Center for Economic Institutions

Working Paper Series

CEI Working Paper Series, No. 2002-6

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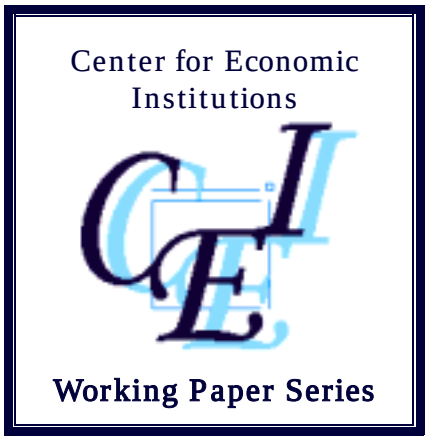

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First Draft: July 1, 2001
This Draft: August 9, 2002

Abstract

Some scholars have argued that globalization should pressure firms to adopt a common set of the most efficient corporate governance practices, while others maintain that such convergence will not occur because of a variety of forms of path-dependence. With new data on governance in 24 developing countries as well as data on laws protecting shareholders and creditors in 49 developed and developing countries, we search for evidence that globalization is correlated with similarity in corporate governance. We find robust evidence of *de jure* similarity in governance. Interestingly, this is not driven by convergence to U.S. standards. Rather pairs of economically interdependent countries – especially if the countries are both economically developed - appear to adopt common corporate governance standards, even after accounting for the effects of common legal origin. In contrast to the *de jure* results, we find virtually no evidence of *de facto* similarity in corporate governance in a battery of estimations at the country, industry and firm levels. This is consistent with either the proposition that complementarities result in different national systems appropriately having different corporate governance systems, or the proposition that globalization is not strong enough to overcome local vested interests. We conclude that globalization may have induced the adoption of some common corporate governance standards but that there is little evidence that these standards have been implemented.

We are grateful to Michael Kremer, Dani Rodrik, Andrei Shleifer, John Sutton, and Louis Wells for helpful conversations, and for suggestions from seminar participants at the HBS/Tsinghua conference on Global Corporate Governance (Shanghai, July 2001), the Aspen Institute for Social Business/William Davidson Institute conference (Aspen, September 2001), the Harvard/MIT Growth and Development Seminar (October 2001), the University of Michigan Business School Corporate Strategy seminar, the Asian Development Bank conference on Corporate Governance (November 2001), Hitotsubashi University Economics Seminar (Tokyo, November 2001), Australian Graduate School of Management Seminar (Sydney, November 2001), Hong Kong University of Science and Technology Economics Seminar (November 2001), Columbia Law School Law & Economics Seminar (December 2001), Instituto Tecnológico Autónomo de México Business School seminar (February 2002), Pontificia Universidad Católica de Chile Business School seminar (March 2002), and Harvard Business School Accounting and Control seminar (April 2002). The HBS Division of Research generously funded this research. All errors remain our own.

1. Introduction

Economists have studied convergence for a long time. Most of this work has focused on convergence in national income levels (Solow [1956], Baumol [1986], Romer [1986], Barro and Sala-i-Martin [1992], Mankiw [1995]). Recently, however, scholars have also directed attention to the microeconomic foundations of such convergence. In particular, the question being asked is whether or not increased global integration of markets is prompting convergence in the institutional foundations of economies (North [1994]). The idea that increasingly stringent global competition should increase the likelihood of convergence to efficient institutional arrangements has some intuitive appeal and has been investigated in a historical context (Ben-David [1993], Williamson [1996]).

One set of institutional arrangements that has been scrutinized is related to the governance of corporations. The number of standards-setting bodies and multilateral institutions that have been set up in recent times to foster good corporate governance worldwide is testimony to the heightened interest in this particular issue. These include the International Corporate Governance Network, the International Accounting Standards Committee, and the International Organization of Securities Commissions, to name but a few. The OECD and the World Bank have issued guidelines for global principles of good corporate governance and promote the dissemination of these guidelines (OECD [2000] and World Bank [2001]). This cottage industry of efforts received a fillip in the wake of recent financial crises, when fingers were pointed at corporate governance problems at least by some.

Theorists have weighed into the debate with gusto. Some, espousing faith in the efficiency-enhancing aspects of competition (especially in the capital markets), aver that there will be complete convergence. This position is exemplified by Hansmann and Kraakmann [2001], in a paper entitled "The End of History for Corporate Law." Others take the polar opposite view that the irresistible force of global competition will meet the immovable object of path dependence. Even if there could be agreement on what constitutes an optimal corporate governance system – which traditionally has not proven possible (Taylor [1998]) – there are too many complementarities in economic systems for unstinting evolution toward the optimal corporate governance system (Aoki [1994], Bebchuk and Roe [1999]). Further, vested interests might well oppose such an evolution (Olson [1971]). Finally, advocates of adherence to various sets of minimal standards as being the only feasible outcome are implicitly signaling belief in partial convergence (Eichengreen [1999]).

These arguments run the virtual gamut of possibilities. Yet there is no empirical work on whether there is convergence in corporate governance systems of any sort, nor any on the association of globalization with this phenomenon. Presumably this is partly because of the non-trivial nature of the question. At some level, it is hard to dispute that there is convergence. For example, there is probably some convergence to acceptance of the idea that resource providers should be protected, but much less to whether the resource providers in question should be primarily shareholders or include other stakeholders as well (Berglof and von Thadden [1994], Shleifer & Vishny [1997], Tirole

[2001]). Similarly, there is probably near-complete convergence to the idea that good information is needed for good corporate governance, but much less convergence on whether financial markets or banks are the best targets for such information. Finally, Hansmann and Kraakman [2001] argue that several features of the modern corporate form are nearly universally adopted,[1] but it is hard to imagine that there is convergence on the actions taken by managers even in the convergent legal structures that such firms represent (Khanna [2001]).

Scholars have made an attempt to account for such subtleties by distinguishing between convergence in "form" and convergence in "function." The latter arises since different institutional arrangements in different countries have sufficient plasticity so as to enable them to achieve similar economic ends (Gilson [2000]). There is also ambiguity as to the system toward which convergence might occur. The *systeme du jour* is the U.S. shareholder-centric one, though other systems have found favor in the not very distant past (Berglof and Perotti [1995], Porter [1992]).

Theoretical issues are compounded by empirical ones. First looking purely at rules-on-the-books as indicators of corporate governance practices is unlikely to be sufficient, even though it is one indicator (Pistor et al. [2000]). It could be that formal rules are circumvented in the all-too-common absence of good enforcement—a familiar phenomenon in many developing countries. Much less common, but quite possible, is the idea that particular firms might well exceed the rules of their country of domicile in a bid to gain economic advantage (Blass and Yafeh [2001], Khanna and Palepu [2001]). Thus attention to intra-country variation is necessary. Second, consistent cross-country data on the multiple aspects of corporate governance—board structure, compensation practices, disclosure and transparency, to name but a few—have traditionally been difficult to come by.

We attempt to fill this empirical void partially by analyzing a variety of new datasets. A number of private sector organizations have recently started collecting firm-level data on corporate governance practices. This phenomenon is itself evidence of convergence in that it demonstrates the belief on behalf of at least some organizations that institutional investors are willing to pay for corporate governance information. We use year-2000 data obtained from Credit Lyonnais Securities Asia (CLSA) on corporate governance practices covering 24 developing countries in Asia, Latin America, and Eastern Europe and data on laws protecting shareholders and creditors from La Porta et al.[1998]..[2] Finally, we develop a host of measures of globalization of capital markets,

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[1] They emphasize full legal personality, limited liability, shared ownership by investors, board structure, and transferable shares. A similar argument is made regarding the organization of nation states by Meyer et al. [1997]. They conduct the interesting thought experiment: how would world society treat a hypothetical country that newly emerged on the world stage. They aver that several aspects of societal organization in such a nascent country would mirror arrangements commonly found elsewhere, i.e. that there would be convergence.

[2] These data and others that we use from Déminor, Proxinvest, and Fortune (described later) have not been used in academic work, to the best of our knowledge. Black's [2001] data source differs from our own. He finds a strong relationship between the market value of Russian firms and the corporate governance rating they received from UBS Brunswick Warburg.

but depart from the theoretical literature's usual focus solely on capital markets to consider competitive forces emanating from global markets for products and talent.

An important feature of our estimation technique – examining similarities in governance among pairs of countries rather than treating the individual country governance regime as the unit of analysis – is that it avoids normative assumptions regarding the optimality of a particular governance regime, a stance vindicated by the continued theoretical debate on this issue. We choose to let the data speak rather than impose our priors on the data.

But our analysis has two important limitations worth highlighting. First, lacking time-series data , we are unable to test convergence in a literal sense. Rather our tests are about correlations between globalization and similarity in corporate governance practices at a point in time. It is thus possible that convergence is occurring but that the *de facto* practices today do not allow us to see this process Second, we do not say much about causality. We cannot distinguish between the possibility that the flows of global factors and products force changes in corporate governance and the possibility that it is because uniform corporate governance systems are adopted that globalization receives a boost.

We summarize our results as follows. We find strong evidence that *de jure* similarity in governance is correlated with several of our proxies for globalization. These proxies are not limited to those that measure capital market integration. Further, the *de jure* results are not driven by similarity with U.S. corporate governance. Rather pairs of economically interlinked countries display similarity to each others' systems, especially if both countries are 'economically developed' ones. Finally, we find virtually no evidence of *de facto* similarity. An interpretation is that, even though countries might mimic the tenets of each others' systems, their implementation is subject to significant lags.

The rest of the paper is organized as follows. Section 2 briefly reviews the literature on convergence in corporate governance. Section 3 introduces the governance ratings, covering selection effects and reliability issues. It also motivates and describes the independent variables we will use in our analysis. Section 4 discusses the methodology of the country level analysis and presents the results. Section 5 confirms the country level results using additional data sources and tests at the industry and firm levels. Section 6 concludes.

2. The Literature on Convergence in Corporate Governance

Globalization entails a lifting of barriers to the mobility of capital, products, and labor, leading to an intensification of competition for these factors across borders by firms and countries. Just as U.S. states competed for most of the twentieth century for franchise tax revenues by offering the best terms for incorporation (Easterbrook and

Fischel [1991], Romano [1993]),[3] nations could compete for firms and resources by creating the most efficient corporate governance environment.[4]

Proponents of the convergence hypothesis tend to highlight the role of global capital flows in eliminating inefficient forms of governance.[5] They aver that convergence is hastened by a realization that alternatives to U.S.-style shareholder-centric governance have generally not succeeded. Several multilateral bodies are spurring on this process by urging the adoption of common standards (OECD [2000], World Bank [2001]).

An aspect of the convergence debate recognized but not emphasized in the literature is the distinction between *de jure* and *de facto* convergence. *De jure* convergence is the adoption of similar corporate governance laws across countries. *De facto* convergence, on the other hand, refers to a convergence in actual practices. Put simply, nations may formally adopt corporate governance systems that look like those elsewhere, but the acceptance of the enshrined principles may significantly lag their codification. This may be for several reasons including a lack of understanding of what is implied by the good corporate governance, absence of complementary institutions needed to implement the principles, or simply poor enforcement (Pistor et al. [2000]). One contribution of our paper is to empirically demonstrate a distinction between these two types of convergence across a large sample of countries.

There are three categories of explanations for why *de facto* convergence may lag *de jure* convergence: path dependence, multiple optima, and rent-seeking by interest groups. According to the path dependence perspective, initial historical conditions matter in determining the corporate governance structures that are prevalent today. Central to the idea of path dependence are complementarities, also called indivisibilities (Bebchuk and Roe [1999], Bratton and McCahery [1999], Schmidt and Spindler [2000]). Corporate governance results from a system of complementary institutions, legal rules, and practices where improving any one element independently may actually hurt efficiency. Thus the main bank monitoring system that historically held sway in Japan depended for its functioning on the existence of particular labor market practices (Aoki [1994]) and patterns of equity cross-holdings among firms (Berglof and Perotti [1994]). Sunk adaptive costs and positive network externalities from the use of the same governance practices by all firms in a country make switching more costly and prevent unilateral governance changes by any one firm or institution.

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[3] There is some disagreement on whether competition between states has led to a race to the top or a race to the bottom. For example, Bebchuk et al [2002] showed empirically that state competition has worked poorly in takeover regulation.

[4] Although most industrial nations do not permit reincorporation across countries as the U.S. allows between states, firms are able to opt into particular regulatory regimes by listing on foreign stock exchanges. In the case of *Centros*, the court ruled that a Danish company could incorporate in the U.K. even though it had no intention of doing business in the U.K. and simply wanted to avoid the minimum capital requirement for Danish incorporation. See European Court of Justice, March 9, 1999, C. 21/297 as cited in Gilson [2000].

[5] Khanna and Palepu [2001] have demonstrated the role of global talent markets and global product markets in fostering some corporate governance convergence in the global software industry.

Even in the absence of path dependence, complementarities induce multiple optima, so that nations, even unburdened by historical constraints, may well choose different bundles of practices that yield equivalent long-run corporate governance.[6] Believers in such a view of the world disagree with the idea that the U.S. model is the one optimal governance model. Not very long ago the Japanese model held pride-of-place in the minds of academics and practitioners (Porter [1992]). In particular, the U.S. model was criticized at the time for three failures relative to the Japanese system – agency costs arising from differences in managers' and shareholders' agendas, time horizon costs due to the reliance of distant shareholders on short-term performance, and industrial organization costs caused by the bureaucracy in vertical organizations that could have been lessened in the presence of strong financial intermediation (Roe [1996]). It is more likely that there are tradeoffs between the systems and that each has costs and benefits suited to different circumstances (Bhide [1993]). Consistent with the idea that there is no universally optimal model, research on the impact of corporate governance on performance has produced ambiguous results (See, for example, Demsetz and Lehn [1985], Thomsen and Pederson [1996], and Coles, McWilliams, and Sen [2001]).

The force of path dependence leads some theorists, primarily legal theorists interested in the foundations of financial markets, to draw a distinction between convergence in form and convergence in function. Formal convergence predicts a convergence of legal rules and institutions while functional convergence predicts adaptations within different existing institutions to perform the function of good corporate governance. Proponents of functional convergence would argue that different institutions are equally capable of performing corporate governance functions such as ensuring management accountability.[7] To the extent that it is possible, it is much less costly to improve corporate performance by working within the current institutions than creating new institutions. Thus, the initial response to the competitive forces of globalization should be functional rather than formal convergence as a result of this path dependence (Gilson [2000]).

Even if there were a single universally optimal corporate governance system, political resistance would pose a major obstacle to governance reform. Because the benefits of improved corporate governance are not distributed evenly, an increase in social welfare that exceeds switching costs would not guarantee the adoption of better practices. This is an idea dating back at least to Olson [1971]. Interest groups such as labor unions, banks, controlling shareholders, and lawyers may sabotage governance reform (Bebchuk and Roe[1999], Coffee [1999]). U.S.-style governance based on

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[6] See Kauffman (1993) for an early articulation of this from evolutionary biology and Milgrom and Roberts (1990) for an adaptation to economics.

[7] See Merton [1968], "Chapter 1: Manifest and Latent Functions," for an early description of functional analysis in sociology. Crane [1995] is a more recent example of functional analysis as applied to financial systems. Kaplan [1994] has provided some econometric evidence for functional convergence for a particular aspect of corporate governance. Statistically, poorly performing CEOs appear equally likely to be dismissed in the U.S., Germany and Japan, despite the very different formal systems in place. In our empirical analysis, we attempt a rudimentary test of functional convergence, within the constraints imposed by our data.

individualism may also conflict with values and anti-Western sentiment found in many developing countries (Branson [2000]).

Despite these ongoing debates, there is exceedingly little empirical work, and none that confronts the nexus between globalization and corporate governance convergence that is the topic of this paper.[8]

3. Data

We use primarily two data sources on corporate governance practices across a number of countries. Laws on the books indicators collected by La Porta et al. [1998] (LLSV) represent indicators of *de jure* governance. A firm level survey completed by Credit Lyonnais Securities Asia (CLSA), when aggregated to the country level, provides ratings on *de facto* governance. Even though most of our analysis ends up using the LLSV data, we describe the CLSA data in detail. This is because it is new to academic analysis, and because our inability to detect *de facto* convergence must be judged within the constraints of the quality of the CLSA data. Our independent variables are proxies for country-level exposure to global capital, product, and labor markets.

(I) Dependent Variable: Corporate Governance Ratings

A. Legal rules country-level data

We use novel data assembled by La Porta et al. [1998] on laws regarding shareholder and creditor protection for 49 developed and developing countries. Each of eight aspects of shareholder protection and five aspects of creditor protection can be coded as binary variables.[9] A value of one in each variable indicates that, say, the country's company law and commercial code or bankruptcy and reorganization law incorporate that form of shareholder or creditor protection. Since corporate governance laws typically apply to all firms and industries, these variables are coded only at the country level.

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[8] Guillén [2000] approaches the convergence hypothesis quantitatively. He examines descriptive summary statistics of aggregate national corporate governance indicators over time for a panel of countries. With a few exceptions, he finds that there have been no shifts in the proportion of stockholding by institutional investors, debt-equity ratios, long-term incentives as a percentage of CEO remuneration, and hostile takeover activity.

[9] The eight shareholder protections are: one share-one vote rule, proxy vote by mail, shares not blocked before meeting, cumulative voting or proportional representation, mechanism for dealing with grievances of oppressed minorities, preemptive rights to buy new stock issues by existing shareholders, low percentage of share capital required to call extraordinary shareholder meeting, and mandatory dividend payment. The five creditor protection are: restrictions for going into reorganization, no automatic stay on secured assets in reorganization, secured creditors first in line, management does not stay in reorganization, and mandatory minimum percentage of total share capital to avoid dissolution. More detailed descriptions of these protections are available in La Porta et al [1998].

An advantage of these data is that they are collected objectively. There is little uncertainty regarding whether or not a particular law exists within a country. La Porta et al. [1988] also identify the origin of the legal system of each of their countries—English, French, German, or Scandinavian—which we use as a measure of path dependence in some of our estimations.

B. Credit Lyonnais Securities Asia (CLSA)

In April 2001, CLSA released a large study of corporate governance entitled, "Saints & Sinners: Who's got religion," which reviewed corporate governance at the firm level in 25 emerging markets. A firm's corporate governance score is based on responses to 57 yes/no questions about various aspects of governance. CLSA's research analysts completed the questionnaire for 495 companies over a six-week period ending March 2001. Of these 57 questions, 70% are based on objective facts while 30% require some interpretation by the analyst but still must be resolved as a yes or no answer. In cases where information was not available or evidence was lacking, analysts were instructed to answer negatively. Since a lack of corporate governance information should be correlated with poor corporate governance, this practice should not lead to large errors. The CLSA questionnaire is divided into seven sections covering fiscal discipline, accounting transparency/disclosure, board independence, board accountability, responsibility, equitable treatment of shareholders, and social awareness. The score for each of the seven sections is simply the percentage of questions receiving a "yes" answer in that section.

Note that the absolute value of the CLSA score for a company, therefore, effectively measures proximity to the Anglo-Saxon system of governance (where there is greater disclosure to outside parties, boards are comprised of independent outsiders), rather than proximity to alternative relationship-based governance systems.

Further, since the firm-level data are about actual practices, rather than laws on books, these data address *de facto* rather than *de jure* convergence. By averaging the scores across all firms within a country, we obtain *de facto* governance scores at the country level. A disadvantage of these data, relative to the *de jure* measures, is that the CLSA data cover only developing countries while the laws-on-the-books indicators span both developed and developing markets (in Europe, Asia and Latin America).

The most significant limitation of the CLSA data is that they are based on subjective opinions. Although research analysts rather than firms complete a detailed and methodical questionnaire, for some of the questions, the analysts must rely on information provided to them by the firms they are rating. Since firms are asked to provide information about their corporate governance, a substantial amount of misreporting can be expected. Misreporting can lead to noisy data and, even worse, if firms with poor governance were more likely to misreport, then the ratings would not measure the strength of governance at all. The reliance on intermediaries such as consulting firms and investment banks to interpret the data and generate the ratings may also lead to biases. These intermediaries are hardly disinterested parties, and, in some cases, they are rating firms who may be their clients.

We handle these reliability issues in two ways. First, the thesis of CLSA's "Saints & Sinners: Who's got religion" is that corporate governance is correlated with performance. We have confirmed that CLSA's governance ratings are significantly correlated with firm P/E ratios. Although we are not able to determine the direction of causation, the correlation of corporate governance ratings with investors' valuations of the firm suggests that the ratings are capturing a real and relevant variable. Second, as described in Appendix 2, we generate our own ratings of egregious corporate governance problems based on public sources only, avoiding some of the biases present in the other ratings. Based on business newspaper and magazine articles, we compile a list of firms with reported instances of minority shareholder expropriation in the last two and a half years, and other kinds of corporate governance problems. Since compiling such data is highly labor intensive, we focus the collection efforts only on firms in India, the emerging market for which CLSA provided data on the largest number of firms. We find that the CLSA rataing is correlated with our index of minority shareholder exploitation (though not as strongly with other corporate governance problems). It appears as though the CLSA index does capture major governance problems.

We also check CLSA's sample selection procedure. According to CLSA, the sample of firms was selected based on two criteria: size and investor interest. "[B]eyond the largest stocks in each market, our coverage would be biased towards companies that we see as likely to be of interest to institutional investors and in making this decision, an inherent sampling bias creeps in." If investor interest were correlated with corporate governance, then the portion of the sample that was selected after the largest firms would be biased towards well-governed firms and larger firms in the CLSA sample would appear to have poorer corporate governance. We test the determinants of selection empirically by focusing on the selection of firms in India to ease the data gathering process. We use Bloomberg to generate a pool of firms from which the CLSA analysts could have selected. Appendix 3 describes a probit analysis of the determinants of CLSA firm selection in this pool. This analysis confirms that firms were selected based on size and investor interest as CLSA claims.

Finally, for the bulk of our analysis, we aggregate the firm-level CLSA governance ratings for all firms within a country, along each of the dimensions captured by the data. We use the average ratings thus generated as country level indicators of the particular facets of corporate governance (disclosure, transparency, board independence etc.), the analogs to the country level de jure indicators in the LLSV data. This process averages out at least some of the idiosyncratic subjectivity in responses, though obviously it does not remove country-level response biases.

(II) Independent Variables used in Estimations

Our country-level regressors try to capture the degree of capital market, product market, and labor market integration between pairs of countries. Factor price equalization provides one theoretically defensible measure of the extent to which two

markets are integrated.[10] While we do not have such measures literally, we use two approximations. The first pertains to a measure of the correlation in wage structure in pairs of countries, the second to co-movement in equity prices. Of course, such correlations might well be induced by common unobservables that have nothing to do with true market integration.

Accordingly, we also examine "quantity" rather than price measures of integration, using measures of both actual and potential flows between countries. Competitive pressure in markets is transmitted through such flows. For example, trade flows or simply the threat of trade flows from abroad puts pressure on domestic firms to be more efficient. Similarly, the potential for capital flows should make countries and firms more likely to reform governance in order to attract this capital. Our measures of actual flows include pairwise trade in products and pairwise foreign direct investment (FDI). Our measures of potential flows include geographic distance and the presence of a common language.

A variable denoting the origin of the legal system is used to control for path dependence. If path dependence is indeed a force in the evolution of corporate governance within a country, then the starting point should have an effect on the current corporate governance laws and practices. La Porta et al. [1998] found that origin of the legal system is a significant determinant of current legal structure. We treat the origin of the legal system as a proxy for the starting point because it was determined exogenously hundreds of years ago.[11] If the origin of the legal system is the only historical factor relevant in determining current legal systems, then our test for similarity becomes a test for convergence as well.[12] We motivate and describe the independent variables in greater detail below.

A. Wage Equalization

Under conditions of perfect labor mobility, workers of a particular skill level, ability, or occupation should receive the same wage across countries after controlling for differences in the cost of living. Until recently, no systematic data on wages across countries were available. Freeman and Oostendorp [2000] have refined the ILO international database of wages to create a dataset of monthly average pay for male workers coded for 161 occupations across 154 countries over the years 1983 to 1998.[13]

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[10] Similarly, a lack of equalization in the prices of capital and labor would indicate the presence of barriers to the mobility of these factors. However, the converse of this statement is not necessarily true. We know from International Trade theory that factor price equalization may occur when factors are not mobile but products are. (See, for example, Samuelson [1948] for an early version of this idea.)

[11] Rajan and Zingales [2001] have argued against such an interpretation, however.

[12] To see this, assume that the origin of the legal system entirely determines the starting point of the corporate governance environment. The LLSV and CLSA data represent the current corporate governance environment. In this way, we implicitly have data on corporate governance for each country at two points in time. This information allows us to estimate whether corporate governance between pairs of countries is converging.

[13] We are grateful to Remco Oostendorp for sharing these data with us.

Since each country had data available for different years and different occupations and the data are presented in local current currency units, we cannot simply compare wage rates by occupation across countries. Instead, we examine the structure of wages by calculating the correlation of wages by occupation across country pairs.[14] If wages are equalized, then we expect a correlation coefficient of 1; for example, if doctors earn more than lawyers in one country, then they would earn more than lawyers in the other country as well. A drawback of this proxy is that wage structure may itself be an indicator of corporate governance separate from the effects of cross-country labor mobility; certain rankings of wages by occupation may result from a shareholder-centered system and other rankings from a labor-centered system.

B. Capital Market Co-movement

A rough measure of economic integration is the correlation of weekly stock market index changes in percentage terms between two countries. By definition, movement in stock prices is caused by either a change in fundamentals or a change in discount rate. If an economic shock occurs in one country and the two countries are economically interdependent, then the economic shock will also affect the other country. Since fundamentals in both countries are affected, the stock prices of both countries should move in the same direction. Alternatively, if two countries have the same set of investors, then the discount rate in both countries will move together and the stock markets will be correlated. In this case, co-movement becomes a proxy for integration between two countries into a single capital market.[15] Stock price data come from the Morgan Stanley stock indices, and, for a few countries where a Morgan Stanley index was not available, from the national indices. Most countries had data available for the period January 1993 to August 2001, but in a few cases shorter time series were used.

C. Trade

Flows of goods between two countries are indicative of openness between these countries, at least in product markets. The flow measures include both intra-industry and inter-industry trade; although competitive pressures should be greater in cross-border horizontal competition, pressures in a vertical relationship are also possible. We develop two related measures. The first, Trade Partner, is appropriate if trade bears the same importance in the political process regardless of size, perhaps because of its potential for growth in the future. The second, Trade Magnitude, assumes that the importance of trade

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[14] The actual procedure is to first take an average of wages by occupation for all available years from 1983-1998 for each country. The correlation coefficient is calculated on a pairwise basis for all occupations for which both countries have reported data. This method has obvious limitations since different pairs of countries have different occupations in common.

[15] Of course correlated changes in fundamentals may have other causes. For example, if two economies were affected by the same severe weather patterns, then their stock markets would be correlated even if there were no economic linkages between them. In the case of price fluctuations due to changes in discount rates, the measure is also imperfect because it is possible that each stock market has separate investors with correlated preferences. Since co-movement represents only one of the many proxies we are testing, we do not attempt to separate correlations due to fundamental and non-fundamental factors, using only a simple correlation coefficient for the proxy.

to political decision-makers is proportional to its current share in the economy. Trade Partner is the sum of the ratios: IMP_{ij}, IMP_{ji}, EXP_{ij}, and EXP_{ji}, where IMP_{ij} is share of total imports into country i originating from country j and EXP_{ij} is share of total exports of country i that are going to country j. Although this measure uses the same numerator twice, it provides the most complete measure of whether the two countries are major trading partners from either country's perspective. Trade Magnitude takes into account the fact that international trade plays a larger role in some economies than others. For example, trade varies with the degree of openness. Furthermore, for a given level of openness, trade is more important for a small country than for a large country. Trade Magnitude is defined as the sum of pairwise total trade divided by the GDP of the first country and the same total trade divided by the GDP of the second country. The pairwise trade data come from the World Trade Analyzer for 1996.

D. Foreign Direct Investment

Pairwise foreign direct investment can proxy for pressures for convergence of corporate governance in several ways. Multinationals might operate more efficiently than local firms because of their access to home country institutions—capital, talent or technology, for example. Competitive forces from the multinationals would then force local firms to abandon inefficient corporate governance structures (Foley [2002]). Mirroring our constructs in the case of the pairwise trade variables, we use two variables for foreign direct investment called FDI Partner and FDI Magnitude. FDI Partner indicates to what degree inward investment in one country originates from another country. It is defined as the sum of FDI_{ij} and FDI_{ji} where FDI_{ij} represents the percentage of total FDI in country i owned by firms in country j. Since FDI plays a larger role in some economies than others, FDI Magnitude weights the two percentages by the degree to which FDI is present in the two economies. The variable is defined as FDI_{ij} * $(\text{Average FDI flows/GDP})_i$ + FDI_{ji} * $(\text{Average FDI flows/GDP})_j$. Data for pairwise FDI are taken from the United Nations World Investment Directory volumes 1-7.

E. Geographic Distance and Common Language

Geographic distance and common language predict the likelihood of flows between countries. We expect countries that are located closer together to have lower transport costs and smaller information acquisition costs, facilitating the flows of goods and factors. Similarly, flows between countries are aided by the presence of a common language between the two countries. These two variables have been extensively used in the literature on gravity models in international trade. Of course, geography and language might well proxy for other underlying variables (Acemoglu et al. [2001], Diamond [1999], Sachs and Warner [1995]). Data are from the atlas and from the CIA Factbook.

4. Similarity at the Country Level

We test the hypothesis that the corporate governance environment in a particular country will be affected by that country's integration into worldwide capital markets,

product markets, and labor markets. We make no assumptions regarding which country has the optimal governance system and which other countries will try to emulate it, and instead, test a general version of the hypothesis. Economic linkages between any two countries are hypothesized to create competitive pressure in each of the two countries to adopt the optimal elements of its partner's governance structure. Thus, pairs of countries with greater economic linkages should have more similar governance structures.[16] We perform the estimations first using the *de jure* governance data and then using the *de facto* data. We explore the *de jure* results in detail to understand which pairs of countries are driving the results.

A. Methodology

We use the 13 indicators of legal rules from the LLSV data to construct a measure of *de jure* governance similarity between two countries i and j as follows:

$$\text{Governance Distance}_{i,j} = \sum_{l=1}^{L} \left| C_{i,l} - C_{j,l} \right|$$

where $C_{i,l}$ represents a particular binary legal characteristic l of country i. The analogous measure of de facto similarity using the CLSA data is:

$$\text{Governance Distance}_{i,j} = \sqrt{\sum_{l=1}^{L} \left(C_{i,l} - C_{j,l} \right)^2}$$

where $C_{i,l}$ represents a 1 to 10 rating on the strength of protection in country i for dimension l.

For each possible pair of countries, we regress these dependent variables on eight measures of pairwise economic integration: wage correlation, capital market co-movement, FDI partner, FDI magnitude, trade partner, trade magnitude, geographic distance, and common language. We use the quadratic assignment procedure (QAP) as described in Appendix 4 to calculate standard errors for such dyadic data (Krackhardt, 1988). Since the independent variables are correlated and, in many instances, meant to proxy for the same type of integration, we test the effect of each of these separately. We distinguish between the effects of integration and historical path dependence by controlling for common origin of legal system. We also control for differences in level of development on the grounds that governance is expected to differ between developed and developing countries. Less developed countries do not have the resources or expertise to refine corporate governance laws and practices. Since the level of economic integration may differ between developed-developing and developed-developed/developing-developing pairs, this control eliminates a potential omitted variable bias.

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[16] Our methodology is distinct from the Gravity Equation of international trade (See for example, Anderson [1979], Leamer and Levinsohn [1995], Evenett and Keller [1998]) which predicts that the volume of trade between two countries is proportional to the product of the two countries GDPs. We do, however, use some similar independent variables in our regressions such as geographic distance and common language.

B. De jure analysis

We find a strong link between economic integration and *de jure* governance similarity. Panel A of Table 1 displays the baseline regressions. All of the globalization proxies are of the expected sign and five of the variables (wage correlation, trade partner, trade magnitude, geographic distance, and common language) are significant at the 10%, 5% or even 1% levels. The predicted magnitude of the effect, expressed as the percentage of a standard deviation change in the dependent variable resulting from a standard deviation change in the independent variable, ranges from 8% to 29% for the variables that were significant. Common origin of the legal system is of the expected sign and significant at the 1% level in all regressions. Difference in development is of the expected sign in all but one of the regressions but is not significant.

Which pairs of countries are driving the results? We first test whether the results are driven by integration with and similarity in governance to the United States. We create two new independent variables to replace each independent variable used in the baseline regression. The first independent variable equals the proxy for integration when the pair contains the United States and zero otherwise. The second independent variable equals the proxy for integration when the pair does not contain the United States and equals zero otherwise. Contrary to expectations, the regression analysis of the effects of these new independent variables (Panel B) reveals that non-U.S. pairs are driving the results. For U.S. pairs, only three of the eight variables are of the expected sign and only one of these three is significant and merely at the 10% level. For the case of the non-U.S. pairs, all the variables are of the expected sign, and all except for capital market correlation are significant, with five of the variables significant at the 1% level. For most variables, the magnitude of the predicted effect for non-U.S. pairs is larger than the magnitude in the baseline regressions.

If U.S. pairs are not driving the results, then to what model of governance are countries converging? It appears that there is no single model. Rather, countries tend to have governance similar to those of regional partners. We demonstrate this pattern using a methodology similar to that described above for the United States. We generate two independent variables, one for integration within regions and the other for integration across regions, such that the former variable is zero when the pairs are not in the same region and the latter is zero when the pairs are in the same region. We are thus able to estimate coefficients for the effects of integration within regions and then separate coefficients for the effects of integration across regions. As shown in Panel C, the results for within-region integration are much stronger, both in terms of the significance of the coefficients and the magnitudes of the predicted effects. This regionalization of governance is consistent with the previous result that convergence is not driven by integration with the United States

Our indicator of geographic distance is significant between regions, but not within regions. This may be due to insufficient variation in this regressor within-region. Of course, geography could be proxying for other variables (for example, culture or religion (Stulz & Williamson [2001]), a possibility which would also be consistent with less intra-regional than inter-regional variation.

We also analyze the results according to level of development of the country pairs. Common wisdom is that convergence will occur because governance practices spread from developed countries with good governance to developed and developing countries with poor governance. Convergence between two developing countries is expected to be less likely. We divide the countries in our sample evenly into developed and developing countries according to GDP per capita and then group the pairs into three categories: developed-developed, developing-developing, and developed-developing. Panel D shows the coefficients for these regressions. The effects of globalization are strongest in terms of significance and magnitude of the coefficients in the developed-developed pairs and weakest in the developing-developing, as expected.

Factor Analysis: Our proxies for globalization are often highly correlated. Further, while it may seem that some of these proxies measure globalization of a particular kind of market— e.g. capital market—this is a tough case to make in practice. For example, foreign direct investment might be a proxy for any of capital, product or labor market integration. If correlation of capital markets is due to common economic factors affecting the performance of firms in both countries, then this explanatory variable is a proxy for economic integration in general. Table 2 shows a factor analysis on the ten explanatory variables, retaining three factors. Factor 1 represents globalization with heavy loadings on foreign direct investment, trade, and geographical distance. Factor 2 represents differences in development with loadings on differences in Log GNP/capita and capital market co-movement. The presence of the latter variable in this factor suggests that the correlation within emerging markets or within developed markets is higher than the correlation between a developed country and a developing country (see Morck, Yeung and Yu [2000] for a more detailed discussion of this pattern). Factor 3 represents path dependency and contains common origin and common language. While common language was intended to be a proxy for the ease of mobility of labor between two countries, it is easy to see how it would be highly correlated with common origin of legal system and included in this factor. The wage correlation variable does not receive heavy weightings in any of the three retained factors. The regression of legal rules differences on these three factors finds all coefficients of the expected sign with common origin significant at the 1% level and globalization to be significant at the 5% level. We also re-run this analysis focusing on dyads that do not involve the U.S. The common origin variable is as strong a predictor of convergence as before. Additionally, globalization is strengthened as a predictor, in magnitude and significance (1% level). This buttresses our finding of *de jure* similarity in governance among pairs of economically linked countries (especially when the U.S. is excluded).

C. Comparison with de facto analysis

In contrast to the *de jure* results, we find almost no evidence of *de facto* similarity between economically linked pairs of countries. As shown in Table 3, of the 8 measures that we test, the coefficients on three of them are of the wrong sign. Of the remaining five, only common language is significant and merely at the 10% level. Common origin of the legal system is of the expected sign in all regressions, but, surprisingly, is not significant, indicating that this measure of path dependence is a poor predictor of

governance enforcement. Difference in level of development is also of the expected sign in all regressions but not significant.

We are unable to implement the type of detailed analysis for the CLSA data that we used for the LLSVdata because the CLSA data cover only developing countries. We attempted a factor analysis of the economic integration proxies for just the developing countries, but the three factors were not easily interpretable.

The *de facto* and *de jure* results are not strictly comparable because they are derived from different samples of countries. Most importantly, the *de jure* results are based on a sample that includes both developed and developing countries while the *de facto* sample only contains developing countries. To address this problem, we perform an apples-to-apples comparison by running the regressions on just the 19 countries for which we have both *de facto* and *de jure* data. These 19 countries are all developing countries, where we expect to see the biggest difference between *de facto* and *de jure* results. Here, complementary institutions are weaker, political rent-seeking possibilities are greater, and enforcement of the rules is inadequate. As hard as it is to change the legal regime defining the rules of corporate governance, modifying actual practices to conform to these legal reforms under the political and economic circumstances found in most developing countries is an even greater challenge. Our results in Table 4 confirm the hypothesis that there is a large gap between *de facto* and *de jure* similiarity in developing countries. For this sample of countries, none of the coefficients in the *de facto* regressions are significant and six of the eight coefficients are of the wrong sign. In contrast, in the *de jure* analysis all but one of the coefficients are of the right sign and five of the coefficients are significant. Thus, our results still hold in the apples-to-apples sample of countries.

We summarize the results of the country level analysis thus. We find evidence that economic interdependence and similarity in de jure corporate governance practices between pairs of countries are correlated, especially intra-regionally, and especially among more developed countries. Estimation using regressors derived from a factor analysis confirms that 'globalization' and 'similarity in corporate governance' are correlated even after controlling for 'common origins.' There is no such correlation between economic interdependence and de facto corporate governance practices, however. An interpretation of these results is that economically integrated countries have rules-on-books regarding corporate governance that are more similar than they would be if the countries were not as integrated; however, this similarity of rules-on-books does not transfer into similarity in practice. This interpretation is consistent with the findings in transition economies of Pistor et al. [2000] and to those regarding Mexican firms exposed to U.S. capital markets by Siegel [2001].

5. Robustness Checks

A problem with aggregating corporate governance ratings at the country level is that we ignore convergence along industry and firm lines. Since most national laws apply to all firms and industries, *de jure* convergence is inherently a country-level

phenomenon. On the other hand, *de facto* convergence can occur at the country, industry, or firm levels. We show using CLSA and other firm-level datasets that *de facto* convergence is occurring at neither the industry level nor the firm level. We also investigate a number of political and economic factors at the country level that may explain why convergence is happening only between certain pairs of countries.

A. Convergence at the Industry Level

It has been argued that a different type of governance is appropriate for different types of industries. In skilled labor-intensive industries, it may be economically optimal to give labor greater control in the governance of the firm in order to induce labor to invest in acquiring firm-specific skills. Alternatively, corporate governance convergence may occur only in global industries, which would be more greatly affected by capital market, product market, and labor market integration.

We test for the role of industry in determining governance using the data from CLSA as well as three other sources of firm level governance ratings: Déminor, Proxinvest, and Fortune. Data from Déminor and Proxinvest, two independent consulting firms, provide governance ratings on the top 300 firms in Europe. Fortune Magazine has rated firms worldwide in its World's Most Admired Companies Index.

If optimal governance structure differed by industry, then we would expect a regression of firm level governance indicators on industry and country dummy variables to find a significant role for industry. Appendix 5 displays the Anova decomposition of the four firm-level governance ratings (CLSA, Deminor, Proxinvest, and Fortune) into country and sector effects. Industry explains only 2% to 13% of the variance in corporate governance scores while country explains 17% to 57% of the variance. The contrast in explanatory power is largest for the Déminor ratings where country explains 29 times more variance than sector. The relatively small effect of industry casts doubt on the theory that different industries require different types of governance.

For another robustness check, we tested separately the argument that more global industries have higher overall governance scores. This is effectively a test for similarity to U.S. corporate governance standards. For each industry, we compiled several measures of how global an industry is by aggregating data up from the firm level. Two of these measures were based on emerging market data (namely the propensity to list abroad and to export), while two other measures were based on U.S. and Western European multinational activity. The advantage of the latter two variables is that they are exogenous because they are not related to the dependent variable, the corporate governance score of firms in emerging markets. For all four measures, we were able to reject the hypothesis that more global industries have governance closer to the U.S. system of governance.

B. Convergence at the Firm Level

Our sector categories in the industry-level analysis are quite broad resulting in significant heterogeneity between firms in the same sector. For this reason, we

conducted firm-level analyses as well. Mirroring some of our industry-level analyses, we test whether firms that are more exposed to global markets have higher governance scores, after controlling for country and industry effects. We use three indicators of exposure to global capital markets, one indicator of exposure to global product markets, and one indicator of exposure to global labor markets. These variables are: institutional investor holdings, U.S. common stock or ADR listings, the use of global intermediaries, export intensity, and proportion of foreign board members. Appendix 7 explains these variables in more detail, including the motivation for their use and the source of the data. As with some of our industry level analyses, the firm-level analyses effectively look for correlations between exposure to global markets and de facto similarity to U.S. corporate governance standards. We find little evidence of a relationship between firm-level exposure to globalization and corporate governance. Regression results from the CLSA data are presented in Panel A of Appendix 8. Although significant, the coefficient for U.S. listing is small.[17] The institutional ownership coefficient is significant at the 10% level in some of the regressions and the coefficient is also small. The global intermediary variables, representing whether the firm has had any connection with the big five accounting firms or major Western investment banks, are not significant. The export intensity variable is not significant when we control for fixed country effects. The coefficient for foreign management and directors is significant at the 1% level but the effect it represents is small.

We have ignored the issue of causation so far, inherently assuming that variables such as institutional investor holdings are exogenous and that higher institutional holdings would put more pressure on firms to change their governance practices. Instead, it is possible that a firm's corporate governance affects the size of institutional investor holdings. Knowing that they will be unable to affect corporate governance of the firms they invest in, institutional investors may decide to only invest in firms who already have good corporate governance. Since the coefficient on institutional investor holdings was small and not highly significant, however, we are able to reject either direction of causation as a significant force. Similarly, firms with better corporate governance may list in the U.S. rather than listing in the U.S. causing firms to improve corporate governance, but the coefficient here was small as well. As long as both directions of causation lead to a coefficient of the same sign, our negative results still hold.[18]

Our *de jure* regressions at the country level found the strongest results for developed countries. For this reason, we repeat the analysis, focusing on developed countries in Europe using the Déminor data rather than the emerging markets in the CLSA data. (The Déminor data are described in Appendix 6.) The results of regressions on governance in Europe are similar. As shown in Panel B of Appendix 8, U.S. listing is

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[17] Since a couple of the questions in the transparency section of the CLSA questionnaire related to requirements that would be imposed by the SEC or by exchange listing rules, the improvement in governance is probably accounted for by compliance with these regulations rather than indicative of a voluntary effort by firms to improve governance in order to attract U.S. investors.

[18] If, on the other hand, poorly governed firms rather than well-governed firms were more likely to list in the U.S. because they needed to improve investor's perceptions of their governance practices, then we might obtain a negative result when in fact there were opposing forces along both directions of causations.

the only variable that is significant in within country regressions. The effect of a U.S. listing is a 0.3 point increase in corporate governance on a scale of 1 to 4.7, which we conjecture is small enough to be attributable to listing requirements. The U.S. listing variable emerges as statistically significant in both the CLSA and the Déminor regressions. The small size of the effect, however, is consistent with Siegel's [2001] finding that ADR listings did not constrain Mexican companies with ADRs from expropriating minority shareholders.

We also test for convergence along a more direct channel, that of pressure by controlling shareholders. We expect to find the greatest differences from country peers for those firms where the top shareholder is a U.S. firm or a U.K firm. As shown in Appendix 9, we identified 13 firms in the CLSA sample where the top shareholder was in this category. Of these 13 firms, 10 had a corporate governance rating greater than their country peers while 3 had a lower rating. However, a fixed country effects regression of weighted corporate governance ratings on a dummy variable representing whether or not the top shareholder was a U.S. or U.K. firm yielded a positive but insignificant coefficient. It is surprising that controlling shareholders did not have more of an effect on governance.

C. Additional Explanatory Variables in the Country Level Analyses

One explanation for why convergence may not happen despite competitive pressures is that vested interests capture political processes and prevent the adoption of needed reforms. We test this hypothesis first using data on the level of democracy in each country, hypothesizing that reform is more likely in democratic countries. We use three proxies for democracy (democracy index, political constraints index, and gini coefficient) and test whether integration has a larger effect when the pair of countries are more democratic. The empirical results here are inconclusive. Since there is substantial disagreement in the academic literature regarding whether reform is more feasible under democracy or autocracy, the lack of a clear relationship in this case is not surprising. We repeat the analysis using a clearer proxy for the power of vested interests—union membership. We expect unions to oppose corporate governance reform intended to strengthen shareholder rights or creditor rights; for this reason, countries with a larger percentage of workers in unions should be less likely to reform. Surprisingly, the empirical analysis finds the opposite relationship. Similarity in governance due to integration was significantly greater in pairs of countries with high union membership. In a separate analysis, we test whether reform is more likely in countries that have recently experienced a currency crisis or received international aid. We find no significant evidence in support of either relationship.

6. Conclusion

Theorists have debated the extent of convergence in corporate governance for some time now. Opinions span the spectrum from believers that global competition will force (and has already forced) such convergence (Hansmann and Kraakman[2001]), through more measured views that functional convergence rather than literal convergence

will occur (Gilson [2000]), to the idea that path dependent considerations preclude the possibility of meaningful convergence (Bebchuk and Roe [1999]). Others have drawn attention to the importance of distinguishing rules-on-the-book convergence from effective convergence, which we refer to in this paper as *de jure* and *de facto* convergence respectively (Pistor et al. [2000]).

Yet these debates about the role of global competition in fostering convergence are generally not informed by systematic empirical inquiry. We conjecture that this is partly because of the difficulty of defining and operationalizing the notion of convergence. We take a small step in the direction of remedying this lack of literature. In particular, we amass several new datasets on *de facto* corporate governance practices of firms in several developed and developing markets. We contrast the *de facto* results from these datasets with a new use of the now ubiquitous La Porta et al. data on shareholder and creditor rights, which we interpret as indicators of *de jure* convergence, as Pistor et al. have shown convincingly in their analysis of transition economies. We try to be careful about what we mean by "globalization." In other words, we distinguish—with useful empirical implications, as it turns out—globalization as exposure to the U.S. system currently in ascendance around the world, from globalization as economic interdependence between any pair of countries.

Our results, based on cross-sectional data, test the hypothesis that similarity in corporate governance between two countries is correlated with economic integration between those countries. This test for similarity is also a test for corporate governance convergence under certain conditions. First, complete convergence to one optimal standard must have not already occurred, since if such convergence had occurred, we would actually find no correlation between similarity in governance and integration. The heterogeneity in governance across countries demonstrates that this condition is met. Second, common origin of the legal system must be a sufficient control for the path dependence. If common origin does indeed sufficiently control for the point at which governance laws and practices started hundreds of years ago, then any common deviation from this starting point by economically-interlinked countries is indicative of a convergence process.

Our conclusions challenge conventional wisdom. We find robust evidence of *de jure* convergence at the country level. Interestingly, this is not driven by convergence to U.S. standards. Rather pairs of economically interdependent countries appear to adopt common corporate governance standards, especially if the pair of countries in question are in the same geographic region and are relatively developed economies. In contrast to these *de jure* results, we find virtually no evidence of *de facto* convergence in corporate governance in a battery of estimations at the country, industry and firm levels. This is consistent with either the proposition that complementarities result in different national systems appropriately having different corporate governance systems, or the proposition that globalization is not strong enough to overcome local vested interests. We conclude that globalization may have induced the adoption of some common corporate governance standards but that there is little evidence that these standards have been implemented.

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Table 1: Dyadic Analysis of La Porta (de jure) country data

Each row represents a separate univariate dyadic regression utilizing one of eight proxies for pairwise economic integration as the explanatory variable. All regressions control for pairwise differences in Log GDP/capita and for common origin of legal systems. The dependent variable in all regressions is the "distance" in corporate governance between two countries, which is calculated as the sum of differences along 13 dimensions of creditor and shareholder rights with data from La Porta et al [1998]. The sample is all possible pairs of countries for which we have governance and pairwise economic integration data. The expected sign in the second column is based on the hypothesis that more economic integration leads to a smaller "distance" in governance.

Parentheses contain percentile distributions of the actual coefficient within coefficients under the null hypothesis generated from a QAP simulation with 500 draws. A percentile less than 5% or greater than 95%, for example, indicates a coefficient that is significant at the 10% level. Magnitude, in the column, is calculated as the coefficient on the independent variable multiplied by that variable's standard deviation and then divided by the standard deviation of the dependent variable. * significant at 10% level; ** significant at 5% level; *** significant at 1% level.

Panel A: Baseline dyadic regressions

Independent Variable	Expected Sign	Indep. Variable Coeff.	Diff. in Log GDP/cap Coeff.	Common Origin of Legal System Coef.	R-Squared	# of Countries	# of Pairs	Magniutde	Variable Definition
Wage Correlation	-	-1.1707** (1.6%)	-0.0243 (44.6%)	-1.3702*** (0.0%)	0.1116*** (100.0%)	40	780	-18%	Correlation coefficient between average monthly wages by occupation
Capital Market Correlation	-	-0.1831 (39.6%)	0.1405 (84.4%)	-1.2867*** (0.0%)	0.0905*** (100.0%)	45	990	-2%	Correlation coefficient between weekly % changes in national stock indices
FDI Partner	-	-1.4039 (13.0%)	0.0463 (69.0%)	-1.3075*** (0.0%)	0.0938*** (100.0%)	47	1081	-6%	Share of total FDI in country A originating in B and vice versa
FDI Magnitude	-	-0.4752 (22.4%)	0.0551 (66.2%)	-1.2222*** (0.0%)	0.0801*** (100.0%)	45	990	-4%	FDI Partner multiplied by FDI/GDP for each country
Trade Partner	-	-0.0121* (4.2%)	0.0626 (68.0%)	-1.2510*** (0.0%)	0.0923*** (100.0%)	49	1176	-8%	Share of total imports and exports in country A originating in B and vice versa
Trade Magnitude	-	-7.6401** (1.6%)	0.0540 (68.0%)	-1.2458*** (0.0%)	0.0947*** (100.0%)	49	1176	-10%	Pairwise total trade divided by GDP of each country
Geographic Distance	+	0.1240*** (100.0%)	0.0594 (70.0%)	-1.2000*** (0.0%)	0.1669*** (100.0%)	49	1176	29%	Distance in kilometers between the capitals of two countries
Common Language	-	-0.6032** (1.8%)	0.1105 (81.8%)	-1.0612*** (0.0%)	0.1030*** (100.0%)	49	1176	-14%	Equals one if the two countries have a language in common

Each row represents a dyadic regression where the independent variable from the baseline regressions in Panel A has been replaced by two independent variables, which separate the effects between U.S. pairs and non-U.S. pairs. The first independent variable equals the underlying proxy for integration when the pair contains the United States and zero otherwise. The second independent variable equals the proxy for integration when the pair does not contain the United States and equals zero otherwise.

Panel B: Dyadic regressions separating US and. non-U.S. pairs

Independent Variable	Expected Sign	Independent Variable Coeff. - US pair	Independent Variable Coeff. - non US Pair	Difference in Log/GDP Coeff.	Common Origin of Legal System Coeff.	R-Squared	# of Countries	# of Pairs	Magnitude
Wage Correlation	-	-0.0072 (50.6%)	-1.3085** (1.6%)	-0.0260 (46.0%)	-1.3956*** (0.0%)	0.1183*** (100.0%)	40	780	-20%
Capital Market Correlation	-	0.3182 (62.4%)	-0.2502 (37.0%)	0.1357 (83.8%)	-1.2878*** (0.0%)	0.0911*** (100.0%)	45	990	-2%
FDI Partner	-	0.4037 (61.0%)	-4.0855*** (0.2%)	0.0377 (61.2%)	-1.2726*** (0.0%)	0.1038*** (100.0%)	47	1081	-12%
FDI Magnitude	-	0.7065 (77.4%)	-1.8873*** (0.4%)	0.0447 (63.4%)	-1.2098*** (0.0%)	0.0900*** (100.0%)	45	990	-10%
Trade Partner	-	-0.0001 (47.4%)	-0.0268** (0.6%)	0.0297 (61.2%)	-1.2199*** (0.0%)	0.1017*** (100.0%)	49	1176	-13%
Trade Magnitude	-	2.2442 (62.8%)	-11.2781*** (0.0%)	0.0424 (64.0%)	-1.2431*** (0.0%)	0.1011*** (100.0%)	49	1176	-13%
Geographic Distance	+	0.1433* (95.4%)	0.1233*** (100.0%)	0.0574 (68.4%)	-1.2048*** (0.0%)	0.1673*** (100.0%)	49	1176	29%
Common Language	-	0.3259 (70.4%)	-0.6783*** (0.4%)	0.0975 (80.4%)	-1.0571*** (0.0%)	0.1092*** (100.0%)	49	1176	-16%

Each row represents a dyadic regression where the independent variable from the baseline regressions in Panel A has been replaced by two independent variables, which separate the effects of integration between regions and within regions. The first independent variable equals the underlying proxy for integration when the observation is for two countries located in the same region and equals zero otherwise. The second independent variable equals the proxy for integration when the observation is for two countries located in different regions and equals zero otherwise. Regions are North America, South America, Europe, Asia, Africa, Middle East, Australia.

Panel C: Dyadic regressions testing for regionalization

Independent Variable	Expected Sign	Independent Variable Coeff. – between regions	Independent Variable Coeff. – within regions	Difference in Log/GDP Coeff.	Common Origin of Legal System Coeff.	R-Squared	# of Countries	# of Pairs	Magnitude between regions	Magntude within regions
Wage Correlation	-	-0.7200 (9.6%)	-3.0419*** (0.0%)	-0.1430 (17.0%)	-1.3116*** (0.0%)	0.1538*** (100.0%)	40	780	-12%	-49%
Capital Market Correlation	-	1.6371* (95.6%)	-1.3864* (3.4%)	0.1522 (85.0%)	-1.2610*** (0.0%)	0.1454*** (100.0%)	45	990	13%	-11%
FDI Partner	-	-0.2251 (48.6%)	-4.0747*** (0.2%)	0.0188 (56.8%)	-1.2997*** (0.0%)	0.1003*** (100.0%)	47	1081	-1%	-17%
FDI Magnitude	-	0.1467 (62.0%)	-1.6022** (1.8%)	0.0419 (64.0%)	-1.2311*** (0.0%)	0.0843*** (100.0%)	45	990	1%	-11%
Trade Partner	-	0.0067 (65.4%)	-0.0195*** (0.2%)	0.0278 (56.2%)	-1.2393*** (0.0%)	0.1004*** (100.0%)	49	1176	3%	-8%
Trade Magnitude	-	4.0344 (67.8%)	-9.8360*** (0.0%)	0.0417 (66.0%)	-1.2512*** (0.0%)	0.1000*** (100.0%)	49	1176	3%	-6%
Geographic Distance	+	0.1248*** (100.0%)	0.1334 (94.0%)	0.0603 (69.2%)	-1.2005*** (0.0%)	0.1669*** (100.0%)	49	1176	25%	26%
Common Language	-	-0.4972* (5.0%)	-0.9134*** (0.2%)	0.0896 (73.8%)	-1.0492*** (0.0%)	0.1059*** (100.0%)	49	1176	-12%	-21%

Each row represents a dyadic regression where the independent variable from the baseline regressions in Panel A has been replaced by three independent variables, which separate the effects of integration into three categories: developed-developed, developing-developing, and developed-developing. The first independent variable equals the underlying proxy for integration when the observation is for two developed countries. The second independent variable equals the proxy for integration when the observation is for two developing countries and equals zero otherwise. The third independent variable equals the proxy for integration when the observation is for a developed and a developing country and equals zero otherwise.

Panel D: Dyadic regressions by pair type: Developed-Developed, Developing-Developing, Developed-Developing Pairs

Independent Variable	Expected Sign	Independent Variable Coeff. – Developed-Developed pair	Independent Variable Coeff. – Developing-Developing pair	Indepent Variable Coeff. – Developed-Developing pair	Difference in Log/GDP Coeff.	Common Origin of Legal System Coeff.	R-Squared	# of Countries	# of Pairs	Magnitude – Developed-Developed	Magnitude – Developing-Developing	Magnutde — Developed-Developing
Wage Correlation	-	-1.8627** (1.2%)	-1.3117* (4.4%)	-0.9767* (4.6%)	-0.1746 (18.4%)	-1.4108*** (0.0%)	0.1204*** (100.0%)	39	741	-19%	-19%	-16%
Capital Market Correlation	-	-1.0380 (16.4%)	2.8380** (99.0%)	1.0447 (86.6%)	0.0043 (53.0%)	-1.4559*** (0.0%)	0.1292*** (100.0%)	44	946	-8%	19%	8%
FDI Partner	-	-4.8584** (0.6%)	5.5091 (80.0%)	-3.6936** (1.4%)	0.0085 (54.8%)	-1.2628*** (0.0%)	0.1042*** (100.0%)	46	1035	-30%	5%	-16%
FDI Magnitude	-	-1.6813** (1.6%)	15.3550 (92.4%)	-2.6744** (1.6%)	0.0355 (61.8%)	-1.1861*** (0.0%)	0.0897*** (100.0%)	44	946	-20%	8%	-18%
Trade Partner	-	-0.0327*** (0.2%)	-0.0020 (44.6%)	-0.0211 (12.8%)	-0.0098 (49.2%)	-1.2474*** (0.0%)	0.1026*** (100.0%)	48	1128	-30%	-1%	-13%
Trade Magnitude	-	-11.9237** (1.6%)	-9.6582 (21.8%)	-10.3290* (4.0%)	0.0185 (55.6%)	-1.2331*** (0.0%)	0.0987*** (100.0%)	48	1128	-21%	-5%	-12%
Geographic Distance	+	0.1128*** (99.6%)	0.1393*** (100.0%)	0.1230*** (100.0%)	0.0395 (61.0%)	-1.1916*** (0.0%)	0.1714*** (100.0%)	48	1128	31%	31%	24%
Common Language	-	-1.8627** (1.2%)	-1.3117* (4.4%)	-0.9767* (4.6%)	-0.1746 (18.4%)	-1.4108*** (0.0%)	0.1204*** (100.0%)	39	741	-44%	-28%	-23%

Table 2: Factor Analysis on Pairwise Explanatory Variables

A factor analysis of the eight pairwise proxies for economic integration identifies three factors which are easily interpretable as globalization, difference in development, and common origin. These factors are then used in a multivariate dyadic regression. The dependent variable in all regressions is the "distance" in corporate governance between two countries, which is calculated as the sum of differences along 13 dimensions of creditor and shareholder rights with data from La Porta et al [1998]. The sample is all possible pairs of countries for which we have governance and all eight pairwise integration measures.

Parentheses contain percentile distributions of the actual coefficient within coefficients under the null hypothesis generated from a QAP simulation with 500 draws. A percentile less than 5% or greater than 95%, for example, indicates a coefficient that is significant at the 10% level. Magnitude, in the column, is calculated as the coefficient on the independent variable multiplied by that variable's standard deviation and then divided by the standard deviation of the dependent variable. *significant at 10% level; ** significant at 5% level; *** significant at 1% level

Factor Analysis on Pairwise Explanatory Variables

Variable	Factor 1: Globalization	Factor 2: Difference in Development	Factor 3: Common Origin	Uniqueness
Eigenvalue	2.96	0.87	0.51	
Rotated factor loadings:				
Common Legal System	0.09124	0.01408	0.49227	0.74915
Difference in Log GNP/capita	-0.04588	0.6387	0.0313	0.58897
Wage Correlation	0.17705	-0.06871	-0.13838	0.94478
Capital Market Correlation	0.2691	-0.67576	-0.03513	0.46969
FDI Partner	0.79849	0.00914	-0.02247	0.36182
FDI Magnitude	0.78307	0.00016	-0.01538	0.38656
Trade Partner	0.84138	-0.17286	0.09574	0.25303
Trade Magnitude	0.79839	-0.16707	0.09359	0.3259
Geographic Distance	-0.26254	0.16065	-0.1402	0.88561
Common Language	0.14661	0.10342	0.52292	0.69436

Regression on Factors

	(1)	(2)	(3)	(4)
	All Available countries	Excludes U.S.	Magnitude All countries	Magnitude Excluding US
Factor 1: Globalization	-0.2701** (1.5%)	-0.4913*** (0.0%)	-13%	-23%
Factor 2: Difference in Development	0.1583 (80.8%)	0.0062 (53.1%)	6%	0%
Factor 3: Common Origin	-0.9393*** (0.0%)	-0.9393*** (0.0%)	-30%	-30%
Number of Countries	0.1108*** (100.0%)	0.1469*** (100.0%)		
Number of Pairs	35	34		
R-Squared	595	561		

Table 3: Dyadic Analysis of CLSA (*de facto*) data

Each row represents a separate univariate dyadic regression utilizing one of eight proxies for pairwise economic integration as the explanatory variable. All regressions control for pairwise differences in Log GDP/capita and for common origin of legal systems. The dependent variable in all regressions is the "distance" in corporate governance between two countries, which is calculated as the sum of differences along 7 dimensions of corporate governance practices using CLSA firm-level data aggregated to the country level. The sample is all possible pairs of countries for which we have governance and pairwise economic integration data. The expected sign in the second column is based on the hypothesis that more economic integration leads to a smaller "distance" in governance.

Parentheses contain percentile distributions of the actual coefficient within coefficients under the null hypothesis generated from a QAP simulation with 500 draws. A percentile less than 5% or greater than 95%, for example, indicates a coefficient that is significant at the 10% level. Magnitude, in the column, is calculated as the coefficient on the independent variable multiplied by that variable's standard deviation and then divided by the standard deviation of the dependent variable. *significant at 10% level; ** significant at 5% level; *** significant at 1% level

Independent Variable	Expected Sign	Independent Variable Coeff.	Difference in Log/GDP Coeff.	Common Origin of Legal System Coeff.	R-Squared	# of Countries	# of Pairs
Wage Correlation	-	-0.0620 (49.2%)	0.7314 (81.2%)	-1.2697 (6.4%)	0.0589 (59.2%)	21	210
Capital Market Correlation	-	2.4122 (77.8%)	0.7242 (86.6%)	-0.9956 (7.8%)	0.0539 (63.0%)	23	253
FDI Partner	-	-4.3005 (13.4%)	0.7556 (90.2%)	-0.3887 (25.4%)	0.0430 (70.8%)	23	253
FDI Magnitude	-	6.2462 (89.4%)	0.9343 (93.0%)	-0.4008 (25.2%)	0.0753 (90.8%)	22	231
Trade Partner	-	-0.0153 (26.0%)	0.7235 (87.8%)	-0.7849 (12.0%)	0.0464 (71.2%)	24	276
Trade Magnitude	-	4.0250 (72.6%)	0.6578 (85.6%)	-0.8583 (10.8%)	0.0453 (72.6%)	24	276
Geographic Distance	+	0.0068 (56.0%)	0.6926 (86.8%)	-0.8204 (10.2%)	0.0429 (64.0%)	24	276
Common Language	-	-1.2015* (4.6%)	0.8764 (90.4%)	-0.3103 (31.6%)	0.0804 (88.2%)	24	276

Table 4: Dyadic Analysis (Apples vs. Apples countries)

These panels repeat the regressions of Table 1 and Table 3, but restrict the sample in both panels to a common set of countries.

Panel A: CLSA (*de facto*) governance indicators

Independent Variable	Expected Sign	Independent Variable Coeff.	Difference in Log/GDP Coeff.	Common Origin of Legal System Coeff.	R-Squared	# of Countries	# of Pairs
Wage Correlation	-	-0.0328 (41.6%)	1.0441 (87.4%)	0.2554 (67.6%)	0.0836 (71.8%)	16	120
Capital Market Correlation	-	1.1823 (65.2%)	1.1437** (97.6%)	0.4062 (85.8%)	0.1217 (85.2%)	18	153
FDI Partner	-	3.1219 (69.6%)	1.0744 (94.8%)	0.4530 (91.0%)	0.1143* (95.2%)	19	171
FDI Magnitude	-	8.3139 (94.0%)	1.3584** (98.8%)	0.4530 (84.0%)	0.1973** (99.2%)	18	153
Trade Partner	-	0.0208 (77.0%)	1.0703* (96.6%)	0.3844 (81.0%)	0.1211* (95.4%)	19	171
Trade Magnitude	-	13.1201 (93.4%)	1.0480* (96.4%)	0.3552 (81.8%)	0.1604* (97.0%)	19	171
Geographic Distance	+	0.0434 (83.0%)	1.1555** (97.8%)	0.5828 (92.0%)	0.1264* (97.0%)	19	171
Common Language	-	0.0693 (46.8%)	1.0841* (96.8%)	0.4359 (85.8%)	0.1130 (92.4%)	19	171

Panel B: LLSV (*de jure*) rights differences

Independent Variable	Expected Sign	Independent Variable Coeff.	Difference in Log/GDP Coeff.	Common Origin of Legal System Coeff.	R-Squared	# of Countries	# of Pairs
Wage Correlation	-	0.1348 (58.4%)	-0.4304 (6.6%)	-1.7124** (0.6%)	0.1575** (99.0%)	16	120
Capital Market Correlation	-	-0.5082 (33.4%)	-0.5086** (1.4%)	-1.8450*** (0.0%)	0.1852*** (100.0%)	18	153
FDI Partner	-	-0.2321 (48.0%)	-0.3933 (5.4%)	-1.7771*** (0.2%)	0.1668*** (99.8%)	19	171
FDI Magnitude	-	-7.6380* (4.2%)	-0.2818 (15.6%)	-1.4137*** (0.2%)	0.1498*** (99.8%)	18	153
Trade Partner	-	-0.0446** (0.8%)	-0.3509 (7.4%)	-1.6340*** (0.2%)	0.2047*** (100.0%)	19	171
Trade Magnitude	-	-13.0249** (1.0%)	-0.3522 (7.4%)	-1.6818*** (0.2%)	0.2135*** (100.0%)	19	171
Geographic Distance	+	0.1180*** (100.0%)	-0.2179 (21.0%)	-1.4187*** (0.4%)	0.2668*** (100.0%)	19	171
Common Language	-	-0.7876* (3.4%)	-0.3201 (9.0%)	-1.6041*** (0.0%)	0.1980*** (100.0%)	19	171

Appendix 1: Model of Corporate Governance Adoption

We propose a model to examine the initial adoption and possible subsequent dissemination of corporate governance practices in a given country. The model assumes that by adopting good corporate governance practices some firms are able to distinguish themselves from other firms in their country as being committed to running the firm for the shareholders. It is motivated in part by the implementation of laws in some countries requiring firms to disclose information about corporate governance practices such as adherence to voluntary codes.[19] The fact that these countries permit any governance practices as long as they are disclosed demonstrates the importance placed on providing sufficient information to investors to help them distinguish between well governed and poorly governed firms. The model uses ideas from Spence [1973] on job market signaling but deviates from the Spence model in that corporate governance practices can actually enhance performance as opposed to being merely a signal correlated with performance. It is also related to Blass and Yafeh [2001], which argued that the high-quality Israeli firms are willing bear the additional cost of listing in the United States to distinguish themselves from lower-quality firms that go public in Tel Aviv.[20]

The initial model considers the conditions under which two types of firms will adopt good corporate governance practices. An extension of the model examines what role the government can play in promoting shareholder centered governance.

Assume there exist two types of firms in a country, type G(Good) and type B(Bad), representing a proportion q and 1-q of the population. The difference between a G firm and a B firm is that the G firm is run with only the interests of shareholders in mind while a B firm pursues multiple objectives. An investment in a G firm pays a rate of return R_G while a similar investment in a B firm pays R_B such that by assumption $R_G > R_B$. Foreign investors do not observe firm types. Investment in each firm I is a function of expected return r such that I=I(r) where $I'(r) \geq 0$ for all $r \in [R_B, R_G]$, $I(R_B)=0$, and $I(R_G)>0$. In the absence of any signals, investors expect a return of $q^* R_G + (1-q)R_B$ for an investment in any firm in that country and each firm will receive an investment amount of $I(q^*R_G + (1-q)R_B)$.

An observable indicator of firm intent to foreign investors is the adoption of shareholder centered governance practices. By reforming governance practices, either type of firm can commit itself to running the firm in the shareholders' interest and delivering a return R_G to the foreign investors. Reform entails a cost c to both types of firms; in order to reform corporate governance, the firm must expend resources to determine what are the best appropriate practices, to convince the relevant stakeholders to approve these practices, and to implement the changes. B firms must pay an additional cost z because adoption of shareholder-centered objectives entails a loss to other stakeholders. Both types of firms derive a benefit b from each unit of foreign investment.[21] An interpretation of b is the return the firm will generate for all stakeholders using this foreign investment to take advantage of an opportunity for which the firm previously did not have enough capital.

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[19] Belgian companies are required "to disclose whether they are in compliance with the recommendations of the 1998 Report of the Belgian Commission on Corporate Governance (Cardon Report)." The Tokyo Stock Exchange "requires all listed companies to include a statement describing their corporate governance practices when they submit their preliminary annual results." Mexican firms are required to report their adherence to a voluntary code of corporate governance. See OECD [2000[.

[20] Costs of U.S. listing relative to Tel Aviv listing included the common phenomenon in the U.S. of first-day underpricing, the loss of control because US IPOs lead to more dispersed ownership, and loss of capital gains tax exemptions for Israeli listed firms.

[21] Technically, the controlling stakeholders of B firms prior to corporate governance reform are not the same as those following reform and the benefit of investment might accrue to the latter stakeholders only. Incorporating this element into the model would complicate the model but not effective the general results.

We imagine a two stage game that occurs following a globalization shock in which U.S. investors become interested in the firms of this country.[22] First, each firm decides whether to reform corporate governance practices. Second, investors observe any corporate governance reforms and make investments in the firms. Proposition 1 gives the results of such a game.

Proposition 1: Three equilibria are possible in such a game: two pooling equilibria where either all firms adopt better corporate governance or no firms adopt better governance, and a separating equilibrium where only some firms adopt better governance.

The conditions under which these equilibria will occur are:

Outcome	Criteria
(1)Pooling Equilibrium with all firms adopting	$b*(I(R_G)-I(q* R_G + (1-q)R_B)) > c$ And $b*I(R_G)>c+z$
(2)Separating Equilibrium	$b*(I(R_G)-I(q* R_G + (1-q)R_B)) > c$ And $b*I(R_G)<c+z$
(3)Pooling Equilibrium with no firms adopting	$b*(I(R_G)-I(q* R_G + (1-q)R_B)) < c$

According to these results, there will be some countries with homogenous governance structures across firms and some countries with heterogeneous governance. Intuitively, a separating equilibrium occurs when some firms are run to a large extent for non-shareholder purposes corresponding to the case where z is large because in this case the benefits of the current management style for the controlling stakeholders exceeds the benefit from foreign investment that could be obtained in exchange for a loss of control.

The model clarifies two motivations for corporate governance reform. G firms reform corporate governance to distinguish themselves from B firms, while B firms adopt reforms in order to commit themselves to delivering returns to the investors. The interesting feature of this model is the interdependence of adoption decisions between firms. In the case of $c + z > b*(I(R_G)-I(q* R_G + (1-q)R_B)) > c$, B firms prefer a state where no one adopts and are hurt by the reform of G firms. If in addition $b*I(R_G)<c+z$, then B firms are adopting only as a response to their expectation that G firms will adopt.

The model has demonstrated how globalization can lead to the adoption of shareholder-centered corporate governance practices by some or all firms. Governance reform can also be imposed on all firms by the government through legal rules and institutions that provide protection to shareholders. The advantage of action by the government is that firms do not have to incur the cost c of implementing their own reforms. When is the government likely to act?

Proposition 2: The government is less likely to encounter opposition from B firms to reform when at least some firms were going to adopt independently.

We verify this proposition by considering each of the 3 outcomes in turn. What do firms stand to lose and gain relative to a case where the government took no action?

Expected outcome if no government action	Loss to B firms from gov't action	Gain to B firms from gov't action	Gain to G firms from gov't action
(1)Pooling Equilibrium with all firms adopting	0	c	c
(2)Separating Equilibrium	Z	$b*I(R_G)$	c

[22] Alternatively, the globalization shock might be limited to only a certain sector in that country. For example, if foreign investors suddenly became interested in technology firms in India, then the relevant population is just Indian technology firms rather than all Indian firms, and only Indian technology firms would even consider adopting.

(3)Pooling Equilibrium with no firms adopting	Z	$b*(I(R_G)-I(q* R_G + (1-q)R_B))$	$b*(I(R_G)-I(q* R_G + (1-q)R_B))$

We note that G firms do not oppose government action in any of the three outcomes because they are already operate in the interests of shareholders. Opposition to government action can only come from B firms. In outcome 1, the net benefit to B firms is strictly positive. In outcome 2 and 3, the net benefit to B firms can be positive or negative, but a positive net benefit and no opposition in outcome 3 implies a positive net benefit and no opposition in outcome 2. In outcome 2, B firms are expecting G firms to adopt better governance and, for this reason, they have more to gain from government action. If the key determinant of government action is the presence of opposition, then government action is more likely when there is already some talk among firms about individual governance practices. If, instead, the government considers the magnitude of the benefits to the G firms and weighs these benefits against the costs and benefits to the B firms, then the greater impetus for government action can occur in outcome 2 or 3, depending on the particular parameter values.

Appendix 2: Constructing the Scandals Index

We create an index of egregious corporate governance violations by combing the public media over the last two and a half years for instances of such violations. Because of the time required to manually scan newspaper articles for scandals for each company, we focus our search on the 80 Indian companies in the CLSA database. We choose India because it is the country for which CLSA provides data on the most number of firms and there is a large range of corporate governance practices in India, with CLSA ratings ranging from 37 to 93 on a 100 point scale. We record for each firm whether it had any of the following three types of scandals: shareholder expropriation, tax evasion, and price fixing.

We search the India Business Insight database within Lexis-Nexis for articles about each of these 80 firms from the last two and a half years.[23] We manually scan article headlines for relevant stories and then read any such articles to determine if there indeed was a scandal and what type of scandal it was. For each firm we record the total number of articles found about that firm which will serve as a control for the media attention devoted to that firm. Three types of scandals are recorded:

1. Shareholder Expropriation – Equals one if any shareholders have accused management of taking actions such as selling off assets, siphoning off funds, or insider trading, where management benefited at the expense of shareholders or majority shareholders benefited at the expense of minority shareholders. (8 cases found)

2. Tax Evasion – Equals one if the company has been raided or investigated for tax evasion or if a warrant has been issued in response to a failure to pay taxes. Does not include instances where certain deductions were ruled inappropriate by the courts or by the income tax department. (3 cases found)

3. Price fixing – Equals one if the company has been accused by the government of operating in a cartel to raise the prices of its products. (4 cases found)[24]

Our search also found other types of scandals but many of these occurred only once and were not as clear cut cases of poor corporate governance.[25]

Probit regressions found that the shareholder expropriation index was correlated with the CLSA data but the tax evasion and price fixing indices were not.

[23] According to Lexis-Nexis, "India Business Insight compiles and consolidates vital information on Indian business and industry from business magazines and newspapers. Information is provided in English language in the form of crisp abstracts of articles from over 40 newspapers and magazines. The database has over 70,000 records cover[ing] 30,000 companies, 300 industry segments and over 8,000 products." Coverage begins on January 11, 1999. The search was performed in August and September of 2001.

[24] There was actually only one instance of price fixing involving four of the firms in our sample so that the cases are not independent.

[25] We found four cases of environmental damage related to illegal dumping or failure to get proper clearances. There were a couple of instances of contractual disputes but it is not clear whether these are related to corporate governance. Three pharmaceutical firms were accused of intellectual property rights violations but India has not adopted global intellectual property norms.

Appendix 3: Selection Issues in the CLSA data

The CLSA sample contains 80 Indian firms with scores ranging from 37 to 93 on a 100 point scale. To examine the selection process which resulted in these firms showing up in the CLSA data, we select all Indian firms listed in Bloomberg with greater than $20 million in market capitalization, producing a list of 301 firms. This pool contains 73 of the CLSA firms, with 5 left out because no market capitalization information was available and 2 left out because market capitalization was less than $20 million according to Bloomberg. The table below shows a probit regression testing the determinants of firm selection by CLSA. The coefficient of log assets, a proxy for firm size, is positive and significant at the 1% level indicating that large firms are more likely to be included. U.S. listing and percent of outstanding shares held by institutional investors are also significant at the 1% level. Export/Sales is positive indicating that firms that sell to foreign markets are more likely to be selected but the coefficient is not significant. Having a big 5 auditor increases the probability of selection and is significant at the 10% level. Not shown in the table is the fact that all Indian firms listed on the New York Stock Exchange were selected for inclusion. These results confirm the claim that CLSA selected large firms as well as firms that should be of interest to U.S. institutional investors.

Probit Analysis of the Determinants of CLSA firm selection in India

	(1)
Log Assets	0.396***
	(0.074)
US Listed (Common Stock or ADR)	0.624***
	(0.207)
Institutional Ownership (% of Outstanding Shares)	4.79***
	(1.72)
Exports/Sales	0.521
	(0.381)
Big 5 Accounting Firm	0.535*
	(0.279)
Constant	-4.90***
	(0.754)
Number of Observations	208
Log-Likelihood	103.9
Pseudo R2	0.2140

* 10% significance; ** 5% significance; *** 1% significance

Appendix 4: QAP Estimation

An OLS regression with dyadic variables produces unbiased coefficient, but since the pairwise observations are not independent, OLS standard errors could be too small leading to possible misinterpretations of spurious correlations. We use the quadratic assignment procedure (QAP), a technique developed for the analysis of dyads in networks (see for example Krackhardt[1988]), to test statistical significance of the regression coefficients. Our pairwise dependent and independent variables each form the lower triangle of a matrix where the rows and columns are countries. The QAP method involves scrambling the data such that the each dependent variable is randomly reassigned to a different observation. The OLS regression is run on the scrambled data and new coefficient estimates are generated. Repeating this process 500 times generates a sampling distribution of the coefficient estimate under the null hypothesis. In order to preserve the interdependencies in the rows and columns in generating the null distribution, the scrambling is accomplished by randomly permuting rows and columns of the matrix; the rows of the dependent variable are rearranged in a new, randomly assigned order, and the columns are rearranged in the same order. To assess statistical significance, we compare the original coefficient estimate with the null distribution. If this coefficient falls in the upper or lower 2.5% of the distribution, then this coefficient is significant at the 5% level. Recent studies using QAP have carried out permutation and estimation steps from several hundred to over 1,000 times. Varying the number of repetitions from 500 has very little effect on our results.

Appendix 5: Supplementary Data

A. Déminor firm-level ratings

Déminor is an independent consulting firm located in Brussels and Paris that provides research and proxy voting services to institutional investors. The sample for their 2000 corporate governance ratings service are the top 300 firms as determined by their inclusion on major European stock indices. Information is drawn from publicly available sources such as annual reports and newspaper articles, as well as public information requested from the firms being rated. Déminor uses 300 corporate governance indicators to rate firms on their governance practices on four areas: rights and duties of shareholders, absence of takeover defenses, disclosure, and board structure. The first area is rated on a scale of 1 to 4 while the second and third are on a scale of 1 to 5. Déminor does not disclose the board structure rating to the public. The actual grid of indicators used to assess governance is also not disclosed.

Déminor relies less than CLSA on the expertise of an analyst familiar with the firm being rated and more on public and firm sources. Since more public information is available on firms in Europe than firms in developing countries, having an expert on the firm perform the ratings of the firms in the Déminor sample is probably less important. There is no overlap between the set of countries in the Déminor data and those in the CLSA data. As with the CLSA data, the Déminor data can be used to probe the possibility of *de facto* convergence.

B. ProxInvest firm-level ratings

ProxInvest is a French proxy voting service which calculated corporate governance ratings for 250 top European companies. They publicly disclose ratings for the top rated 100 of these companies but do not provide any information on sample selection or the composition of their overall index. Since the Déminor data are available for more firms and more information is available regarding its composition, we base our European firm-level analysis on the Déminor data rather than the ProxInvest data. We use the ProxInvest data as an alternate source of data to confirm some of our results.

C. Fortune firm-level ratings

Fortune magazine has published an annual list of global most admired companies since 1997. To construct this list, firms from the Global 500 list of largest companies are separated by sector (industry). Sectors dominated by firms from one country are removed. Every firm is sent a survey asking it to rate all of the other firms in its sector on a scale of 1 to 10 on eight characteristics: quality of management, quality of products and services, innovativeness, long-term investment value, financial soundness, ability to attract/develop/retail talent, community responsibility, and use of corporate assets. A firm's "admired" score is simply the average of the scores over these eight characteristics (though *Fortune* reports only the average score and not its constituents). The most significant value of this data is that the index considers stakeholders other than shareholders.[26] The cross-country coverage is also a plus of this dataset, as is the fact that the countries it covers tend not to overlap with those in the CLSA data. Finally it is the only dataset available in time-series, though we do not yet exploit the time-series nature of this data.

D. Relationship between firm-level ratings

To what extent are good corporate governance practices easy to define and measure? Since there is overlap between the companies covered in the Déminor, ProxInvest, and *Fortune* ratings, we test the hypothesis that the rating agencies agree on which companies are well-governed and poorly governed. There are 90 firms for which we have both a Déminor and ProxInvest rating, and for these observations, the correlation coefficient between the two indices is 0.53. We also test for correlation within countries by regressing the Déminor index on country dummy variables as well as the ProxInvest rating, obtaining a positive and highly significant coefficient (t-statistic of 4.50).

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[26] Similar ratings taken from *Fortune*'s America's Most Admired Companies list have been used in evaluating the relationship between corporate governance and performance (Preston and O'Bannon[[1997], Waddock and Graves [1997].) In U.S. studies, only components relevant to shareholders are used typically, but *Fortune* does not disclose the components of the Global Admired index to the public.

Since the ProxInvest rating is publicly disclosed for only the top 100 firms, these tests have shown only an agreement between the two rating indices on well-governed firms. To verify that the indices correspond on the entire Déminor sample of European firms, we check whether the firms which were in the top 100 according to Proxinvest had higher Déminor scores than those firms which were not in the top 100.[27] The mean Déminor score for firms in the top 100 was higher by 0.51—about a half of the standard deviation of the Déminor scores--than the mean for firms not in the top 100 and this difference was highly significant with a t-statistic of 3.88.

The *Fortune* rankings are not closely correlated with either the Déminor or ProxInvest ratings, with correlation coefficients of .05 and .15 in 77 and 40 overlapping observations, respectively. The *Fortune* coefficient takes on an insignificant and surprisingly negative coefficient in within-country regressions. The lack of correspondence probably results from the different criteria used by *Fortune* in its rating service which focused on overall management rather than adherence to a shareholder-centered model.

[27] We do not actually know which other firms were ranked by ProxInvest. However, both Déminor and ProxInvest claim to have ranked the top 250 companies in Europe. Based on what we can tell from the 100 top firms ranked, ProxInvest did not rate firms in Belgium, Switzerland or the U.K. The test we run involves comparing, for all firms which Déminor ranked except for firms from the above three countries, the mean Déminor score of firms for which no ProxInvest score was available with the mean Déminor score for firms for which a Proxinvest score was available.

Appendix 6: Anova Decomposition of Country and Industry Effects

The table shows the percentage of total variance in corporate governance ratings explained by country and sector dummy variables using partial sum of squares analysis of variance. The corporate governance ratings we use come from CLSA, Fortune, Déminor, and Proxinvest.

In April 2001, CLSA released a large study of corporate governance entitled, "Saints & Sinners: Who's got religion," which reviewed corporate governance at the firm level in 25 emerging markets. A firm's corporate governance score is based on responses to 57 yes/no questions about various aspects of governance. The CLSA questionnaire is divided into seven sections covering fiscal discipline, accounting transparency/disclosure, board independence, board accountability, responsibility, equitable treatment of shareholders, and social awareness. The score for each of the seven sections is simply the percentage of questions receiving a "yes" answer in that section. The overall corporate governance score for the firm is a weighted average of the firm's scores in these seven sections.

Fortune magazine publishes an annual list of global most admired companies. To construct this list, firms from the Global 500 list of largest companies are separated by sector and sectors dominated by firms from one country are removed. Every firm is sent a survey asking it to rate all of the other firms in its sector on a scale of 1 to 10 on eight characteristics: quality of management, quality of products and services, innovativeness, long-term investment value, financial soundness, ability to attract/develop/retail talent, community responsibility, and use of corporate assets. A firm's "admired" score is simply the average of the scores over these eight characteristics. The variable Sales/Max Sales is included the Fortune regressions to control for the portion of the admired score attributable to being the largest firm in the sector.

Déminor, an independent consultancy firm in Brussels, has rated 250 of the 300 largest European firms on over 70 governance indicators which are grouped into four governance categories: rights and duties of shareholders, absence of takeover defenses, disclosure, and board structure. Since the board structure rating is not publicly available, the table uses the average of the first three.

ProxInvest is a French proxy voting service which calculated corporate governance ratings for 250 top European companies. They publicly disclose ratings for only the top rated 100 of these companies. ProxInvest ratings are matched with Deminor subsector categories for this table.

	CLSA Weighted Governance index	Fortune Global Most Admired rating	Deminor average rating	ProxInvest rating
Country	37%	17%	57%	39%
Sector	6%	13%	2%	12%
Sales/Max Sales in Sector	-	11%	-	-
Number of Countries	16	13	13	9
Number of Sectors	18	26	10	10
Number of Firms	470	294	250	88

Appendix 7: Description of Explanatory Variables at the Firm Level

The firm-level empirical analysis will use four indicators of capital market globalization as well as two indicators of product market and labor market globalization: institutional investor holdings, top U.S. or U.K.-based shareholders, U.S. common stock or ADR listings, the use of global intermediaries, export intensity, and proportion of foreign board members.[28] Here we discuss the motivation for each of the six indicators in greater detail and explain how each indicator was obtained.

A. Institutional Investors

Institutional investors are any entities, that invest in, or buy and sell, securities for their own account and include banks, insurance companies, broker/dealers, pensions funds, and mutual funds, but not individuals who manage their own accounts. Starting in 1987 in the U.S., institutional investors, pension funds in particular, deviated from their prior role as passive investors by submitting proxy proposals focusing largely on corporate governance issues. As professional managers of capital, these investors have the requisite knowledge and experience to differentiate between poorly governed and well-governed firms. For example, the California Public Employees Retirement System (CalPERS), with over $100 billion invested in equities, is frequently mentioned in the shareholder activism literature. CalPERS has set out corporate governance principles in the U.S. and other OECD countries and has pressured poorly performing companies to reform their corporate governance practices.[29] The role of shareholder activism in affecting governance and performance has been addressed by academics theoretically and studied empirically with mixed results by a number of researchers, including Buxbuam [1991], Black [1992ab], Pound [1993], Kissane [1997], Opler and Sokobin [1998], and Gillan and Starks [2000].

Bloomberg compiles data on the percentage of shares outstanding held by institutional owners from three sources: mutual fund filings, 13-F filings, and schedule D filings. Bloomberg receives annual or semi-annual reports on holdings of mutual funds based in the U.S., the U.K. and a dozen other countries. According to Section 13(f) of the Securities Exchange Act, any U.S. or foreign institutional investment manager that uses the U.S. mail or other instrumentality of interstate commerce in the course of their business and exercises investment discretion over $100 million or more in assets is required to report holdings on form 13-F.[30] Schedule Ds are financial statements filed annually by insurance companies (including life and property and casualty companies).

A manual scan of the first Bloomberg screen listing up to seventeen holders for many of the firms in the CLSA data revealed that the great majority of holders were U.S.-based mutual funds with U.K.-based mutual funds in second place. There were few instances of mutual funds based in other countries, and in many cases mutual funds listed as foreign were actually U.S. funds.[31] There was an occasional holding by a U.S. pension fund or a U.S. or UK bank; holdings by insurance companies were rare.

B. Top Shareholders

Convergence in corporate governance may occur when shareholders based in countries with good corporate governance standards impose good corporate governance on the companies they control. On the other hand, if the corporate governance of a foreign controlled firm in a developing country is in fact no different from governance of domestic owned firms in that country, the foreign corporate governance standards must be inefficient for or

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[28] It is not always clear whether a particular variable proxies cleanly for one or another type of market integration. Our objective is to ensure a broader focus than purely on capital market integration variables.

[29] When the president of CalPERS visited Paris, the Paris daily paper published an article titled, "The Pension Funds That Drive Fear into the French." (as cited in Tagliabue [2000]). For more information on CalPERS activities in governance reform, see http://www.calpers-governance.org.

[30] Institutional investors are only required to report on securities listed in the Official List of Section 13(f) Securities published by the SEC which may exclude some non-US listed shares. See "Frequenty Asked Questions about Form 13F," SEC Division of Investment Management, http://www.sec.gov/divisions/investment/13ffaq.htm

[31] For example, the Templeton India Growth Fund is listed as an Indian mutual fund even though it is controlled by the Franklin Templeton Group, a large California-based investment management company

incompatible with the business environment of that developing country. To make progress on this issue empirically, we attempt to identify the origin of top shareholders of firms in developing countries.[32] Some firms list the names of the banks serving as nominees as their shareholders, while others, most notably firms in China, are structured with multiple levels of wholly owned holdings companies which must be traced to find the ultimate controlling interest. Many firms, especially Indian firms, do not report their top shareholders in their annual reports at all. By searching Bloomberg and the internet for information on the top shareholder in each firm, we are able to identify the origin of the top shareholder for 235 of the 482 firms in the CLSA sample. Although most firms in our CLSA sample are locally owned, there are 13 firms where the top shareholder was a U.K. or U.S. firm. We are currently repeating this procedure for the Déminor data.

C. U.S. listing

We track whether each company's securities are traded in the U.S., either as American Depositary Receipts (ADR) or underlying stock. A common reason for listing in the U.S. is to expand the shareholder base by making it easier for U.S. investors to buy shares. Some U.S. investors, such as the majority of U.S. pension funds, can only invest in U.S. dollar denominated shares while others prefer to purchase foreign shares on a U.S. exchange to minimize transaction costs. The business press has cited numerous examples of companies listing in the U.S. to find additional capital to fund their growth.[33] The academic literature has also pointed to this motivation.[34] Although U.S.-traded stock and ADRs are subject to reporting, disclosure, and corporate governance requirements mandated by the U.S. Exchange Act and the listing rules of the exchanges, many of the requirements, with the exception of conformance to U.S. GAAP, are frequently waived for foreign issuers.[35] Both compliance with listing requirements and additional voluntary improvements are examples of capital market pressure – yet the sources of the pressure are somewhat different: enforcement of SEC and exchange requirements or an appeal directly to investors.[36]

In an empirical analysis of factors influencing the decision to list in foreign capital markets, Saudagaran [1988], mentions, in addition to gaining access to a different investor base, two non-capital market reasons. A foreign listing might aid product visibility and provide "free advertising" for sales in that country. This aspect is often referred to as the "prestige" element of listing on a major exchange (See for example Baker and Edelman [1991]). A foreign listing can also improve the practicability of an employee stock ownership plan for employees in the host country. In this sense, a U.S. listing becomes a proxy for product market globalization and labor market globalization in addition to capital market globalization. We have also captured whether the firms have listed in London as common stock or Global Depository Receipts (GDRs).[37]

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[32] La Porta et al. [1999a] provide a description of ownership structures around the world and explains how to trace these structures to the ultimate owner. Our methodology is an approximation of the technique they use in that we seek merely to trace ownership to the first entity that is not a holding company. Our approximation is reasonable on the assumption that US or UK based shareholders will generally not try to control a developing country company through pyramidal ownership structures that we do not pick up. If US or UK shareholders control a developing country firm through a pyramid in the US or UK, we still treat the part of the pyramid that we observe as potentially being the bearer of good governance practices.

[33] See for example, Mark Fisher, "Can German firms resist a U.S. listing?" *Corporate Finance*, April 1993, p. 23, discussing the impact on other German firms of Daimler-Benz's decision to list on the NYSE. See also "Stockmarket listings: Plunging into foreign markets," *The Economist*, September 17, 1994, p. 86. For a less optimistic account of the value of a U.S. listing, see Charles Olivier, "Are dual listings a waste of time?", *Euroweek*, October 1997, 29-31.

[34] Merton[1987], for example, has developed a model where investors only invest in firms they are aware of and listing aids investor recognition. See also Foerster and Karolyi[19xx] on the use of ADRs.

[35] An excellent source of detailed information on legal requirements of foreign listings is Greene et al. [2000]. For NYSE requirements in particular, see *NYSE Listed Company Manual*, available online at www.nyse.com.

[36] Siegel (2001) documents cases of expropriation in Mexican companies with ADRs and argues that US listings provide insufficient deterrence against such practices.

[37] In an earlier version of this paper, we used as an independent variable whether the firm listed in the U.K. or the U.S. but this does not change the results.

D. Capital Market Intermediaries

According to Hansmann and Kraakman [2001], the use of global rather than local intermediaries (such as big five accounting firms, top investment banks, and consulting firms) will facilitate convergence in corporate governance. For each firm in our sample, we collect data on the name of the auditor as reported in Bloomberg. In some developing countries, big five accounting firms have licensed their names to local firms. These local firms sign the auditor's statement but the official auditor as reported for company databases is the big five firm. Since some firms report a local auditor to Bloomberg, we might still obtain an effect although the coefficient would be biased downwards. Bloomberg also reports on recent offerings for some companies based on information provided by the lead manager of the investment bank handling the offering. We code two binary variables for the regression analysis: whether the firm has a big five auditor and whether it recently placed an offering through a global investment bank.

E. Export Intensity

Our proxy for a firm's exposure to global product market competition is its export to sales ratio. We assume firms that do not report geographic segmentation data in their annual report have no exports, although that is not necessarily the case. Since the lack of disclosure of geographic segmentation can be correlated with poor governance, assuming non-disclosing firms have zero exports can bias the coefficient upwards.

F. Foreign management and directors

Although we do not know the percentage of all employees that are foreign, we can estimate this figure for senior management and directors, as it is this class of employees which should have the strongest relationship with corporate governance. A sampling of the management and board of directors was taken using the first page of the Bloomberg management screen which lists up to eighteen executives or directors. These names were manually scanned for instances of foreign first and last names. Although the list was scanned for any person whose name was clearly not from the region in which the firm is located, almost all of the foreign persons found were American. Firms in South Africa and the Philippines were not included in this sample because of the difficulty of distinguishing foreign names for these countries.

Appendix 8: Firm-Level Regression Analysis

The table explores the effects of various types of global integration on a firm's governance score for firms in 24 emerging markets. The dependent variable is an overall governance score computed by averaging each firm's scores, as computed by CLSA, along seven dimensions of governance: fiscal discipline, accounting transparency/disclosure, board independence, board accountability, responsibility, equitable treatment of shareholders, and social awareness. In some cases not all seven dimensions are used because one of the dimensions is based in part on an explanatory variable. For example, one of the 10 questions in the fairness section is whether foreign portfolio managers own more than 20% of the stock; this question is related to the institutional ownership independent variable. Standard Errors shown in Parentheses. * Significant at 10% level; ** Significant at 5% level; *** Significant at 1% level

Panel A: Firm-level regressions on CLSA ratings

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Dependent Variable	*CG ex. Fairness*	*CG ex. fairness*	*CG ex. fairness*	*CG*	*CG*	*CG ex. acability*	*CG ex. acability*	*CG ex. fair,ac.*
Capital Market	Trades in US as an ADR or as common stock	4.32*** (1.33)	3.60*** (1.24)	2.37 (1.56)					3.41** (1.45)
	Institutional Ownership (fraction of outstanding shares)	4.56 (11.48)	21.39* (11.05)	23.53* (13.73)					13.41 (12.06)
	Auditor is KPMG, Ernst, Price, Andersen, or Deloitte			-1.34 (2.36)					
	Recent offering by major U.S. investment bank			2.65 (2.17)					
Product Market	Exports/Sales				15.32*** (3.07)	4.45 (2.87)			-0.30 (3.69)
Labor Market	Fraction management/directors with foreign first and last name						20.88*** (4.52)	11.83*** (4.15)	15.11*** (4.24)
Control Vars.	Log of Assets in millions of USD	0.12 (0.39)	-0.88* (0.50)	-0.97 (0.62)	0.22 (0.38)	-0.67 (0.46)	-0.90** (0.41)	-1.49*** (0.53)	-1.82*** (0.57)
	Holdings of largest shareholder (fraction of outstanding shares)			0.79 (3.75)					
Dummy Vars.	Number of Country dummy vars. (not including constant)		18	15		18		17	16
	Number of Sector dummy vars. (not including constant)		17	17		17		17	17
	Constant	52.39*** (3.02)	62.92*** (9.83)	59.59*** (12.88)	54.09*** (2.88)	64.24*** (9.69)	63.32*** (3.08)	66.11*** (10.16)	48.10*** (12.24)
	R-squared	0.0294	0.443	0.5326	0.0560	0.4696	0.641	0.4526	0.4648
	Ad j R-squared	0.0222	0.3847	0.4574	0.0515	0.4184	0.0587	0.3908	0.3961
	Observations	407	402	275	426	421	351	346	335

The table explores the effects of various types of global integration on a firm's governance score for firms in 13 Western European countries. The dependent variable is an overall governance score based on data from Déminor, an independent consultancy firm in Brussels which rated 250 of the 300 largest European firms on over 70 governance indicators. The overall governance score is computed as the average of the firm's scores in three areas of governance: rights and duties of shareholders, absence of takeover defenses, and disclosure. Standard errors shown in Parentheses. * Significant at 10% level; ** Significant at 5% level; *** Significant at 1% level

Panel B: Firm-level regressions on Déminor Ratings

		(1)	(2)	(3)	(4)
	Dependent Variable	*Average CG*	*Average CG*	*Average CG*	*Average CG*
Capital Market	Trades in US as an ADR or as common stock	0.364** (0.152)	0.303*** (0.109)		0.306*** (0.110)
	Institutional Ownership (fraction of outstanding shares)	6.57*** (1.53)	1.76 (1.20)		1.46 (1.25)
	Auditor is KPMG, Ernst, Price, Andersen, or Deloitte				-0.154 (0.144)
Product Market	Exports/Sales			0.170 (0.138)	0.146 (0.146)
Dummy Vars.	Number of Country dummy vars. (not including constant)		12	12	12
	Constant	2.06*** (0.169)	2.14*** (0.24)	2.22*** (0.231)	2.18*** (0.258)
	R-squared	0.1065	0.6018	0.5881	0.5980
	Ad j R-squared	0.0990	0.5773	0.5654	0.5687
	Observations	242	242	250	236

Panel C: Firm-level variables used—Summary Statistics

CLSA variables

		Obs.	*Mean*	*Std. Dev.*	*Min*	*Max*
CLSA governance indices	Corporate Gov. Average	482	56.52	13.22	14.84	93.80
	Discipline	482	49.82	19.68	0.00	100.00
	Transparency	482	57.43	20.62	0.00	100.00
	Independence	482	56.75	27.69	0.00	100.00
	Accountability	482	48.29	22.65	0.00	100.00
	Responsivenss	482	51.57	22.61	0.00	100.00
	Fairness	482	63.27	27.78	0.00	100.00
	Social Awareness	482	68.51	22.11	0.00	100.00
Capital Market	Trades in US	482	0.55	0.50	0.00	1.00
	Trades NYSE	482	0.12	0.32	0.00	1.00
	Institutional Ownership	451	0.06	0.06	0.00	0.34
	Auditor is big 5	450	0.71	0.45	0.00	1.00
	Major U.S. bank offering	482	0.12	0.32	0.00	1.00
Product Market	Exports/Sales	482	0.06	0.19	0.00	1.00
Labor Market	Foreign first name	353	0.22	0.27	0.00	1.00
	Foreign last name	353	0.07	0.16	0.00	1.00
Controls	Log assets	426	7.44	1.67	2.85	13.31
	Largest shareholder	315	0.41	0.20	0.01	0.96

Panel B: Déminor variables

		Obs.	*Mean*	*Std. Dev.*	*Min*	*Max*
Déminor governance indices	Corporate Gov. Average	252	2.86	1.04	1.00	4.67
	Shareholder Rights	259	3.01	1.14	1.00	4.00
	No Takeover Defenses	256	2.47	1.56	1.00	5.00
	CG Disclosure	255	3.13	1.47	1.00	5.00
Capital Market	Trades in US	262	0.75	0.43	0.00	1.00
	Trades NYSE	262	0.30	0.46	0.00	1.00
	Institutional Ownership	253	0.08	0.04	0.00	0.21
	Auditor is big 5	248	0.77	0.42	0.00	1.00
	Major U.S. bank offering					
Product Market	Exports/Sales	262	0.33	0.34	0.00	0.99
Controls	Log assets					
	Largest shareholder	157	0.25	0.20	0.01	0.72

Appendix 9: CLSA firms where top shareholder is UK or US based

The table tests the hypothesis that firms with major foreign shareholders have better governance, as measured by the CLSA overall governance score. By searching Bloomberg and the internet for information on the top shareholder in each firm, we are able to identify the origin of the top shareholder for 235 of the 482 firms in the CLSA sample. Although most firms in our CLSA sample are locally owned, there are 13 firms where the top shareholder was a U.K. or U.S. firm. Each row shows the corporate governance score for firms with a large foreign owner as well as the average score for all firms in the country. Although in most cases, the firm's governance score exceeds the country average, a regression with fixed industry effects and control variables for firm size found this difference to not be statistically significant.

Firm Name	Country	Sector	Owner	WCG	Cntry WCG
Cathay Pacific	Hong Kong	Airlines	45% owned by Swire Group, a family owned firm which invests in Asia (UK)	76	62.8
Wing Hang	Hong Kong	Banks	25% owned by Bank of New York (US)	68.1	62.8
Kookmin Bank	South Korea	Banks	11% ownership by an investment group of Goldman Sachs (US)	49.4	47.7
Swire	Hong Kong	Conglomerates	Top Shareholder is Swire Group, a family owned firm which invests in Asia (UK)	69.1	62.8
British American Tobacco	Malaysia	Consumer	50% owned by British American Tobacco (UK)	77.8	56.7
Giordano	Hong Kong	Consumer	26% combined ownership by Tiger Management and Harris Associates (US)	73.9	62.8
Modelo	Mexico	Consumer	35% owned by Anheuser-Busch (US)	71.8	64.4
Guinness	Malaysia	Consumer	51% owned by GAPL, which in turn is partly owned by Guiness (UK)	60.4	56.7
AngloGold	South Africa	Metals & Mining	53% owned by Anglo American (UK)	79	69.3
Anglo American Platinum	South Africa	Metals & Mining	24% owned by Anglo American (UK)	65.2	69.3
Anglo American	South Africa	Metals & Mining	???	64.6	69.3
Marco Polo	Singapore	Property	57% owned by HSBC (UK)	50.8	64.5
Datacraft	Singapore	Technology	50% owned by Dimensation Data (UK)	67.7	64.5