitutes a plausible way to ascertain the contribution corporate law made to stock market development in the United States. This methodological approach has not yet been deployed for the US but we do so here.

Delaware as the Jurisdiction of Choice

Given that in the US corporate law is largely a matter for the states, a threshold issue that needs to be addressed when deploying the anti-director rights index on a historical basis is the appropriate state to focus on. Delaware stands out as the obvious choice. LLSV specifically cited Delaware's popularity among publicly traded companies to justify their decision to rely on Delaware law when coding for the United States (La Porta *et al.*, 1998, p. 119). Delaware's dominance continues today, as it is currently the home of over 60% of

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28 Spamann, "On the Insignificance", 12-13, 16-18.

29 Roe, "Corporate Law's", 251-52; Armour *et al.*, "Private Enforcement", 688.

30 Spamann, "The 'Antidirector Rights", 468.

31 Pistor *et al.*, "The Evolution of Corporate Law", 802-3 (Britain); Cheffins, *Corporate Ownership*, 36; Franks, Mayer and Wagner, "The Origins of the German", 546.

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Fortune 500 companies.[32] Moreover, Delaware has been first among equals for decades. *Atlantic Monthly* labelled Delaware in 1932 "the corporation homeland of America."[33] As of 1933, nearly 30% of companies listed on the New York Stock Exchange were incorporated in Delaware, well ahead of rivals New York at 18% and New Jersey at 12%.[34]

The pattern was different at the beginning of the 20th century. New Jersey, as the first state to seek actively the incorporation of firms without any economic connection to the state so as to bolster its revenues, was first choice among corporations until restrictive laws introduced in 1913 prompted corporations to look elsewhere.[35] Nevertheless, Delaware remains the appropriate state to focus on when coding US corporate law.

New Jersey's dominance was under threat even prior to the 1913 reforms, as Delaware granted more corporate charters that year.[36] Moreover, Delaware's corporate law closely resembled New Jersey's as the 20th century opened, meaning that there is little point focusing on how New Jersey might score. In 1899 Delaware enacted a new general incorporation statute designed to attract incorporation business and its drafters, fully aware of New Jersey's popularity, copied much of New Jersey's statute.[37] As Chancellor Nicholson said in a 1900 Delaware Court of Chancery decision where he ruled that that it should be presumed the Delaware legislature intended Delaware courts to construe the Delaware statute in the same manner New Jersey courts construed the New Jersey corporate legislation, "there is comparatively little in our statute which is not taken with slight or no change of verbiage

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32 Delaware Division of Corporations, *2010 Annual Report*, available at http://corp.delaware.gov/10CorpAR.pdf (last visited 6 June 2012).

33 John T. Flynn, "Why Corporations Leave Home", *Atlantic Monthly*, Sept. 1932, 268, 268.

34 Twentieth Century Fund, *The Security Markets*, 744.

35 Kirk, "A Case Study", 246-49, 256-58; Grandy, "New Jersey Corporate".

36 Kirk, "A Case Study", 254-55.

37 Larcom, *The Delaware Corporation*, 15.

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from the great multitude of elaborate and minute provisions and regulations contained in the...New Jersey acts."[38]

Delaware's ADRI score, 1899-present

Having established that Delaware is the appropriate jurisdiction on which to focus when using the ADRI to track the evolution of US corporate law, we turn now to scoring Delaware law over time. We do so cognizant of changes and improvements in coding practice occurring over time. La Porta, López-de-Silanes and Shleifer, together with Djankov (DLLS) (2008), re-coded the ADRI, focusing again on Delaware when they considered the US. The key difference between LLSV's and DLLS's coding protocol was the treatment of enabling provisions, these being statutory measures authorizing companies to "opt in."[39] DLLS acknowledged that LLSV had failed when scoring countries to distinguish appropriately between enabling, mandatory and default rules. To ensure consistency for the purposes of re-coding, DLLS ignored enabling rules, meaning that a country would only be awarded a "1" in relation to a particular variable if its corporate law had a default or mandatory rule providing the relevant protection to shareholders.[40] This change in approach explains why DLLS awarded the US a "3" out of "6" whereas LLSV has awarded the US a "5" (Table 1). The US correspondingly was transformed from a top rank corporate law country to a jurisdiction that provided below average protection (Table 2), hardly the pattern that would be expected given the stock market orientation of the US corporate economy.

Table 1: Delaware/US ADRI scores awarded by LLSV, DLLS and Spamann

ADRI element	LLSV (1998)	DLLS (2008)	Reasons for LLSV/DLLS	Spamann (2009)	Reasons for DLLS/Spamann

38 Wilmington City Ry. v. People's Ry., (1900) 47 Atlantic Rep. 245, 251.

39 Djankov *et al.*, "Law and Economics", 454.

40 Djankov *et al.*, "Law and Economics", 454.

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			Discrepancy		**Discrepancy**
Vote by Proxy Allowed	1	1	N/A	0	For DLLS, it sufficed that Delaware permitted voting by proxy.[41] Spamann only gave countries a "1" with this variable if the law required that proxies provide for "yes or no" "two way" voting and Delaware corporate law does not do this (2006, p. 27; 2008, 182-83).
No Block	1	1	N/A	1	N/A
Cumulative Voting	1	0	LLSV awarded the US a "1" because cumulative voting was permitted. DLLS awarded a "0" because the relevant provision is not a default rule (Djankov *et al*., 1998, p. 454).	0	N/A
Oppressed Minority	1	1	N/A	1	N/A
Pre-emptive Rights	0	0	N/A	0	N/A
Ability to Call General Meeting	1	0	DLLS awarded a "0" because Delaware shareholders lack a statutory right to requisition a meeting (Djankov *et al*., 1998, p. 455). Delaware law has an enabling provision on point – see Table 3/Ability to Call General Meeting.	0	N/A
Total	5	3	N/A	2	N/A

Sources: La Porta *et al.* (1998), Djankov *et al.* (2008), Spamann (2006), Spamann (2008), Spamann (2009)

Table 2: US ADRI scores/aggregate averages for all common law and civil law countries, as determined by LLSV, DLLS and Spamann

Index	US score	Common law avg.	Civil law avg.

[41] Djankov *et al*., "Law and Economics", 454 (indicating it would suffice if "shareholders can vote by mail on each of the items on the agenda through a ballot or proxy form"), 455 (Table 9, describing elements in their revised ADRI).

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LLSV (1998)	5	4.00	2.42
DLLS (2008)	3	4.22	3.11
Spamann (2009)	2, (1997), 2 (2005)	3.94 (1997); 4.06 (2005)	3.63(1997); 3.93 (2005)

Sources: La Porta *et al.* (1998), Djankov *et al.* (2008), Spamann (2009)

Spamann (2009) independently re-coded the ADRI, similarly using Delaware as his US reference point.[42] His approach differed in three ways from LLSV and DLLS: 1) the raw legal data was derived from primary materials with the assistance of local lawyers 2) the raw legal data was described in a detailed manner in an appendix available online and 3) a detailed coding protocol, again made available online, was deployed to convert the raw data into ADRI scores for each country.[43] Spamann generated what he called "corrected ADRI" scores for 1997, the baseline year for the original ADRI, and for 2005, the baseline year for DLLS's version of the ADRI.

Of the 46 countries dealt with in the original ADRI that Spamann re-coded, he changed the overall score for 33 of them, and the correlation between original ADRI and the 1997 corrected ADRI was only 0.53. He specifically drew attention to the fact the US score went from "5" to "2" (Table 1),[44] well below the average for the entire sample of re-coded jurisdictions (Table 2). Spamann awarded the US a "2" rather than the "3" DLLS had awarded because Spamann adopted a tougher standard for awarding a "1" for proxy voting that Delaware failed to meet (Table 1).[45]

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42 Spamann, "The 'Antidirector Rights Index' Revisited", 472, n. 12.

43 Spamann, "The 'Antidirector Rights Index' Revisited", 470.

44 Spamann, "The 'Antidirector Rights Index' Revisited", 474.

45 Spamann, "The 'Antidirector Rights Index' Revisited", does not provide for the US or any other country an element-by-element breakdown of ADRI scores. For this data, see http://rfs.oxfordjournals.org/content/23/2/467/suppl/DC1 (last visited 6 June 2012), link to Supplementary Data #2.

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In order to find out how Delaware would have scored historically, our departure point was to deduce from DLLS's 2008 article, Spamann's 2009 article and background material Spamann made available online the Delaware General Corporation Law (DGCL) provisions and case law rules that accounted for the scores awarded for each variable (Table 3). We then worked backwards to 1899 when Delaware enacted its first modern-style general incorporation statute, searching for changes to Delaware law that would have caused the score to change for any of the variables.

The notion of a corporate law "race", whether to the top or bottom, connotes movement. Given Delaware's current low ADRI score and given the general consensus that the competition among states for incorporation business occurring in the 20th century served to erode shareholder rights while enhancing managerial flexibility, the most obvious direction for Delaware to have gone throughout the 20th century would have been from a high score downwards. A trend of this sort might well help to explain from a law and finance perspective why the US currently combines "weak" corporate law with a stock market-oriented corporate economy. Arguably what would have been happening is that "strong" corporate law would have provided the legal foundation for the stock market to achieve prominence. With appropriate institutional structures in place, such as a well-developed nexus of investment bankers and stock market analysts, publicly traded companies could continue to flourish even as shareholder protection diminished.[46]

While it might be expected that Delaware's ADRI score would have dropped steadily as the 20th century progressed, this did not occur (Table 3). Instead, only one change occurred, in 1967, when common law pre-emptive rights were statutorily abolished. While

[46] For similar reasoning concerning the UK, see Roe, "Political Foundations", 130 (explaining how vibrant British securities markets persisted despite less than ideal post-World War II political conditions).

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this meant that the US aggregate score fell, it only declined from average or slightly below average (Table 2) to well below average.

Table 3: Delaware's ADRI score, 1899-present

ADRI element	**1899-1967**	**1967-present**	**Justification for present day score and for changes (if any)**	**Other Major Changes to the Law (if any)**
Vote by Proxy Allowed	1/0	1 (DLLS)/0 (Spamann)	DGCL § 212(b) (gives shareholders the right to vote by proxy but not providing for, as Spamann requires, two way voting).	None. Shareholders have been authorized to vote by proxy since 1899 (DCGL 1899 § 20) and two-way voting has never been provided for.
No Block	1	1	Spamann (2008) (at 183): "Under the default regime, firms cannot require deposit of shares…"	None. DGCL 1925 § 17 gave a corporation's directors the power to close the stock transfer books up to 50 days prior to a shareholder meeting to fix who was permitted to vote but did not authorize the directors to preclude dealing in the shares.
Cumulative Voting	0	0	DGCL § 214 (providing for an enabling rule, not a default rule)	The enabling rule was introduced in 1917: 29 Del. Laws c. 113, § 9.
Oppressed Minority	1	1	Spamann (2008, p. 184): Minority shareholders can challenge breaches of duty by a derivative suit and can challenge shareholder amendments to the corporate charter on grounds of "unfairness"; appraisal rights exist with mergers and combinations.	The common law right to bring a derivative action has been recognized since at least 1882 and by 1924 Delaware courts were treating the principles as "well settled".[47] Appraisal rights were introduced in 1899 (DCGL 1899 § 56).
Pre-emptive Rights	1	0	Spamann (2008, p. 184): "Preemptive rights exist only to the extent expressly granted in the (certificate of incorporation) (DGCL §102(3)." At common	In 1927, the DGCL was amended to permit corporations to use their certificate of incorporation to displace pre-emptive rights: DGCL 1927 § 5, para. 10.

[47] Hawes v. Oakland 104 US 450 (1882); Fleer v. Frank H. Fleer Corp., 125 A. 411, 415 (Del. Ch. 1924).

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			law, shareholders had pre-emptive rights.[48] The 1967 DGCL abolished these -- § 102(b)(3).	
Ability to Call General Meeting	0	0	Spamann (2008, p. 184): "shareholders can call a special meeting only if allowed by, and under the conditions specified in, the (certificate of incorporation), DGCL §211(d)...."	None. The 1967 DGCL introduced the statutory enabling rule (§211(d)) but even prior to this Delaware companies could use their by-laws to empower shareholders to call a stockholder meeting.[49]
Total	4/3	3/2		

Sources: Spamann (2008), various versions of the Delaware General Corporation Law

Delaware's historical ADRI score is an awkward fit with both law and finance thinking and the standard historical narrative for US corporate law. Delaware corporate law, based at least on its ADRI score, offered mediocre protection to outside investors not only when US equity markets were stultified between the 1930s and the 1950s but during decades when the stock market flourished. Moreover, while it is generally acknowledged that Delaware prevailed in a chartermongering "race" where states marketed themselves by offering increasingly manager-friendly laws, the extent to which Delaware corporate law protected shareholders varied little throughout the 20th century. As we have acknowledged the ADRI is not an optimal device for measuring change over time in a particular country. Nevertheless, our analysis suggests that the notion of a Delaware-led race to bottom (or top) should not be taken for granted and provisionally confirms that at no point during the 20th century was the quality of Delaware corporate law as high as would be anticipated if "good" corporate law was providing the legal springboard for the development of US equities markets.

Federal Securities Law – the Law and Finance Angle

48 Berle and Means, *The Modern Corporation*, 133-34.

49 See, for example, Moon v. Moon Motor Car Co., 151 A. 298, 299 (Del. Ch. 1930).

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The ADRI focuses exclusively on corporate law, which means that in the US context it misses a crucial element of investor protection, federal securities law. While a widely held view is that in the corporate law realm "(f)rom the post-Civil War period onward stockholders and directors have gone to battle over many issues, and the directors have usually won,"[50] during the mid-1930s a federal counter-trend emerged. The Securities Act of 1933 (48 Stat. 74) required public disclosure of material financial information about public offerings companies made and the Securities Exchange Act of 1934 (48 Stat. 881) established the Securities Exchange Commission, prohibited various forms of market manipulation and imposed substantial disclosure requirements on companies with shares already listed on stock exchanges. Arguably, these reforms provided a robust regulatory foundation for the development of equities markets in a way that corporate law did not. Kaufman and Zacharias (1992, p. 543) maintain, for instance, "New Deal securities legislation in effect authorized federal officials to reinforce the shareholder's ownership role under state laws and to reduce the risks of separating ownership from control."

According to Zingales (2009, p. 391), "The backbone of US securities law was introduced in the 1930s to restore the public's trust in the securities market....", an objective which, if fulfilled, plausibly would have done much to promote the success of US equities markets. Various observers maintain federal intervention indeed gave investors good reason to have faith in the stock market. According to Knauss (1964, p. 616) "the Securities Act...prevented numerous investors from buying poor quality stocks." Baskin and Miranti (1997, p. 207) say of the growth of governmental regulatory institutions during the 1930s, "In the case of securities market reform, public confidence was enhanced by the increased transparency of corporate affairs". Fraser (2005, p. 475) makes the point more evocatively,

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[50] Roy, *Socializing Capital*, 158.

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arguing "By shaming Wall Street and by subjecting the Street along with the rest of the world to some form of regulation, however rickety and ad hoc, the New Deal made a convincing case that the ogre had been effectively defanged."

A US scenario where securities law, more than corporate law, provided the key legal foundation for the stock market orientation of the US corporate economy is provisionally a good fit with the law and finance literature. La Porta, López-de-Silanes and Shleifer (LLS) (2006), in a follow up to their original ADRI research, examined securities laws in 49 countries to determine whether private and public enforcement of laws governing prospectuses – documentation circulated to prospective investors by those organizing public offerings of securities – were determinants of the size of national stock markets and corporate ownership structures. They found that a legal regime facilitating private enforcement, measured by the strictness of disclosure requirements and the burden of proof private investors had to meet to sue successfully in the event of prospectus misdisclosure, was strongly associated with robust stock markets. The US scored highly on the securities law indices LLS compiled,[51] as would be anticipated from a law and finance perspective given its well-developed equity market. Correspondingly, from a "law matters" perspective the "fit" between US stock market development and securities law is much better than it is with corporate law.

Consistent with the US pattern, LLS's cross-country results indicate that securities law could be a more influential determinant of stock market development than corporate law. While for the purposes of their 2006 article they replicated their 1998 finding that in isolation high ADRI scores correlated statistically with better developed stock markets, when they added their measures of private enforcement of securities law to their regressions the

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[51] Armour *et al.*, "Private Enforcement", 711-12.

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association between the ADRI and stock market measures was largely cancelled out.[52] Extrapolating matters historically for the US, federal securities regulation arguably provided the key legal departure point for the enduring strength of US equities markets, counter-balancing the modest protection corporate law provided.

Securities Law and mid-20th Century US Equities Markets

While a case can be made that federal securities law provided the true legal cornerstone for stock market development in the US, the historical evidence arguably tells a different story. If the New Deal reforms were indeed pivotal, their introduction might have been expected to yield quick results. Instead, stock markets in the US were in the doldrums for at least two decades following federal intervention (see Figures 1 to 6 above). This hiatus casts doubt on a securities law-oriented explanation for the size and scale of US equities markets.

If regulation of securities markets had stepped up a gear in the 1950s in tandem with the revival of the stock market, the facts would fit much better with a law and finance account oriented around securities law. This, however, did not occur. Instead, during the 1950s the SEC "reached its nadir" when "its enforcement and policy-making capabilities were less effective than at any other period in its history."[53]

Despite stock markets failing to revive fully for at least two decades following the enactment of federal securities regulation, it remains possible that, as law and finance thinking implies, federal intervention contributed materially to the development of US equities markets. This is because the benefits of reform in the 1930s may have been genuine but postponed. Sylla and Smith (1995, p. 200) say, for instance, of New Deal financial

52 La Porta et al., "What Works", 19.

53 Seligman, *The Transformation of Wall Street*, 265.

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reforms "The lingering Depression and World War II delayed their impact, but even then the groundwork was being laid for the great expansion and transformation of US securities markets in the second half of the century. The availability of timely, extensive, and relatively standardized financial information made it possible to compare the performance of US corporations at any given time as well as over longer periods of time." Cross and Prentice (2007, p. 60) make a related point, which is that the boost federal securities reform might have been expected to provide to US equities markets would logically have been delayed because SEC staff needed to gain expertise and experience and because private parties needed to become familiar with the new legal regime.[54]

Even if the Depression and World War II mean the lag between the introduction of federal securities law reform and the stock market rebound of the mid-1950s is explicable from a law and finance perspective, differences between the growth of the market for shares listed on national stock exchanges and the growth of an "over the counter" (OTC) market where a decentralized network of dealers who would "make markets" by dealing in shares for their own account casts doubt on the extent to which federal intervention was a key foundation for flourishing US equities markets.[55] The SEC noted that there were "vast differences in the degree of investor protection in the two markets (1963, p. 1)." Specifically, while general antifraud provisions in the Securities Exchange Act of 1934 applied to companies with shares traded over-the-counter, rules precluding specified forms of insider trading and requiring companies to divulge salient information when soliciting proxies from shareholders did not and rules mandating the disclosure of financial data on a quarterly and annual basis only applied to OTC issuers when the total market capitalization of securities

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[54] See also Seligman, *The Transformation of Wall Street*, 562.

[55] On the nature of the over-the counter market, see Federer, "Advances in Communication", 501-2.

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issued by such companies exceeded specified levels.[56] This state of affairs continued until 1964, when statutory reform levelled the regulatory playing field by imposing the more stringent requirements on OTC issuers.[57]

The SEC said in its 1963 report that the statutory measures inapplicable to OTC companies "provide valuable protections for the investor in a listed company"[58] and empirical research done on the 1964 statutory reforms indicates that investors became willing to pay more for the shares of OTC firms affected.[59] Correspondingly, if regulatory context is as important to the vibrancy of equities markets as law and finance thinking implies, the over-the-counter market should have struggled relative to national stock exchanges between the enactment of federal securities regulation in the mid-1930s and statutory reform in 1964. The opposite occurred. The OTC market grew from 16% to 61% as a percentage of total national stock exchange sales between 1935 and 1961.[60] Equities markets therefore flourished in the US in the absence of thoroughgoing federal regulation, contrary to what law and finance logic implies.

Conclusion

While the law and finance literature indicates that the quality of corporate and securities law does much to explain the configuration of equities markets across countries, with the United States the historical evidence tells a different story. In the case of corporate law, throughout the 20th century Delaware law offered only modest protection for outside investors, at least when measured in terms of the well-known anti-director rights index. This

56 Greenstone, Oyer and Vissing-Jorgensen, "Mandated Disclosure", 407-8; Securities and Exchange Commission, *Report*, 2-5.

57 78 Stat. 565; for background see Sclar, The Securities Acts".

58 Securities and Exchange Commission, *Report of Special Study*, 5.

59 Greenstone, Oyer and Vissing-Jorgensen, "Mandated Disclosure".

60 Ferrell, "Mandatory Disclosure", 219-20.

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is not what would be anticipated, given the corporate law version of law matters thinking and the robust nature of US equities markets.

Securities law developments conform better with the notion that the law matters, with US securities law currently offering the robust investor protection one would expect in a country with a stock market-oriented corporate economy. However, the fact equities markets were in the doldrums for at least two decades following the introduction of federal securities regulation suggests that law may not have in practice provided a major boost to investor confidence in the stock market. Likewise, the rapid growth of the considerably less regulated over-the-counter market relative to national stock exchanges prior to the mid-1960s indicates that robust legal protection was not essential for investors to focus on publicly traded companies as a medium for investment.

If corporate and securities law did not play the dominant role in fortifying US equities markets that law and finance thinking implies, then what prompted the revival of the stock market in the mid-1950s? Extralegal factors likely played a key role. The US economy was performing well and, with memories of the trauma of the 1929 Great Crash and the ensuing Depression beginning to fade, investors became increasingly confident about business prospects generally and about stocks as an investment specifically.[61] Other laws also might have "mattered." For instance, a dividend tax credit introduced in 1954 in response to concerns about declining equity investment coincided with the revival of the stock market, though the modest size of the tax credit likely muted the impact of reform.[62] Likewise, when various states, most prominently New York in the early 1950s, liberalized rules governing permissible trust investments, this likely bolstered demand for shares by paving the way for

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[61] Baskin and Miranti, *A History of Corporate*, 224-26, 231-34; Sobel, *The Last Bull Market,* 1-11, 26-31, 47-48, 63-64, 74-75; Gordon, *An Empire*, 359, 367-70.

[62] Bank, "The Rise and Fall", 226-30.

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rapidly growing pension funds to reconfigure asset allocations in favour of equities.[63] The upshot is that while the law and finance literature indicates that the quality of corporate and securities law do much to dictate stock market development, at least in the United States during the middle decades of the 20th century other variables apparently were more important.

Acknowledgments

We are grateful for feedback from Lawrence Hamermash, Holger Spamann and the anonymous referees and for excellent research assistance provided by Brendan Mace.

References

Armour, John, Bernard Black, Brian Cheffins and Richard Nolan. "Private Enforcement of Corporate Law: An Empirical Comparison of the United Kingdom and the United States." *Journal of Empirical Legal Studies* 6 (2009): 687-722.

Armour, John, Simon Deakin, Priya Lele and Mathias Siems. "How Do Legal Rules Evolve? Evidence from a Cross-Country Comparison of Shareholder, Creditor and Worker Protection." *American Journal of Comparative Law* 58 (2009): 579-629.

Bank, Steven A. "The Rise and Fall of Post-World War II Corporate Tax Reform." *Law & Contemporary Problems* 73 (2010): 207-32.

Baskin, Jonathan Barron and Paul J. Miranti. *A History of Corporate Finance*. Cambridge: Cambridge University Press, 1997.

Berle, Adolf A. and Gardiner C. Means. *The Modern Corporation & Private Property*. New York: Harcourt, Brace & World, 1932. Reprinted with a new introduction by Murray Weidenbaum and Market Jensen. New Brunswick, N.J.: Transaction Publishers, 1997.

63 Burk, *Values in the Marketplace*, 83-85; Smith and Sylla, "Capital Markets", 1231.

Electronic copy available at: https://ssrn.com/abstract=2079505

Black, Bernard. "The Core Institutions that Support Strong Securities Markets." *Business Lawyer* 55 (2000): 1565-1607.

Burk, James. *Values in the Marketplace: The American Stock Market Under Federal Securities Law*. Berlin: Walter de Gruyter, 1988.

Cary, William L. "Federalism and Corporate Law: Reflections Upon Delaware." *Yale Law Journal* 83 (1974): 663-705

Cheffins, Brian R. "Law as Bedrock: The Foundations of an Economy Dominated by Widely Held Public Companies." *Oxford Journal of Legal Studies*, 23 (2003): 1-23.

Cheffins, Brian R. "Dividends as a Substitute for Corporate Law: The Separation of Ownership and Control in the United Kingdom." *Washington & Lee Law Review* 63 (2006): 1273-1338.

Cheffins, Brian R. *Corporate Ownership and Control: British Business Transformed*. Oxford: Oxford University Press, 2008.

Coffee, John C. "The Rise of Dispersed Ownership: The Roles of Law and the State in the Separation of Ownership and Control." *Yale Law Journal* 111 (2001): 1-82.

Cross, Frank B. and Robert A. Prentice. "The Economic Value of Securities Regulation." *Cardozo Law Review* 28 (2006): 333-89.

Cross, Frank B. and Robert A. Prentice. *Law and Corporate Finance*. Cheltenham, U.K.: Edward Elgar, 2007.

Danielan, N.R. "Ownership of Securities in the United States. In *The Security Markets: Findings and Recommendations of a Special Staff of the Twentieth Century Fund*, 35-62. New York: Twentieth Century Fund, 1935.

Electronic copy available at: https://ssrn.com/abstract=2079505

Djankov, Simeon, Rafael La Porta, Florencio López-de-Silanes and Andrei Shleifer. "The Law and Economics of Self-Dealing." *Journal of Financial Economics* 88 (2008): 430-65.

Enriques, Luca. "Do Corporate Law Judges Matter? Some Evidence from Milan." *European Business Organization Law Review* 3 (2002): 756-821.

Federer, J. Peter. "Advances in Communication Technology and Growth of American Over-the-Counter Markets." *Journal of Economic History* 68 (2008): 501-34.

Ferrell, Allen. "Mandatory Disclosure and Stock Returns: Evidence from the Over-the Counter Market." *Journal of Legal Studies* 36 (2007): 213-51.

Franks, Julian, Colin Mayer and Hannes F. Wagner. "The Origins of the German Corporation – Finance, Ownership and Control." *Review of Finance* 10 (2006): 537-85

Fraser, Steve. *Every Man a Speculator: A History of Wall Street in American Life.* New York: Harper Collins, 2005.

Goldsmith, Raymond W. *Comparative National Balance Sheets: A Study of Twenty Countries, 1688-1978*. Chicago: University of Chicago Press, 1995.

Gompers, Paul A. and Josh Lerner, "The Really Long-Run Performance of Initial Public Offerings: The Pre-Nasdaq Evidence." *Journal of Finance* 58 (2003): 1355-92.

Gordon, John Steele. *An Empire of Wealth: The Epic History of American Economic Power*. New York: Harper Perennial, 2004.

Grandy, Christopher. "New Jersey Corporate Chartermongering, 1875-1929." *Journal of Economic History* 49 (1989): 677-92.

Greenstone, Michael, Paul Oyer and Annette Vissing-Jorgensen. "Mandated Disclosure, Stock Returns, and the 1964 Securities Acts Amendments." *Quarterly Journal of Economics* 121 (2006): 399-459.

Electronic copy available at: https://ssrn.com/abstract=2079505

Horowitz, Morton J. *The Transformation of American Law 1870-1960: The Crisis of Legal Orthodoxy*. New York: Oxford University Press, 1992.

Hurst, James W. *The Legitimacy of the Business Corporation in the Law of the United States 1780-1970*. Charlottesville, University of Virginia Press, 1970.

Kaufman, Allen and Lawrence Zacharias, "From Trust to Contract: The Legal Language of Managerial Ideology." *Business History Review* 66 (1992): 523-72.

Kimmel, Lewis H. *Share Ownership in the United States*. Washington D.C.: Brookings Institution, 1952.

Kirk, William E. "A Case Study in Legislative Opportunism: How Delaware Used the Federal-State System to Attain Corporate Pre-Eminence." *Journal of Corporation Law* 10 (1984): 233-60.

Knauss, Robert L. "A Reappraisal of the Role of Disclosure." *Michigan Law Review* 62 (1964): 607-48.

La Porta, Rafael, Florencio López-de-Silanes, Andrei Shleifer and Robert Vishny. "Law and Finance." *Journal of Political Economy* 106 (1998): 1113-55.

La Porta, Rafael, Florencio López-de-Silanes and Andrei Shleifer. "What Works in Securities Laws?" *Journal of Finance* 61 (2006): 1-32.

Lele, Priya and Mathias M. Siems. "Shareholder Protection: A Leximetric Approach." *Journal of Corporate Law Studies* 7 (2007): 17-50

Larcom, Russell C. *The Delaware Corporation*. Baltimore: Johns Hopkins Press, 1937.

Milhaupt, Curtis J. and Katharina Pistor. *Law and Capitalism: What Corporate Crises Reveal about Economic Development Around the World*. Chicago: University of Chicago Press, 2008.

Electronic copy available at: https://ssrn.com/abstract=2079505

O'Sullivan, Mary. *Contests for Corporate Control: Corporate Governance and Economic Performance in the United States and Germany*. Oxford: Oxford University Press, 2000.

O'Sullivan, Mary. "The Expansion of the U.S. Stock Market: Historical Facts and Theoretical Fashions." *Enterprise & Society* 8 (2007): 489-542.

Perkins, Edwin J. *Wall Street to Main Street: Charles Merrill and Middle-Class Investors.* Cambridge: Cambridge University Press, 1999.

Pistor, Katharina, Yoram Keinan, Jan Kleinheisterkamp and Mark D. West. "The Evolution of Corporate Law: A Cross-Country Comparison." *University of Pennsylvania of Journal of International and Economic Law* 23 (2002): 791-871.

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

Roe, Mark J. "Political Foundations for Separating Ownership from Control." In *Corporate Governance Regimes: Convergence and Diversity*, eds. Joseph A. McCahery, Piet Moerland, Theo Raaigmakers and Luc Renneboog, 133-46. Oxford: Oxford University Press, 2002.

Roe, Mark J. "Corporate Law's Limits." *Journal of Legal Studies* 31 (2002): 233-71.

Romano, Roberta. *The Genius of American Corporate Law*. Washington, D.C., 1993.

Roy, William G. *Socializing Capital: The Rise of the Large Industrial Corporation in America*. Princeton: Princeton University Press, 1997.

Sclar, Lee J. "The Securities Acts Amendments of 1964: Selected Provisions and Legislative Deficiencies." *California Law Review* 53 (1965): 1494-1519.

Securities and Exchange Commission. *Report of Special Study of Securities Markets of the Securities and Exchange Commission, Part 3*. Washington, D.C.: U.S. Government Printing Office, 1963.

Electronic copy available at: https://ssrn.com/abstract=2079505

Seligman, Joel. *The Transformation of Wall Street: A History of the Securities and Exchange Commission and Modern Corporate Finance*. Boston: Houghton, Mifflin, 1982.

Smith, George David and Richard Sylla. "Capital Markets". In *The Encyclopedia of the United States in the Twentieth Century, vol. III*, ed. Stanley I. Kutler, 1209-41. New York: Charles Scribner's Sons, 1996.

Sobel, Robert. *The Big Board: A History of the New York Stock Market*. New York: Free Press, 1965.

Sobel, Robert. *The Last Bull Market: Wall Street in the 1960s*. New York: W.W. Norton, 1980.

Spamann, Holger. "On the Insignificance and/or Endogeneity of La Porta et al.'s 'Anti-Director Rights Index' Under Consistent Coding." Harvard Olin Center for Law, Economics and Business Fellows' Discussion Paper No. 7 (2006).

Spamann, Holger. "Appendix to The 'Antidirector Rights Index' Revisited." Available at http://rfs.oxfordjournals.org/content/suppl/2009/09/24/hhp067.DC1/hhp067_suppl_data.pdf (2008) (last visited 3 March 2012).

Spamann, Holger. "The 'Antidirector Rights Index' Revisited." *Review of Financial Studies* 23 (2010): 467-86.

Sylla, Richard and George David Smith. "Information and Capital Market Regulation in Anglo-American Finance." In *Anglo-American Financial Systems: Institutions and Markets in the Twentieth Century*, eds. Michael D. Bordo and Richard Sylla, 179-205. New York: New York University Press, 1995.

Twentieth Century Fund. *The Security Markets: Findings and Recommendations of a Special Staff of the Twentieth Century Fund*. New York: Twentieth Century Fund, 1935.

Electronic copy available at: https://ssrn.com/abstract=2079505

Vagts, Detlev. "Comparative Company Law – The New Wave". In *Festschrift für Jean Nicolas Druey zum 65. Geburtstag*, eds., Rainer J. Schweizer, Herbert Burkert and Urs Gasser, 595-605. Zurich: Schultess, 2002.

Walter, James E. *The Role of Regional Security Exchanges*. Berkeley: University of California Press, 1957.

Zingales, Luigi. "The Future of Securities Regulation." *Journal of Accounting Research* 47 (2009): 391-425.

Electronic copy available at: https://ssrn.com/abstract=2079505