SHAREHOLDER PROTECTION AROUND THE WORLD (LEXIMETRIC II*)

BY MATHIAS M. SIEMS+

ABSTRACT

This article analyzes how shareholder protection has developed in twenty countries from 1995 to 2005. In contrast to traditional legal research, it draws on a quantitative methodology to law (called leximetrics or numerical comparative law). This methodology reveals that in most countries shareholder protection has improved in the last years; that developed countries perform better than developing countries in protecting shareholders; that shareholder protection in common law countries is relatively similar, whereas no comparable similarity is found within the German and French civil law families; that German corporate law is "more mainstream" and U.S. corporate law is "more eccentric" than the law of the other countries; and that, in general, there has been convergence in the last decade. In order to explain these results, the distinction between origin and transplant countries can be useful. However, in contrast to previous studies, this does not mean that all depends on the distinction between English, French, and German origin and transplant countries. Rather it is decisive (1) which "version" of the corporate law the transplant country copied, (2) whether transplant countries continue to take developments in the origin countries into account, and (3) whether transplant countries have left the path of their (former) origin countries.

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I. INTRODUCTION

Recently, the question of whether and how shareholders should be protected has been intensely debated. Lucian Bebchuk found shareholders seldom use their power to challenge directors.\(^1\) He suggested this should be remedied by reducing impediments to replacing directors and by improving shareholders' power to change the company's charter.\(^2\) This has evoked


many critical comments. These critics argue shareholders lack proper incentives to act for the corporation as a whole, board control is beneficial to the shareholders, and the primacy of the director in U.S. law has worked well during the last decades. However, there has also been some support for strengthening shareholder rights. Scholars have argued that the existing rights must be made more effective and that shareholders would enjoy greater, longer-lasting happiness by using their shares to have a participatory role.

Outside the U.S., the protection of shareholders is also topical. In the European Union (EU), the European Parliament recently approved a directive on shareholder rights. Critics object that this directive addresses topics better left to the companies themselves, such as the use of the new media preceding and during the general meeting. Furthermore, this directive may also be an unnecessary irritant to national corporate laws, which may already protect shareholders sufficiently. Internationally, the Organisation for Economic Co-operation and Development (OECD) emphasizes in its Principles of Corporate Governance that "[t]he corporate governance framework should protect and facilitate the exercise of...
shareholders' rights. These principles are important because the International Monetary Fund (IMF) and the World Bank, as well as investors, use them as a benchmark for good corporate governance. However, critics may point out that these principles are based on a western model of corporate law, which may be unsuitable in other parts of the world.

This article analyzes the relationship between these discussions and the legal development of shareholder protection in twenty countries using "leximetrics" or "numerical comparative law," a quantitative methodology explained in Part II of this article. Part III presents the results of this leximetric approach. In particular, it examines whether there are profound differences between different groups of countries (e.g., between common law and civil law countries; developed and developing countries). Part IV provides possible explanations for the differences found. The author's conclusions are in Part V.

II. LEXIMETRICS: CHOICE AND CODING VARIABLES FOR SHAREHOLDER PROTECTION

A. Previous Research

Lawyers usually follow a qualitative approach because, apart from citation to statutes or cases, they do not use numbers and do not make calculations. In contrast, leximetrics refers to every quantitative measurement of law. With respect to shareholder protection, the most


12Id. at 9. See also Hwa-Jin Kim, Taking International Soft Law Seriously: Its Implications for Global Convergence in Corporate Governance, 1 J. KOREAN L. 1, 34 (2001) (discussing OECD principles' influence on South Korean corporate law and international lending institutions' reference to them); Howard Sherman, Corporate Governance Ratings, 12 CORP. GOVERNANCE 5, 7 (2004) (rating agencies that use the OECD principles in order to rank companies' quality of corporate governance).


15This term was first used in Mathias M. Siems, Numerical Comparative Law: Do We Need Statistical Evidence in Law in Order to Reduce Complexity?, 13 CARDozo J. INT'L & COMP. L. 521 (2005).
famous attempt to quantify the law is the study by La Porta et al. entitled "Law and Finance." This study used eight variables as proxies for shareholder protection in forty-nine countries. These variables coded the law for "one share, one vote," "proxy by mail allowed," "shares not blocked before the meeting," "cumulative voting," "oppressed minorities mechanism," "pre-emptive rights to new issues," "share capital required to call an extraordinary shareholder meeting," and "mandatory dividend." Next, the authors drew on those numbers as independent variables for statistical regressions. Their main finding was that good shareholder protection leads to more dispersed shareholder ownership, which can be seen as a proxy for developed capital markets.

However, it is doubtful whether the findings of La Porta et al. are accurate. Studies have identified many coding errors. In addition, their choice of variables does not provide a meaningful picture of the legal protection of shareholders. The chosen variables suffer from a U.S. bias and do not capture the most significant aspects of the law, making them a poor proxy for shareholder protection in general.

Lele and I made a fresh start for a quantification of shareholder protection (Leximetric I). We built a new shareholder protection index for five countries (Germany, France, UK, U.S., and India) and coded the development of the law over three decades. In particular, we took into account that different legal instruments can be used to achieve a similar function. We also increased the number of variables to sixty. Furthermore, we addressed the various problems related to the coding of

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17 La Porta, et al., supra note 16, at 1151-52.


21 Lele & Siems, supra note 14, at 22.

22 Id. at 22-25.
legal provisions. For instance, we made clear how we dealt with ambiguous legal provisions and to what extent we coded nonmandatory and soft law.  

Further, our article gave examples of the interesting possibilities that diligent quantification of legal rules provides for comparing variations across time and across legal systems. For instance, it was found that: shareholder protection has been improving in the last three decades, the protection of minority against majority shareholders is considerably stronger in "blockholder countries," and convergence in shareholder protection has been taking place since 1993 and increasing since 2001.  

This article (Leximetric II) ties in with our coding of shareholder protection in Leximetric I. In one respect, it is more extensive because it deals with not five, but twenty countries. It is narrower, however, because it uses only ten variables, not sixty and looks at the years 1995 though 2005. This reduction was based partially on pragmatic reasons because the compilation and coding of legal rules across time is very complex and time-consuming. An index cannot take all aspects of shareholder protection into account. As corporate law of most countries consists of several hundred sections or articles, the coding of all the details would lead to an unworkable index of several hundred (or thousand) variables. Thus, it was necessary to construct a limited number of core variables that could function as a proxy for shareholder protection in general.

B. Variables on Shareholder Protection

Table 1. Description and Coding of Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Description and Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Powers of the general meeting for de facto changes</td>
<td>Equals 1 if the sale of more than 50% of the company's assets requires approval of the general meeting; equals 0.5 if the sale of more than 80% of the assets requires approval; otherwise, it equals 0.</td>
</tr>
</tbody>
</table>

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23Id. 25-30. For a discussion of what is to be considered "soft law," as well as its role and significance in international lawmaking, see Kim, supra note 12, at 3 n.1 ("The non-treaty international soft law regularly takes the form of codes of conduct, guidelines, recommendations, declarations, and resolutions of international organizations, conferences, and NGOs, which are not a source of international law in the sense of Article 38 Para. 1 of the Statute of the International Court of Justice.").

24Lele & Siems, supra note 14, at 43-44.

25Nonbinary coding was used where necessary to provide an accurate picture.
<table>
<thead>
<tr>
<th>2. Agenda setting power(^{26})</th>
<th>Equals 1 if shareholders who hold 1% or less of the capital can put an item on the agenda; equals 0.75 if there is a hurdle of more than 1% but not more than 3%; equals 0.5 if there is a hurdle of more than 3% but not more than 5%; equals 0.25 if there is a hurdle of more than 5% but not more than 10%; otherwise, it equals 0.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Anticipation of shareholder decision facilitated</td>
<td>Equals 1 if (1) postal voting is possible or (2) proxy solicitation with two-way voting proxy form(^{27}) has to be provided by the company (i.e., the directors or managers); equals 0.5 if (1) postal voting is possible if provided in the articles or allowed by the directors, or (2) the company has to provide a two-way proxy form but not proxy solicitation; otherwise, it equals 0.</td>
</tr>
<tr>
<td>4. Prohibition of multiple voting rights (super voting rights)(^{28})</td>
<td>Equals 1 if there is a prohibition of multiple voting rights; equals 2/3 if only companies which already have multiple voting rights can keep them; equals 1/3 if state approval is necessary; otherwise, it equals 0.</td>
</tr>
<tr>
<td>5. Independent board members(^{29})</td>
<td>Equals 1 if at least half of the board members(^{30}) must be independent; equals 0.5 if 25% of them must be independent;(^{31}) otherwise, it equals 0.</td>
</tr>
</tbody>
</table>

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\(^{26}\)If the law of a country does not provide the right to put an item on the agenda of a general meeting (including the annual general meeting), the right to call an extraordinary general meeting was coded, provided the minority shareholders can utilize this right to discuss any agenda.

\(^{27}\)A two-way proxy form refers to a form which can be used in favor of or against a proposed resolution.

\(^{28}\)This can also be regulated in securities law (including listing requirements).

\(^{29}\)This can also be regulated in a corporate governance code. If there is no "comply or explain" requirement, this may, however, justify a lower score.

\(^{30}\)Notes: (1) In a two-tier system, this concerns only members of the supervisory board (not the management board). (2) If it is only provided that the members of some special committees of the board need to be independent (and, therefore, some of the members of the actual board must be independent too), a lower score was assigned than for a requirement of board independence.

\(^{31}\)Other intermediate scores are also possible. They are calculated in the same way, i.e., the score equals percentage of independent board members divided by two. If the law requires a fixed number of independent directors (e.g., always 2 independent directors), the (estimated) average size of boards was used in order to calculate the score.
| 6. Feasibility of directors' dismissal | Equals 0 if good reason is required for the dismissal of directors; equals 0.25 if directors can always be dismissed but are always compensated for dismissal without good reason; equals 0.5 if directors are not always compensated for dismissal without good reason, but they could have concluded a non fixed-term contract with the company; equals 0.75 if, in cases of dismissal without good reason, directors are only compensated if compensation is specifically contractually agreed; equals 1 if there are no special requirements for dismissal and no compensation has to be paid. Note: If there is a statutory limit on the amount of compensation, this can lead to a higher score. |
| 7. Private enforcement of directors' duties (derivative suit) | Equals 0 if this is typically excluded (e.g., because of a strict subsidiarity requirement or hurdle which is at least 20%); equals 0.5 if there are some restrictions (e.g., certain percentage of share capital; demand requirement); equals 1 if private enforcement of directors' duties is readily possible. |
| 8. Shareholder action against resolutions of the general meeting | Equals 1 if every shareholder can file a claim against a resolution by the general meeting; equals 0.5 if there is a threshold of 10% voting rights; equals 0 if this kind of shareholder action does not exist. |

32 For two-tier systems, both the management and the supervisory boards were addressed.
33 This can be based on a specific provision in statutory or case law. It can also be based on a contract, for instance, if the company has to conclude an employment contract with the director and this contract cannot be terminated without good reason.
34 This restricts dismissal because either: (1) an immediate unilateral termination of this contract may not be possible, or (2) the directors have to be compensated in case of immediate unilateral termination of this contract.
35 Variables 7 and 8 only concern the law on the books and not the efficiency of courts in general.
36 I have also given intermediate scores, e.g., ¼ for a 5% hurdle, ¼ for a 10% or 15% hurdle. A 5% hurdle led to the score ½.
37 The substantive requirements for a lawful decision of the general meeting have not been coded.
38 I have also given intermediate scores, e.g., ¼ for a 33% hurdle and ¼ for a 20% hurdle.
9. Mandatory bid  | Equals 1 if there is a mandatory public bid for the entirety of shares in case of purchase of 30% or 1/3 of the shares; equals 0.5 if the mandatory bid is triggered at a higher percentage (e.g., 40% or 50%); further, it equals 0.5 if there is a mandatory bid but the bidder is only required to buy part of the shares; equals 0 if there is no mandatory bid at all.

10. Disclosure of major share ownership  | Equals 1 if shareholders who acquire at least 3% of the companies' capital have to disclose it; equals 0.75 if this concerns 5% of the capital; equals 0.5 if this concerns 10%; equals 0.25 if this concerns 25%; otherwise, it equals 0.

The description and coding of the variables is identified in table 1. First, I chose variables in order to get a representative mixture of legal rules. Thus, the index includes variables on: the power of the general meeting and on who decides about its topics (variables 1 and 2); how voting takes place (variables 3 and 4); whether directors take the shareholders' interests into account (variables 5 and 6); which legal actions shareholders can file (variables 7 and 8); and how shareholders are protected in the event of a change of corporate control (variables 9 and 10). Second, it had to be decided which specific legal questions to code. It might be surprising that the index includes the "powers of the general meeting for de facto changes" (variable 1), but not the more ordinary powers to elect the directors, amend the articles, or decide about mergers. However, because the purpose of this index is to examine differences, I chose variables where differences could be expected. This can also be seen in other variables. For example, I examined whether the ability of shareholders to anticipate a decision of the directors was facilitated (variable 3) rather than simply examining whether anticipation is "possible" because some kind of proxy voting is admissible in all countries. Finally, not all legal questions are codeable. For instance, it is difficult to code case law on fiduciary duties because this crucially depends on the facts of the specific cases. Thus, variables were chosen for which consistent coding could best be achieved.

It may be objected that some of the variables do not really protect shareholders. For instance, the mandatory bid (variable 9) protects shareholders because it gives them an opportunity to exit the company for compensation; but indirectly, it may be harmful because it may discourage
takeover activity. However, that is not a relevant point here. The purpose of the index is only to provide a description of the legal rules on shareholder protection and not to answer the normative question—whether and how shareholders should be protected. This will be examined in the future as this index will constitute a basis for an econometric study to find statistical relationships between legal and economic data.

C. Coding

The description of the variables (tbl. 1) contains some explanation of how the variables were coded. In other respects, the coding follows the methodology developed in Leximetric I. The main points are as follows. The index coded the law applicable to the listed countries. The index accounts for mandatory as well as default rules, and statutory as well as case law. It also considered listing rules, takeover codes, and corporate governance codes. This article based the U.S. coding on Delaware corporate law, and the Canadian coding on federal corporate law. Finally, nonbinary coding (½, ¼, ⅜, ⅜, etc.) was used where necessary to provide an accurate picture of the law.

The full text of the index plus the explanations are published on the Internet. Thus, only four brief points are highlighted here. First, the variables on independent board members and on mandatory bid (variables 5 and 9) have improved significantly in most countries. Second, the

39 See, e.g., Lucian Arye Bebchuk, Efficient and Inefficient Sales of Corporate Control, 109 Q. J. ECON. 957 (1994) (comparing the market rule and equal opportunity rule for selling controlling interests in corporations by examining the respective efficiencies and inefficiencies of both rules); Luca Enriques, The Mandatory Bid Rule in the Takeover Directive: Harmonization Without Foundation?, 1 EUR. CO. & FIN. L. REV. 440, 443-47 (2004) (discussing how not all countries' mandatory bid rules create the same results because the specifics of a particular country's legislation or the ability to enforce or skirt the rules).

40 See supra Part II.A.

41 This article is part of the project on Law, Finance and Development at the Centre for Business Research, University of Cambridge, UK. For further information, see http://www.cbr.cam.ac.uk/research/programme2/project2-20.htm.

42 See supra Part II.B.

43 Lele & Siems, supra note 14, at 25-30.

44 But see supra note 29.

45 See also the examples in the description of the index above (tbl. 1).

46 The index consists of ten variables, over eleven years, for twenty countries, for 2,200 observations.

47 Index and explanations are at http://www.cbr.cam.ac.uk/research/programme2/project2-20output.htm.

48 For variable 5, see for China: Donald C. Clarke, The Independent Director in Chinese Corporate Governance, 31 DEL. J. CORP. L. 125, 175-201 (2006); for France, Principles for
variables on feasibility of directors' dismissal and on shareholder action against the general meeting (variables 6 and 8) have, by contrast, hardly changed in any of the countries.\footnote{With respect to variable 6, there has only been a minor change in the UK in 1996 due to the Code of Best Practice 1995, s. D2 (applied since 1996); and with respect to variable 8, there has only been a minor change in Mexico in 2001 due to the new article 14.bis.3Vl.f of the Stock Markets Act.} Third, the variables on shareholder action against the general meeting and on disclosure of major shareholder ownership (variables 8 and 10) display the best scores in most of the countries.\footnote{With respect to variable 8 (year 2005), only the following countries score 0.5 or less: Brazil (Law 6404/76, arts. 115, 117), Chile (18046/1981 Act, arts. 69, 133), Mexico (see supra note 49), and Pakistan (Companies Ordinance, 1984, s. 290 and Ordinance No. C 2002 dated Oct. 26, 2002).} Fourth, by contrast, the variables on anticipation of shareholder decision facilitated and on independent board members (variables 3 and 5) are, on average, the weakest variables.\footnote{With respect to variable 10 (year 2005), only the following countries score 0.5 or less: Canada (Ontario Securities Act, s. 101), Chile (18045/1981 Act, art. 12), Latvia (Law of the Financial Instrument Market, s. 61), Mexico (Articles 109-111 of the 2005 Stock Markets Act only came into force in 2006), and Pakistan (Listed Companies (Substantial Acquisition of Shares and Takeovers) Regulations, 2000, reg. 4).}
III. LEXIMETRIC RESULTS

A. Shareholder Protection Aggregate

An aggregate of all ten variables for all countries leads to twenty curves which indicate the protection of shareholders from 1995 to 2005 shown in Figure 1 (app. A).

One can observe that the countries at the bottom of the figure have slightly improved their scoring. In 1995, the lowest score was 1.8; while in 2005, it was 3.4. Similarly, most other countries move constantly upwards. Exceptionally, Brazil's score first dropped and then improved again. Furthermore, the best countries have not managed to rise higher, perhaps indicating an upper limit of 7.5. The explanation for this can be that too much shareholder protection can work as overkill, because it excessively restricts companies.\(^5\)\(^2\) Thus, it could be the case that 7.5 is some kind of optimum of shareholder protection, and countries would be ill advised to go beyond it.

For more specific observations on particular countries, it is useful to present the aggregate in a different format.\(^5\)\(^3\)

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\(^{52}\)See Lele & Siems, supra note 14, at 34.

\(^{53}\)These figures use the abbreviations AR (Argentina), BR (Brazil), CA (Canada), CH (Switzerland), CL (Chile), CN (China), CZ (Czech Republic), DE (Germany), ES (Spain), FR (France), GB (United Kingdom), IN (India), IT (Italy), JP (Japan), LV (Latvia), MX (Mexico), MY (Malaysia), PK (Pakistan), US (USA), and ZA (South Africa).
Figure 2 shows most developed countries perform better than developing countries. This is no surprise because either developed countries tend to have better lawmaking institutions or it may be because their advanced legal system promotes economic development. Apart from that, generalizations are difficult. There is no clear division between legal families, since one of the best three and one of the worst three countries is a common law country (Canada and Pakistan). It does appear that countries whose corporate law is influenced by different traditions from other countries may profit from this influence (regarding Japan: German and U.S. law, regarding Canada: UK and U.S. law; regarding the UK: its own tradition and EU law; regarding France: its own tradition and Anglo-Saxon traditions). Finally, the bottom of the "list" appears to be dominated, apart from Pakistan, by countries from Eastern Europe and Latin America.

\[\text{Figure 3: Shareholder protection aggregate 2005} \]

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54 For the "causality puzzle," see MATHIAS M. SIEMS, CONVERGENCE IN SHAREHOLDER LAW 231-33 (2008).
56 For the relatively early reception of Anglo-Saxon concepts in French corporate law, see Lele & Siems, supra note 14, at 37-38.
57 For an explanation, see infra Part IV.
Comparing 1995 and 2005 (figs. 2, 3), one can first observe that most countries have improved their scoring. Above all, this concerns some of the transition and developing countries which are now catching up with the developed world. For instance, the scores of Pakistan, Mexico, Czech Republic, and Latvia have improved slightly. Significant progress has also been made by China. Second, however, the overall "ranking" of the countries and, thus, the lead of developed countries has remained relatively untouched. The top five countries of 1995—all of them developed countries—are also at the top in 2005.\textsuperscript{58} Germany and Italy have also made some progress. Third, some countries have not changed or have even dropped a little bit. Apart from the top performers, Japan and Canada, this concerns in particular Switzerland.

The strong Chinese and the weak Swiss performance in the 2005 index may be most surprising. However, this result does not mean that shareholders in Switzerland are more at risk than in China since the efficiency of the courts also has to be taken into account. Thus, it is useful to consider a "rule of law" ranking, based on the World Bank Governance Indicators shown in figures 4 and 5.\textsuperscript{59}

\begin{center}
\textbf{Figure 4: Rule of Law 1996 (World Bank Governance Indicators)}
\end{center}

\textsuperscript{58} Top five are Japan, France, Canada, UK, and U.S.
\textsuperscript{59} The World Bank Governance Indicators: 1996-2006, available at http://www.worldbank.org/wbi/governance/govdata/. Rule of law measures "the extent to which agents have confidence in and abide by the rules of society, in particular the quality of contract enforcement, the police, and the courts, as well as the likelihood of crime and violence." \textit{Id.}
As one would expect, figures 4 and 5 show developed countries performed better than developing countries. It is also interesting to see how the countries on the bottom of the table have developed. In contrast to the shareholder index, where most countries have moved up, changes here have not been consistent. Whereas the Indian, Latvian, and Czech scores have improved, the Pakistani, Mexican, and Argentine scores have gotten worse. A likely explanation for this is that copying legal rules is easier than addressing the inefficiency of courts.  

B. Differences and Similarities

Based on the previous figures, one may get the impression, for instance, that in 2005 the U.S. and France's shareholder protection laws were identical because both countries had the same score of 7.25 out of 10 variables. This, however, would not be a fair assessment. The previous figures simply show the aggregate of all of the variables. It is possible, as is the case here, that different variables have led to the same scores for the U.S. and France. Therefore, to highlight the differences between the countries with a view towards identifying trends of convergence or divergence, I calculated the differences between each variable in the law of a particular

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60For a similar result, see SIEMS, supra note 54, at 224-28.
legal system and the same variable in the law of the other countries. Subsequently, the absolute values of these differences have been totaled and represented graphically.61

First, this was done for the three so-called "origin countries": UK, France, and Germany.62 If, as it is claimed, the law of these countries has influenced other countries' laws,63 one may expect clear-cut distinctions between English common law, French civil law, and German civil law countries. Second, it is interesting to examine the differences from and similarities to U.S. law.64 This was done because it is sometimes said that there has been a significant "Americanization" of other countries' laws in recent years.65 Third, one can calculate the difference between each country and all other countries of this index. This establishes the "mainstreamness" or "eccentricity" of each legal system's approach to shareholder protection, as well as the convergence or divergence of shareholder protection in general.66

61 For this methodology, see Lele & Siems, supra note 14, at 37.
62 See infra Part III.B.1-3.
64 See infra Part III.B.4.
66 See infra Part III.B.5-6.
1. Differences from UK Law

The 1995 figure displays some similarity between the UK and the other common law countries. Malaysia, Canada, and U.S. laws are the most similar to UK law. The scores of South Africa and India—mixed legal systems\textsuperscript{67}—are also fairly similar. Pakistan's law on shareholder protection is very different from UK law militating against a mere explanation based upon legal origins. Moreover, France and China are surprisingly close to the UK. It is more difficult to make generalizations about Latin American as a whole. Chile's and Mexico's laws are quite different from UK law while Argentina and Brazil yield intermediate scores compared to UK law.

\textsuperscript{67}For South Africa, this is uncontroversial. See MIXED LEGAL SYSTEMS IN COMPARATIVE PERSPECTIVE: PROPERTY AND OBLIGATIONS IN SCOTLAND AND SOUTH AFRICA (Reinhard Zimmermann et al. eds., 2005). For India, see Mathias M. Siems, Legal Origins: Reconciling Law & Finance and Comparative Law, 52 MCGILL L.J. 55, 71-72 (2007).
The 2005 figure does not clarify the situation (fig. 7). French, Indian, South African, Japanese, and Brazilian law have diverged from UK law while Chinese, Canadian, Czech, Chilean, and Italian law have converged to it. It must also be noted that some of the changes are relatively small and should not be overrated. At minimum, the fact that a number of changes have taken place shows that later developments matter in addition to the origins of a particular law.68

68 Later developments may matter more than origins. This will be explained infra Part IV.
2. Differences from French Law

![Figure 8: Difference from French law 1995](image)

The 1995 figure for French law confirms that categorizations are difficult (fig. 8). The other (allegedly) French legal origin countries (Brazil, Spain, Argentina, Italy, Chile, and Mexico) occupy very different positions in the list. The European countries mainly have intermediate scores. Given the European directives on corporate law, this may be seen as a surprise. Yet, the explanation for this could be that in the 1980s French law was already influenced by Anglo-Saxon concepts, such as with respect to takeover regulation and financial disclosure. This is supported by the fact that in 1995, U.S. law was remarkably similar to French law.

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69 See the categorizations in La Porta et al., supra note 16; Glaeser & Shleifer, supra note 63.
70 See http://ec.europa.eu/internal_market/company/index_en.htm (stating European Commission's goal of harmonizing corporate governance and company law); see also Directive 2007/36/EC, supra note 8.
71 See Lele & Siems, supra note 14, at 37-38.
By 2005, the laws of other continental European countries had converged with French law (fig. 9). By 2005, these countries had incorporated some Anglo-Saxon concepts into their law. Apart from that, generalizations according to different legal origins remain difficult. Pakistan has converged, whereas the UK and the U.S. have slightly diverged. Chile has diverged, Argentina and Mexico have converged, and Brazil remained relatively unchanged.

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72See, e.g., for Germany, the WpÜG (Takeover Act) 2001 and the Corporate Governance Code 2002; for Italy, the lgs. n. 58/1998 (TUF, Testo Unico della Finanza) and the Preda Code 1999.
3. Differences from German Law

The striking feature in figure 10 is the differences between Germany and the other countries are relatively small. Only Canada and France differ more than four points from Germany. This contrasts with the previous figures, because in 1995 there were six countries differing more than four points from UK law and seven countries differing more than four points from French law.\textsuperscript{73} Thus, German corporate law is "more mainstream" than the law of the UK and France.

\textsuperscript{73}See supra Part III.B.1-2.
This did not change fundamentally in 2005 (fig. 11). Yet, there are movements in both directions. Chinese law has become remarkably similar to German law. Canadian law has also slightly converged, whereas U.S. and UK law have diverged from German law. This illustrates the notion of legal families is not only about "legal origins" but also about the ongoing influences on particular countries. Thus, it is not the abstract question of legal origins but the specific question of why particular legal changes take place, which is crucial.74

74See infra Part IV.
4. Differences from U.S. Law

Given the American influence on Japanese and French law,\textsuperscript{75} it is no surprise that in 1995 these legal systems were relatively close to the U.S. (fig.12). There is also some similarity between the U.S. and the common law countries Canada, UK, India, and Malaysia. Yet, in general, it is remarkable that U.S. law appears to be quite exceptional.\textsuperscript{76} Eight countries differ more than four points from U.S. law, compared with only the seven, six, and four countries that differ respectively to UK, French, and German law.\textsuperscript{77}

\textsuperscript{75}See supra notes 55-56.
\textsuperscript{76}For a similar result, see Lele & Siems, supra note 14, at 41-42.
\textsuperscript{77}See supra Part III.B.1-3.
In 2005, this exceptionalism did not change (fig.13). Thus, the claim that there has been an "Americanization" of the law of the other countries cannot be confirmed. In particular, the differences between continental European and Latin American countries' laws and U.S. law has not been reduced considerably.

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78See SIEMS, supra note 54, at 226-227; Cheffins & Thomas, supra note 65; Green & Boury, supra note 65; Kelemen & Sibbitt, supra note 55.
5. Differences from Average

It is difficult to say which results one would expect from a calculation of the "differences from average." On the one hand, one may contemplate...
that the law of successful countries is special because they have managed to create particularly sophisticated systems of corporate law. On the other hand, it could be emphasized that corporate law has to find a balance between different interests, so that every deviation from the international average (in either direction) could be harmful. Then, one would expect the most economically successful countries to be least similar to the other legal systems. The reality, however, does not confirm either of these theories. In 1995, as well as in 2005 (figs. 14, 15), there were an assortment of countries which are most similar and most different from average.

6. Average of Everything

![Figure 16: Convergence (0) or Divergence (10)]

Figure 16 displays the mean of the differences from average,\(^7^9\) and thus answers the general question of whether shareholder protection in the twenty countries has converged or diverged.\(^8^0\) The resultant curve indicates

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\(^7^9\)See supra Part III.B.5.

\(^8^0\)Nonquantitative research disagrees about this fact. See CONVERGENCE AND PERSISTENCE IN CORPORATE GOVERNANCE (Jeffrey N. Gordon & Mark J. Roe eds., 2004); SIEMS, supra note 54; Douglas M. Branson, The Very Uncertain Prospect of "Global" Convergence in Corporate Governance, 34 CORNELL INT'L J.L. 321 (2001); Ronald J. Gilson, Globalizing Corporate Governance: Convergence of Form or Function, 49 AM. J. COMP. L. 329, 334-37 (2001); Henry
a steady trend towards convergence until 2003. That trend stopped and the law has started to slightly diverge. Why was there divergence in 2004? According to figure 17 (app.B), showing the differences from average, German and UK law led to this development because both curves went up, indicating that their laws became more different from the laws of the other countries.

Which developments in German and UK law caused this divergence? Remarkably, in both countries, it was only one variable that changed. In Germany, since 2004, multiple voting rights have been excluded in all cases, and thus the value of its variable 4 became "1." In the UK, since 2004, the Combined Code recommends that at least half of the board members be independent, and thus the value of its variable 5 became "1." These maximum scores are significant because, with respect to variable 4, the nineteen other countries have the average value of only 0.58; and with respect to variable 5, the nineteen other countries have the average value of only 0.33. As a result, one should not overinterpret the 2004 divergence shown in figure 16. This caveat is reinforced by the fact that our previous study on five countries (but 60 variables) did not find a similar divergence for 2004.

IV. POSSIBLE EXPLANATIONS

Various explanations have been offered regarding why countries differ in their protection of shareholders, such as the differences between developed and developing countries, different legal families (legal origins), cultural differences, politics, memberships in particular organizations (such as the EU), and geography. The previous figures only confirm some of these reasons. These findings show there is a difference between developed and developing countries, with the former usually performing better in


82Combined Code 2003 (applied since 2004), s. A.3.2.

83Lele & Siems, supra note 14, at 42.

84For an overview, see Beck & Levine, supra note 63; Siems, supra note 67, at 60-62. For complementarities between legal and economic institutions, see Simon Deakin & Beth Ahlering, Labor Regulation, Corporate Governance and Legal Origin: A Case of Institutional Complementarity?, 41 LAW & SOC'Y REV. 865 (2007).
protecting shareholders.\textsuperscript{85} The data also shows shareholder protection in common law countries is relatively similar.\textsuperscript{86}

However, this may not be derived solely from "the common law." Because these countries share similarities in their history and culture while also sharing English as a common legal language, it may be that ideas "travel" more easily between these countries.\textsuperscript{87} Further, it is worth noting that there is no comparable similarity within the (allegedly) German and French civil law countries.\textsuperscript{88} Geographic and political "closeness" may account for some similarities within the European countries and within the Latin-American countries. However, this explanation has its limits because there are also various counterexamples, such as the difference between German and French law in 1995.\textsuperscript{89} To provide a deeper understanding of the differences and developments, it is useful to analyze the recent changes in shareholder protection in their wider comparative and historical context.

\textbf{A. Distinction Between Origin and Transplant Countries}

The distinction between origin and transplant countries\textsuperscript{90} assumes that in some countries the law has developed endogenously, i.e., without copying the laws of other countries. On the other hand, there are countries that have simply transplanted the law of one of these origin countries. This leads to different groups of countries denoting different legal families, such as English, French, and German legal origins.

First, a critical analysis of this view has to address whether there are really different independent origin countries. The origins of corporate law were very similar in all "origin countries," namely the establishment of colonial corporations by English, Dutch, and French merchants.\textsuperscript{91} Later on, interconnections between the different countries continued, and thus it is no surprise that by the end of the nineteenth century the most important features of corporate law were relatively uniform across countries.\textsuperscript{92} Thus, one could validly make the point that in corporate law there is just one legal origin.

\begin{flushright}
\textsuperscript{85}See supra Part III.A.
\textsuperscript{86}See supra Part III.B.1, 4.
\textsuperscript{87}Siems, supra note 67, at 72-73.
\textsuperscript{88}See supra Part III.B.2, 3.
\textsuperscript{89}See supra Part III.B.3.
\textsuperscript{90}See, e.g., Beck & Levine, supra note 63, at 254-58; Djankov et al., supra note 63, at 609-12; Glaeser & Shleifer, supra note 63, at 1193.
\textsuperscript{91}SIEMS, supra note 54, at 18-19.
\end{flushright}
which only differs in detail. However, this does not mean the concept of legal origins has to be disregarded completely. Even though these legal origins have not developed independently and are not fundamentally dissimilar, there are still differences between English, French, and German corporate law. Within limits, it is therefore feasible to use the didactic notion of different legal origins.  

Second, the idea of transplant countries can be criticized because countries often do not simply copy the law of a particular origin country. The claim of a mere copying disregards: (1) the ongoing influence of their pre-transplant law; (2) the mixtures and modifications at the moment when some copying of foreign law occurs; and (3) the post-transplant period, in which the transplanted law may be altered (or at least applied differently from the origin country). However, at some point in time, many Asian, African, and American countries have undeniably copied a significant part of their corporate law from one of the origin countries. Thus, although this transplanted law is not completely identical to the corporate law of the origin country, and although it may have changed later on, one can also accept the didactic notion that there are English, French, or German legal transplant countries.

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93This is also the view of mainstream comparative law. See RENE DAVID & JOHN E.C. BRIERLEY, MAJOR LEGAL SYSTEMS IN THE WORLD TODAY 21 (3d ed. 1995) ("[I]t is no more than a didactic device."); KONRAD ZWEIGERT & HEIN KÖTZ, INTRODUCTION TO COMPARATIVE LAW 72 (3d ed. 1998).

94Siems, supra note 67, at 69-70. See also Ugo Mattei, Three Patterns of Law: Taxonomy and Change in the World's Legal Systems, 45 AM. J. COMP. L. 5, 14 (1997) ("Legal systems never are—they always become.").
B. Origin Countries

Figure 18 presents a simplified history of shareholder protection in the legal origin countries (i.e., the UK, Germany, and France). It is based on the fact that shareholder protection has constantly improved in the last two centuries. Initially, the establishment of a company "only" depended on governmental or royal authorization. Thus, in all countries, there were no corporation acts, which protected shareholders. This changed in the nineteenth century and thus, protection improved. Still, from today's point of view, the early acts were incomplete and indeed every law reform extended them, and by doing this, shareholder protection has been strengthened as well. For instance, Pistor et al. examined the development of corporate law in the last two centuries and found a gradual improvement of shareholder protection in the UK, Germany, and France. Applying a quantitative methodology, this is also the result of Leximetric I for the period from 1970 to 2005.

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95SIEMS, supra note 54, at 18-23.
97Lele & Siems, supra note 14, at 31.
C. Transplant Countries

It appears the way in which shareholder protection develops in transplant countries follows one of the following three templates, shown in figures 19, 20, and 21.

A first group of countries (Type A transplant countries shown in fig.19) copied the law of one of the origin countries at one point in time and subsequently has not changed it significantly. This can also be seen in the figures above since some of the transplant countries perform worse than their origin countries. The extent of this weaker protection of shareholders depends on the "version" of the transplanted corporate law. For instance, a country that copied a foreign corporate law very recently (such as China) performs better than countries which have copied an older version of the law of their origin country decades or even centuries ago (such as most of the Latin American countries).

The first and main reason why these countries have been apathetic is weak legal adaptability. This may be based on various factors related to the law-making procedure of a particular country, its political system, and its courts. Second, the lack of change may also be caused by a weak

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98 See supra Part III.A.
100 See Pistor et al., supra note 96, at 793, 841-46.
101 See Mathias M. Siems, Legal Adaptability in Elbonia, 2 INT'L J. LAW CONTEXT 393
relationship between the transplant and the origin country. In particular, if language hinders communication with the origin country—which is the case in most German and French legal transplant countries—improvements in the law of the origin country may not have been noticed by the transplant country. Third, legal improvements in shareholder protection are not always necessary. Not only does corporate law balance different interests, but the legal protection of shareholders is also connected with economic factors. For instance, in a country where there is hardly any dispersed shareholder ownership, the law on public takeovers only plays a marginal role. It is also possible that in a particular country a lack of legal shareholder protection may be compensated for by nonlegal forms of protection.  

Figure 20: Shareholder protection in the last 150 years "Type B transplant countries"

A second group of countries (Type B transplant countries shown in fig.20) follows the path of its origin country and, by doing this, improves its shareholder protection (but does not exceed the origin country in the level of protection). Following the trend of the origin country may be based on the transplant country's own independent decision, but it is also likely that the ongoing consideration of the law of the origin country plays an important role. This influence is particularly strong if the origin and transplant country share common values and a common legal language. In the real world, this is the case in some of the common law countries, and thus explains, for example, the ongoing (or even increasing) similarity between UK and 

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Canadian, and UK and Malaysian corporate law. However, this development is neither necessary nor restricted to common law countries. Pakistan's very low score shows that within the common law family, there is no "natural" following of the English path. Furthermore, there are also examples of "Type B transplant countries" in the civil law world, such as the ongoing influence of German corporate law on Austria and the ongoing influence of French corporate law on Luxembourg.

The third group of countries may be puzzling because here the transplant country gradually exceeds the level of shareholder protection of its origin country (fig.21). Given the limited value of the distinction between origin and transplant countries, this potential development is, however, not surprising. For instance, the phenomenon of a "Type C transplant country" may be caused by the fact that two foreign countries subsequently influenced the law of this transplant country or that it deliberately decided to improve shareholder protection. Japan is a good real world example. In 1995,
Japanese corporate law exceeded both German and U.S. law, which were transplanted to Japan 100 and 50 years ago, respectively. Also, Japan is no longer a mere transplant country. This can be seen in the 2005 reform (in force in 2006), which despite some American influence, strengthens the distinctive features of Japanese corporate law.

V. CONCLUSION

This article analyzed how shareholder protection has developed in twenty countries from 1995 to 2005. Unlike traditional legal research, it has drawn on a quantitative methodology to law (leximetrics or numerical comparative law). Quantitative methods are no panacea and have inherent limits. However, they can also lead to interesting results. The results of this study can be organized into three categories: aggregates, differences, and explanations.

- Aggregates:
  1. In most countries, shareholder protection has improved between 1995 and 2005. However, there appears to be an upper limit which countries do not exceed.
  2. Most developed countries perform better than developing countries in protecting shareholders. However, in recent years developing countries are catching up with the developed world.

- Differences:
  1. Shareholder protection in common law countries is relatively similar whereas there is no comparable similarity within the German and French civil law families.
  2. German corporate law is "more mainstream" than the law of the UK and France. U.S. corporate law is "more eccentric" than these three countries. The differences from average show no clear-cut distinction between developed and developing countries.

\[108\] See supra Part III.A.
\[109\] Siems, supra note 54, at 20-22.
\[110\] Thus, this reform was not included in the index which coded the legal development from 1995 to 2005.
\[112\] Siems, supra note 15, at 539.
(3) Shareholder protection converged until 2003. Then, however, convergence appears to have stopped—although there are conflicting results.

- Explanations:
  (1) The distinction between origin and transplant countries can be used as a didactic device.
  (2) In the three origin countries (UK, Germany, and France), shareholder protection has constantly improved in the last centuries.
  (3) For the transplant countries:
     (a) It is decisive which "version" of the corporate law of the origin countries they copied.
     (b) It also matters whether transplant countries continue to take developments in the origin countries into account and thus improve their law. In this respect, common law countries may have the advantage of common values and a common legal language.
     (c) Sometimes, however, transplant countries can and do leave the path of their (former) origin countries.

Future research will examine the statistical relationship between economic and legal data to address normative questions including whether shareholders should be protected.113

113See supra note 47.
APPENDIX A

Figure 1: Shareholder protection aggregate (10 variables)
Figure 17: Difference from Average (max. 10)