

**European Corporate Governance Codes:
An Empirical Analysis of Their Content, Variability and Convergence**

by

James E. Cicon*
University of Missouri
jecdhf@mizzou.edu

Stephen P. Ferris
University of Missouri
ferriss@missouri.edu

November 20, 2008

*Corresponding author. Mail: Department of Finance, Cornell Hall, Trulaske College of Business, University of Missouri, Columbia, MO 65211. Phone: 573-882-4505.

European Corporate Governance Codes: An Empirical Analysis of Their Content, Variability and Convergence

Abstract

Using Latent Semantic Analysis techniques to analyze the texts of the corporate governance codes of twenty-three EU nations, we obtain a number of new findings regarding their content, variability and convergence. We determine that national governance codes of corporate governance can be decomposed into five common themes, with substantial cross-sectional variability in their relative importance. We also find that these codes cluster in ways that are not fully consistent with the legal regime classifications of LaPorta et al (1997), leading us to construct two new regimes. We further discover that the identity of the code issuer is important in establishing a code's primary theme as well as its changes over time. Finally, we fail to find evidence of an unchecked convergence towards an Anglo-Saxon model of corporate governance, with some aspects of code design converging to the U.K. model while others diverge.

JEL Codes: G30; G34

Keywords: governance; convergence; codes

European Corporate Governance Codes: An Empirical Analysis of Their Content, Variability and Convergence

I. Introduction

As national economies become interconnected through global trade and communication, local standards of corporate governance have become increasingly important to investors. Beginning with the Cadbury Report of 1992, countries are adopting national codes that attempt to guide, if not implicitly regulate, the level of corporate governance enjoyed by investors in their firms. The existence of these codes now makes it possible for investors to shop national markets in an effort to invest in those economies that will best provide protection against expropriation and fraud by management or majority shareholders. Using a sample of twenty-three different European national codes spanning a variety of historical legal traditions, this study provides one of the first empirical analyses of the content, variability and convergence in these national codes of corporate governance.

Our focus on European national codes is motivated by several considerations. First, the existence of the European Union (EU) allows us to examine the impact of political and economic integration on the development of corporate governance and the associated evolution of normative company law. Second, the European economies are sufficiently capitalized to be important to the global economy, making our findings useful to an understanding of international business practices and policies. Finally, this sample of European countries provides the cross-sectional variability in legal regimes that will allow us to test how historical legal traditions influence the design of current governance practices.

More specifically, this study empirically examines three research questions as they relate to national codes of corporate governance. First, we examine the extent to which there is

significant variation across the twenty-three codes of our sample countries. That is, to what extent are there meaningful differences in the governance themes emphasized in these codes? The existence of differences in national governance codes can encourage competition in the market for business incorporations as investors seek the most favorable environments for their investments. Related to the issue of code variability is our analysis of similarities between codes of countries from a shared legal regime and the extent to which these governance codes are able to define new country groupings that differ from the common-civil law classifications currently reported in the literature.

The effect that issuer identity has on the content of codes has not been examined in any systematic fashion within the literature. In this study we compare the thematic content of governance codes based on the nature of the issuer. We find that issuer identity plays an important role in deciding what themes will be emphasized within a code and helps to explain code evolution.

Cernat (2004) argues that the spread of global capitalism and its emphasis on economic efficiencies implies a competition between corporate governance systems to determine which one better serves the needs of international investors. To the extent that a particular system of governance best serves the needs of investors, one might anticipate a convergence of governance systems. Previous researchers such as LaPorta et al (1997) argue that the common law system provides the best set of investor protections, suggesting that one would observe a convergence of national codes to the United Kingdom (UK) model. That is, we might see countries design their national codes in an effort to create a corporate legal environment that is most attractive to investors. Thus, our third research question focuses on the extent to which national corporate governance codes are converging towards the U.K. model. Unlike previous studies of code

convergence (Bebchuk and Roe, 1999; Pistor et al., 2000; Hansmann and Kraakman, 2001; Gilson, 2001; Khanna, Kogan and Palepu, 2006), our analysis tests for convergence on a theme by theme dimension of the codes. This approach allow us to test specifically for the possibility that convergence with common law is occurring in some aspects of governance while diverging in others.

We develop this study into eight sections. In the following section, we provide a brief discussion of the development of national codes of corporate governance while in section three we describe the data used in this study. Section four provides our empirical findings regarding code variability and the relevance of historical legal traditions for grouping countries with comparable governance practices. Our findings regarding the effect of code issuer are contained in section five. We present our results concerning code convergence and their thematic evolution in sections six and seven. We conclude with a brief summary and discussion in section eight.

2. The Development of National Codes of Corporate Governance

2.1 The creation of national codes of corporate governance

The first corporate governance codes were written in the U.S in the 1970s, during a wave of mergers and hostile takeovers. In 1978, the U.S. Business Roundtable published a report entitled, *The Role and Composition of the Board of Directors of the Large Publicly Owned Corporation*. As noted by Aguilera and Cuervo-Cazurra (2004), this report shifted the role of directors from being largely ornamental to one with substantial responsibilities and represented the first set of guidelines designed to improve the quality of corporate governance within U.S. firms.

By the late 1980s, corporate governance codes began to emerge worldwide. In 1989, the Hong Kong Stock Exchange issued a code of best practices, followed by Ireland in 1991. The development of national governance codes accelerated with the publication of the Cadbury Report in the U.K. in 1992. Aguilera and Cuervo-Cazurra (2004) report there has been an exponential rise in the number of national codes following the release of the Cadbury Report, although this evolution has not followed a linear path. By the end of 2007, the European Corporate Governance Institute reported codes for sixty-six different countries.

2.2 The nature of corporate governance codes

The corporate governance codes developed throughout the European Union are not legally binding and are an important component of European soft law. These codes are based on the “comply or explain” principle. That is, companies are free to deviate from the practices recommended in these codes as long as they explain the reasons for doing so. But as Hermes, Postma and Zivkov (2006) caution, the fact that these codes are incorporated into the listing requirements of many exchanges gives them a more formal nature than “comply or explain” would imply. Indeed, Aguilera and Cuervo-Cazurra (2004) note that codes developed by stock exchanges and governments have the strongest enforceability and hence are most likely to effect actual governance practices.¹ Indeed, this aspect of government and exchange issued codes is an important reason for our subsequent analysis of issuer identity on code design. They conclude their examination of corporate governance codes with the observation that these codes are gaining increased visibility and importance as the demand for corporate transparency and accountability grows in a globalized economy.

¹ National codes are also developed by professional associations, director associations, and management associations with consequently less ability to enforce them. These codes are essentially voluntary in nature and are less able to correct governance deficiencies.

3. Data Description

The sample used in this study consists of twenty-three members of the European Union selected on the basis of their adoption of a national corporate governance code, the significance to the global economy, and their contribution to the diversity of the legal regimes contained in our sample. The first formal adoption of a national code of corporate governance for our sample countries occurs in 1998, while the most recent adopter in our sample is in 2007. The actual national corporate governance codes and related data concerning the dates of code adoption are obtained from the website of the European Corporate Governance Institute, an international non-profit organization focusing on the policy and academic study of global governance practices.

We describe our set of sample codes in Table 1 with a listing of their adoption dates and a history of their subsequent revision. We separate our sample of governance codes according to their legal regime as defined by LaPorta et al (1997). This allows us to compare groups of countries using a characteristic that has important implications for corporate governance and is widely established in the literature. Indeed, LaPorta et al note that common law countries provide shareholders and creditors the greatest amount of protection against expropriation by insiders while French civil law countries offer the least.

We observe that the United Kingdom, the only common law country in our sample, is a relatively early adopter of corporate governance codes. Although France reports the first adoption in 1998, the U.K. issued a series of studies and public statements on the need for corporate governance and reform beginning in 1992 with the Cadbury Report. These studies continued with the Greenbury Report (1995), Hampel Report (1998), and finally concluding with the Turnbull Report and the Hermes Statement on International Voting Principles in 1999. In 2000, the U.K. completed its internal debate over governance by formally adopting a national code of corporate governance. Thus, there is a long history of activity within the U.K.

concerning corporate governance prior to its actual adoption of a national code in 2000. The U.K. has revised its code twice subsequently. The first revision occurred in 2003 while the second was published three years later, in 2006.

The German civil law countries adopt their codes either coincident with that of the U.K. as was the case with Germany or two years later, as did Austria and Switzerland. Interestingly, both Austria and Germany have repeatedly revised their codes. Indeed, Germany leads as the most frequent code reviser among our sample countries and has revised five times.

The French civil law countries exhibit the widest range in adoption dates of any of our legal regime sub-samples. As noted previously, France implemented the first formal national corporate governance code in 1998. Luxembourg is among the latest adopters, with its code being adopted only in 2006. The three earliest adopters among the French civil law countries have all revised their codes at least once since initial adoption. France has revised its code once, while Portugal, a 1999 adopter, has revised its code three times. Greece, another early adopter among the French civil law countries has revised its code once.

There are only three Scandinavian civil law countries in our sample and they have only recently adopted corporate governance codes. Finland has the oldest of these codes, although it extends back only to 2003. In spite of its recent adoption in 2004, we observe that Norway has revised its code three times.

The last subset of our sample countries are those that we refer to as former Socialist states. This subset is as large in number as the French civil law countries and constitutes 35% of our sample. The Czech Republic is the first of the former Socialist states to have adopted a corporate governance code, doing so in 2001. The latest is Poland in 2007. One of the most

distinguishing features of this subset of countries is the limited number of revisions. Only the Czech Republic (2004), Slovenia (2004) and Hungary (2007) have revised their codes.

4. Code Variability and Country Clustering

4.1 Latent Semantic Analysis and code theme identification

In this section we explore two important aspects of national governance codes. First, we investigate how governance codes differ from each other by the themes they elect to emphasize in their code construction. We then examine how these differences in codes might group countries into governance-comparable clusters that do not align with the civil vs common law dichotomy of LaPorta et al (1997).

We undertake this analysis by using Latent Semantic Analysis (LSA) which involves a quantitative analysis of the relationships between a set of documents and the terms they contain.² LSA was invented by Deerwester et al (1990) to discover hidden structure, (i.e., latent semantics) in the corpus of a text. As a simple example of this, consider these two sentences: “John is Bob's father and Mary is Ann's mother” and “Mary is Bob's mother.” LSA is able to discover the sibling relationship between Bob and Ann, even though it has no explicit knowledge of family structure (Landauauer et al, 1998). LSA does not match terms between passages to accomplish this. Rather, it infers relationships by reducing the dimensionality of the text's eigenspace in a manner similar to Ordinary Least Squares reduction of a two dimensional space to a one dimensional line (Manning and Schutze, 2001). For example, LSA will treat the words

² Latent Semantic Analysis was patented as a new methodology in 1988 and is based on both the method of least-squares (LS) and on singular value decomposition (SVD). It requires several steps. In the first step the documents are converted to term vectors and collected into a matrix. Next the matrix is decomposed via SVD into three component matrices, the T, D and S matrices. The dimensionality of these SVD matrices is reduced and the original matrix is reconstructed from the reduced SVD components. The reconstructed matrix is a least-squares best fit of the original matrix.

'car' and 'automobile' synonymously when they are used in similar contexts. By using the LSA methodology, we can undertake a comparative analysis of national governance codes, determine their inherent themes, and estimate which of them are most closely related.

4.2 Code thematic analysis

To begin our analysis of cross-sectional differences in national codes of corporate governance, we first decompose each code into its critical themes. These themes capture the essence of any governance code and serve as the framework around which the codes' various provisions are constructed. We then compare the relative importance of each of these themes across our sample governance codes.

By using the technique of Boukus and Rosenberg (2006) in the context of the LSA methodology, we are able to identify key themes in the national governance codes of our sample countries. More specifically, we identify the five most dominant themes that are present in our sample governance codes. We limit our analysis to only five themes since additional themes explain very little variance in the code documents. Indeed, our fifth theme is able to explain only 2.96% of the variance in codes. Overall, the five themes capture over 83% of the variability in the governance codes. Additionally, our use of only five themes is consistent with the practice and parsimony of Boukus and Rosenberg.

In Table 2 we provide a listing of the five themes present in our sample of national codes of corporate governance along with the percentage of code variance they explain. We also itemize the keywords associated with each theme. We observe that the most important theme as measured by percentage of variance explained is that associated with internal governance and board organization. This theme accounts for over 64% of the aggregate variation in the national codes. The percentage of variation explained drops significantly as we consider the remaining

themes. For instance, the coordination of state legal and regulatory effects explains only 9.09% of code variability while the themes of accounting/disclosure, industry effects and shareholder protection in aggregate account for only approximately another 10%.

4.3 Country clustering by code theme

Using the themes identified in the preceding section, we can explore how countries cluster on the basis of code similarity. We begin this analysis by grouping the sample countries based on the legal regime classification of LaPorta et al (1997). We then identify an archetype code for each country group that we examine. This archetype is simply the country code that is most closely identified with a legal regime as defined by LaPorta et al (1997). For the common law regime, the United Kingdom serves as the archetype code. For the French and German civil law regimes, the French and German codes serve as archetypes, respectively. LaPorta et al (1997) also identify Scandinavian and Former Socialists regimes. Our analysis suggests that these regimes are no longer useful in understanding commonalities among national governance codes. We find that many of the former Socialist and Scandinavian countries exhibit a stronger relation with the code of Finland than with other former Socialist countries or with another Scandinavian country. We also find that the governance codes of three French civil law countries (i.e., Greece, Portugal, and Spain) demonstrate a stronger correlation with Finland than their own regime's archetype, France.

These results lead to the creation of a new archetype and country grouping. We establish Finland as a new archetype with the associated regime referred to as Global Governance Practices which reflects the relative geographical dispersion of these countries. We also find that Latvia's governance code most closely relates to that Estonia. Hence, we identify Estonia as a code archetype for a regime that we refer to as Baltic civil. Thus, we find that the regime

groupings based on the historical origins of a country's laws only imperfectly account for commonalities in corporate governance codes and that a more current classification emerges from an analysis of the content contained in the codes themselves. This leads to the creation of two new code archetypes and legal regimes.

In Table 3 we present our results from a LSA of the most recent code for our sample countries. We observe that there are important divergences from the widely used legal regime groupings of LaPorta et al (1997). For instance, Switzerland is classified as a German civil law country according to LaPorta et al, but our analysis shows that its current code of corporate governance is more highly correlated with that of France rather than Germany. Indeed, its code is more highly correlated with that of France's than the codes of Italy or Luxembourg which are classified as French civil law countries by LaPorta et al. We observe similar divergences from the LaPorta et al classifications for Greece, Portugal, Spain, Netherlands, Norway and Sweden. These findings suggest that use of the LaPorta et al classifications for the purpose of gaining a deeper understanding of the governance practices and shareholder protections available to investors in firms incorporated in these nations might be misleading. Our findings show that national governance practices have evolved past historical legal practices, with new country clusters emerging. These new country clusters, based on the thematic content of the most current national governance codes are likely to be more useful in understanding a country's capital market flows and its business environment than historical legal traditions.

Now that we have identified the key themes present in our sample of governance codes, we are able to compare these codes across countries. In panel A of Table 4 we present a country-by-country analysis of theme weight for each national governance code. That is, we examine what percentage of variation in each country's code is accounted for by each theme. We observe

that internal governance and board organization are the most important themes in the codes of Sweden, Switzerland and Finland. It is of the least importance to the U.K. State legal and regulatory effects are less important for all countries, with an average theme weight of 9.7% compared to 34% for internal and board governance. Accounting and disclosure is generally more critical, with an average theme weight of 22.4%. The Baltic and Germanic civil law countries appear most interested in this theme. Industry effects are most important to Hungary, Portugal, and Norway. The results for shareholder protection are interesting in that France's code appears slightly more focused on this aspect of governance than that of the U.K which is the archetype for common law. Although our methodological approach can not capture the quality of shareholder protections provided in the French codes, this result suggests that shareholder concerns have become a more visible issue for French investors.

In panel B we compare mean theme weights across countries grouped according to the LaPorta et al (1997) legal regimes. We observe that the Scandinavian regime ranks the highest in attention given to internal governance/board design as well as legal/regulatory effects. It ranks second among the regimes regarding industry effects, but at the bottom concerning accounting/disclosure. The German civil law regime ranks second in internal governance/board design as well as legal/regulatory, but first in accounting/disclosure. The common law countries rank low with respect to discussion of internal governance/board design, but not surprisingly are at the top regarding shareholder protection. Their interest on shareholder protections is consistent with previous work (e.g, LaPorta et al, 1997, 2000) reporting the superiority of common law for the protection of minority shareholders. The former socialist countries are top-ranked relative to industry effects, perhaps reflecting their desire to design general governance guidelines that will assure foreign investors and attract external capital.

In panel C we perform an identical analysis, but use our revised listing of legal regimes based on code thematic content. We find that the results for the common law and French civil law regimes remain generally robust. That is, their relative rankings regarding theme importance between the LaPorta and the alternative regime rankings are comparable. The changes that we do observe are attributable to the migration of the former socialist states to the Global Practices regime and the emergence of the Baltic civil law regime. The Global Practices regime, which includes most of the former Socialist countries, now ranks the highest in emphasizing the themes of internal governance/board structure, state legal and regulatory issues, and industry guidelines and policy. Interesting, it ranks last in its emphasis on accounting and disclosure. Codes in the Global Practices regime are in the middle with respect to shareholder protections. The other new regime, Baltic civil, places a heavy emphasis on accounting and disclosure, but is last in shareholder protection. Indeed, its mean theme weight of 3.44% for shareholder protection is the lowest value observed across all five themes and give regimes. The Baltic based codes also place important weight on internal governance/ board structure (28.9%) and state legal and regulatory issues (11%).

5. The Effect of Code Issuer

Although studies such as Aguilera and Cuervo-Cazurra (2004), Enrione, Mazza and Zerboni (2006), and Zattoni and Cuomo (2008) document that the identity of the issuer varies across national corporate governance codes, the literature has not systematically analyzed differences in the content of the codes that each issuer creates. In this section, we examine how codes differ across issuers by comparing the relative importance of each theme. We then

investigate the extent to which these themes change across the sample period. That is, do issuers elect to alter the relative importance of themes as they revise their codes over time?

In panel A of Table 5 we present a tabulation of the issuers of our sample codes. The issuer identity and subsequent classification is obtained from several sources. The ECGI, our source of the code documents themselves, provides an initial issuer identity that they refer to as the provenance of the code. In a number of cases this identity is insufficient to classify the issuer as to type. Consequently, we undertake a systematic web search, beginning with the website of the issuer as identified by ECGI, and then progressing to various exchange, industry and governmental websites. From this search we are able to identify successfully the identify of the issuer of our twenty-three sample codes.

We assign our set of codes to one of four issuer classifications. The first is government and represents issuers who are national regulatory authorities, government ministries or a state commission. Exchange codes are those codes issued by a national stock exchange and code compliance is a requirement for listing. An industry classification is assigned to those issuers who are members of various trade or industrial associations. These codes are voluntary in nature and lack the enforceability of government or exchange issued codes. Our last classification is that of a composite group and refers to an issuer that contains members from at least two of the preceding groups. By design, composite issuers represent a hybrid of interests and perspectives.

Panel A of Table 5 contains a distribution of the number and percentage of the sample codes by issuer type. We observe that industry is the most frequent issuer of codes, accounting for nearly 35% of the sample. The next most prolific issuers are stock exchanges (30.5%), followed by government (26.1%). Composite groups account for only 8.2% of the codes. We

find that the identity of the issuer does not change when we consider revisions. The original issuer remains the issuer of the revisions as well.

Panel B provides a country and legal regime analysis of code issuers. There is no obvious pattern in the distribution of issuer type across the legal regimes. One finding that does emerge is the near absence of government issued codes in the former Socialist countries. Of the eight former Socialist countries in the sample, only the Czech Republic operates under a government issued code of corporate governance. The codes of the other seven countries are either industry or exchange originated.

The content of the codes by issuer type is examined in Table 6 through an analysis of their latent themes. In Panel A we present the mean percentage of total code variance explained by each theme for the four different kinds of issuers. Both the exchange and government issued codes place primary emphasis on accounting and disclosure, although the exchange issued codes places a nearly identical weight on board organization and internal governance. Industry issued codes clearly emphasize board organization and internal governance, with the policy guidelines and principles articulation associated with industry effects a distant second. The composite group focuses on accounting and disclosure and weights this dimension of corporate governance more highly than any other issuer.

Differences also emerge in what issuers least emphasize in their codes. Exchange issuers are least concerned with industry and association related governance while the government issued codes place the least weight on state and legal regulatory issues. Industry issuers appear to de-emphasize accounting and disclosure concerns in the codes they design. The composite issuers, like the government issuers, place the least emphasis on state and legal regulatory considerations.

In Panel B of Table 6 we examine the standard deviation of theme weight across issuers. This analysis provides us with an insight into the variability and differences in theme importance within codes issued by a given issuer type. Among exchange issued codes, we observe that the highest standard deviation occurs concerning accounting and disclosure guidelines. Variability regarding the nature of shareholder protections is of only slightly lesser magnitude. The government designed codes demonstrate a comparable pattern in variability, with the greatest standard deviation occurring in accounting and disclosure followed by shareholder protection. The industry issued codes show their greatest variability in the discussion of industry and association related governance matters followed by board organization and internal governance matters. The composite group shows the widest variability in the area of shareholder protections with accounting and disclosure issues following.

In Table 7 we examine how theme importance changes over time for each of the issuers. For each issuer, we report the slope coefficient for a regression of theme weight against the year in which the specific code is issued. This allows us to determine if the importance of a particular theme is changing over time. Panel A contains our findings for the exchange issued codes. We find that board organization and internal governance themes are increasing in importance over time with the importance of the other themes remaining constant. The legal and regulatory theme involving coordination with state authorities is of increasing importance in the codes issued by government agencies as shown in Panel B. We observe in Panel C that the industry codes change in several different aspects over time. Industry issued codes decrease their emphasis on both shareholder protections and accounting/disclosure guidelines while increasing their attention on the coordination of corporate governance with state legal and regulatory guidelines. Panel D

examines composite issued codes and shows that legal and regulatory policy considerations are becoming increasingly important in the design of these codes.

We conclude from Table 7 that theme importance changes over time and that these changes differ across issuer types. We find that exchange issued codes are emphasizing the importance of board organization and the firm's internal governance structures while those codes issued by government agencies or composite groups of interested parties are placing greater weight on state legal and regulatory policy coordination. The greatest set of changes, however is occurring within industry codes that are decreasing the importance of accounting/disclosure requirements as well as shareholder protections. They, too, like the government and composite group issuers are emphasizing state legal and regulatory policy coordination. In aggregate, our findings show the importance of issuer identity in code design and theme emphasis.

6. Convergence

6.1 Legal regime and convergence

A number of recent studies such as Berglof (1991), LaPorta et al (1998), Becht and Roel (1999), Hall and Soskice (2001) and Colier and Zaman (2005) focus on the issue of whether there is a national corporate governance code that performs best under the competitive pressures of a globalized economy. The increase in cross-border merger and acquisition activity, the growth in international equity trading, and the continued development of national codes of corporate governance have intensified this debate.

Various researchers note the apparent superiority of the common law system and argue that there is global convergence towards it. Aggarwal, Erel, Stulz and Williamson (2007) contend that, on average, foreign firms have inferior governance compared to the U.S., while those few firms that enjoy better governance are located in Canada or the U.K. Hansmann and

Kraakman (2001) argue that Anglo-American governance is the best and predict a convergence of corporate governance towards this model. They further assert that companies that fail to adopt a shareholder orientation will suffer from lower share prices and a consequent higher cost of capital. Goergen and Renneboog (2008) note that such a view implies the ultimate survival of only the shareholder focused governance of the Anglo-American model.

In spite of the many plausible arguments in favor of an international convergence in corporate governance, a number of contrary arguments exist. Cernat (2004) contends that the capital-labor differences inherent between the common and civil law regimes combined with weaknesses in EU decision-making makes governance convergence unlikely. Roe (1996) and Bebchuk and Roe (2002) argue that once a corporate governance is in place, incumbent interests will work to maintain it. Further, the existence of switching costs increases the likelihood that a governance system will not be changed.

The existing empirical literature suggests that while comprehensive convergence might be difficult to achieve, there is limited convergence on specific issues. Aguilera and Cuervo-Gazurra (2004) find evidence for convergence in corporate governance practices but also an indication of hybridization, reflecting the influence of specific national factors. Georegen, Martynova and Renneboog (2005) report that the civil law regulating takeovers has evolved significantly over the past decade and now more closely resembles that of the U.K. Collier and Zaman (2005) find convergence in global governance practices towards the common law concept of the audit committee with its demands for independence and financial literacy by committee members. Wojick (2006) also reports evidence of governance convergence based on a statistical analysis of governance ratings. Khanna, Kogan and Palepu (2006) find evidence of governance similarity between countries, but emphasize that their findings are not driven by similarity to

U.S. governance standards. They further observe that such similarity occurs most prominently for relatively developed countries located in the same geographical region. Goergen and Renneboog (2008) note there are other drivers of corporate governance convergence such as the standardization of listing requirements and the adoption of common accounting practices.³

The literature, however, has not examined the extent to which convergence might be occurring through the design of national codes of corporate governance. Our analysis of these documents provide new insights regarding the convergence of international legal practices through the design of compatible corporate governance codes. The following section provides our empirical results.

6.2 Empirical results

In Table 8 we examine the extent to which national governance codes are converging towards the common law model of the U.K. We perform this analysis on both an aggregate code level as well as for each of the individual themes. This latter analysis tests for the possibility that convergence occurs along selected dimensions of governance rather than being a general phenomenon.

In Panel A we present the cosine similarity correlations between our sample codes and that of the U.K.⁴ In the case of multiple codes, we calculate the correlation for each revision with the U.K. code that is most current at that time. In the far right column, we present the change in the correlation for each country over the sample period.

There are a number of important findings contained in panel A. We first note that the correlations of the German Civil Law countries with the U.K. are decreasing over time. We

³ For instance, as of 2005, all firms listing on a EU stock exchange must comply with International Financial Accounting Standards.

⁴ The cosine-similarity measure is the most commonly used correlation measure used in LSA. We compute this statistic by converting the governance codes into an array of document vectors. These vectors are normalized and the similarity measure is computed between every document vector.

observe that both Germany and Austria are moving away from the U.K. model, with Germany demonstrating greater divergence than Austria. With the exception of one, all of the French civil law countries fail to revise their codes. Thus, there is only one correlation change to analyze. The absolute level of the correlations for these countries is high, greater than those calculated for the German civil law countries, most of the Global Practice countries, and all of the Baltic countries. The average correlation for the French Civil Law countries is 0.816. Italy is the one French Civil Law country that has multiple codes and we find that it is becoming less correlated with the U.K. over time.

The Global Governance Practices group demonstrates considerable variability as one might expect in such a diverse set of countries. The Czech Republic, Portugal, and Hungary demonstrate divergence from the common law model, with their U.K. correlations declining over time. Three countries, Finland, Norway, and Slovenia exhibit movement towards the U.K. model. For those countries with no change in their codes, their average correlation with the U.K. governance code is 0.824.

The Baltic countries of Estonia and Latvia show the lowest overall correlation with the U.K. code. In this sense, the Baltic codes appear to be the least influenced by common law. Their correlations with the U.K. are even significantly less than those of the former socialist countries.

We conclude from this analysis that both convergence and divergence towards the U.K. model of governance is occurring within the EU. Our findings do not support the contention that there is a trend in continental corporate law to become more common law oriented. These results suggest, however, that continental law is already affected by common law as measured by the high correlation of continental governance codes with that of the U.K. But we further observe that this relationship is not strengthening over time.

We now examine the extent to which specific themes contained in these governance codes of civil law countries compare with their counterparts in common law. We estimate this by standardizing the variance for a given theme within a country with the corresponding U.K. percentage. This ratio provides a measure of a theme's relative importance to the U.K. governance code. To the extent that theme weights are approximately equal and the ratio approaches unity, the codes possess high compatibility and a degree of convergence can be presumed.

We observe, in general, that German civil law countries include more discussion in their codes about internal governance/board design, legal/regulatory, accounting/disclosure, and industry effects than their U.K. counterparts. The major exception is shareholder protection. Germany devotes only 30% as much as the U.K. to a discussion of shareholder protections. It is likely that this discrepancy accounts for the growing divergence between the U.K. and German codes reported in panel A. The findings regarding shareholder protection in Austria are even more pronounced, with the Austrian code containing only 11% as much as that of the U.K.

The French Civil Law countries uniformly devote more attention to internal governance and board organization than does the U.K. They also focus more on issues concerning state ownership, government policies and the management of the legal/regulatory interface. This might reflect the greater degree of state involvement in the French economy than that observed in the U.K. Half of the sample countries exhibit a comparable level of discussion of accounting and disclosure as their U.K. counterparts, while the other half focuses less attention. The major differences between the French Civil Law codes and that of the U.K., however, reside in the areas of shareholder protections and the involvement of industry associations in the development of governance principles. The codes of French civil law countries, on average, offer only 73% of

the emphasis on shareholder protection as that provided by the U.K. Likewise, they provide only 46% of the emphasis offered by the U.K. code regarding industry guidelines.

The codes of the Global Governance Practices group of countries show comparatively high levels of attention directed towards internal governance/board organization, legal and regulatory effects, and the role of industry groups. These codes, however, provide less discussion on accounting/disclosure issues and shareholder protection than the U.K. code. The Global Governance Practices group of governance codes, on average, demonstrate less weight on shareholder protection than the French Civil Law group, but more than the Baltic or German Civil Law codes.

The Baltic Civil Law codes focus strongly on internal governance/board organization, legal and regulatory considerations, and accounting/disclosure issues. They place the least emphasis on shareholder protection of the four code regimes that we analyze in this study. They are also weaker than the U.K. code regarding the discussion of industry groups and associations in the design of their governance principles.

7. Evolution of Code Themes

It might be that codes of corporate governance evolve over time as national policies and economic priorities change. In this section, we investigate how national codes change over time by separately examining those codes that have been revised. We perform this analysis at both the country and country-group level.

In panel A of Table 6 we examine each of our sample countries individually. We observe that the largest overall change occurs for accounting disclosure, with that theme appearing to become less important over time. The largest decrease in the importance of the

accounting/disclosure theme occurs for the codes in Finland, Portugal and Slovenia. Internal and board governance considerations have become more important, with an average increase of 3.25% in proportional thematic content. Surprisingly, the relative importance of shareholder protection does not appear to change much across code revisions. We do note, however, that it has become incrementally more prominent in the codes of U.K. and Germany.

Panel B contains an analysis of thematic evolution within our set of alternative legal regimes. Several interesting findings emerge from this examination. First, we notice that the Global Governance Practices regime demonstrates the largest change of any regime when all five themes are considered, reflecting the large changes in Portugal and some of the former Socialist countries. The common law countries exhibit the smallest absolute change for each of the five code themes, suggesting an overall increased stability in these codes. The theme with the greatest change is accounting and disclosure, with a noticeable decline in its relative importance among the Global Governance Practices countries. This is followed by a 42% change in the importance of board organization and internal governance.

8. Conclusion

Through the use of LSA, we are able to examine the thematic content of the governance codes for twenty-three EU nations. Our analysis produces a number of useful findings regarding the content, variability and convergence of these codes.

We find that these national codes of corporate governance can be decomposed into five major themes emphasizing internal governance/board organization, state legal and regulatory effects, accounting and disclosure, industry effects, and shareholder protection. We find that there is substantial variability in the relative importance of these themes across both countries

and regimes. Consistent with the existing international governance literature, we find that the U.K. offers exceptionally strong emphasis on shareholder protections.

We also determine that these codes cluster in ways that are not totally consistent with the legal regime classifications established in the literature by La Porta et al (1997). Consequently, we construct two new groupings, Global Governance Practices and Baltic Civil Law that better capture code commonalities. We conclude that national governance practices have evolved past historical legal classifications, perhaps reflecting the increasing influence of global market and economic forces.

We find that the identity of the code issuer is important in establishing a code's primary theme. We also discover that theme importance changes over time and that these changes differ across issuer types. Exchange issued codes emphasize the importance of board organization and the firm's internal governance structures while those codes issued by government agencies or composite groups of interested parties place greater weight on state legal and regulatory policy considerations. The greatest set of changes, however occurs within the set of industry issued codes that are decreasing the importance of accounting/disclosure requirements as well as shareholder protections. They, too, like the government and composite group issuers emphasize state legal and regulatory policy coordination.

Although the existing corporate finance literature is abound with references to the general superiority of common law countries with respect to shareholder rights, we fail to find evidence evidence of an unchecked convergence towards an Anglo-Saxon model of corporate governance. Rather, we determine that some elements of continental governance codes are converging to the U.K. model while others diverge. We conclude that any convergence between national codes is more likely to occur on the basis of "best practices" than convergence to a common law model.

References

- Agaarwal, R., Erel, I., Stulz, R. and R. Williamson, 2007, Do U.S. Firms Have the Best Corporate Governance? A Cross-Country Examination of the Relation between Corporate Governance and Shareholder Wealth, *Journal of Financial Economics*, forthcoming.
- Aguilera, R. and A. Cuervo-Cazurra, 2004, Codes of Good Governance Worldwide: What is the Trigger? *Studies in Organizational Management* 25(3), 415-443.
- Bebchuk, L. A. and M. Roe, 1999, A t Theory of Path Dependence in Corporate Ownership and Governance, *Stanford Law Review* 52, 127-170.
- Becht, M. and A. Roel, 1999, Blockholding in Europe: An International Comparison, *European Economic Review* 43, 10-49.
- Berglof, E., 1991. *Corporate Control and Capital Structure: Essays on Property Rights and Financial Contracts*. Stockholm: IIB Institute of International Business.
- Boukus, E an d J. Rosenberg, 2006, The Information Content of FOMC Minutes, New York Federal Reserve Bank Working Paper.
- Cernat, L. (2004) The Emerging European Corporate Governance Model: Anglo-Saxon, Continental, or Still the Century of Diversity? *Journal of European Public Policy* 11(1), 147-166.
- Collier, P. and M. Zaman, 2005, Convergence in European Corporate Governance: the Audit Committee Concept., *Corporate Governance: An International Review*, 13(6), 753-768.
- Deerwester, S., Dumais, S. T., Furnas, G. W., Landauer, T. K., & Harshman, R., 1990, Indexing by Latent Semantic Analysis. *Journal of the American Society for Information Science* 41 (6), 391-407.
- Enrione, A., Mazza, C., and Zerboni, F., 2006, Institutionalizing Codes of Governance, *American Behavioral Scientist*, 49, 961-973.
- Gilson, R., 2001, Globalization of corporate governance; convergence of form or function, *American Journal of Comparative Corporate Law* 49, 329-357.
- Goergen, M. and L. Renneboog, 2008, Contractual Corporate Governance, *Journal of Corporate Finance*, July.
- Goergen, M. M. Martinova and L. Renneboog, 2005, Corporate Governance Convergence: Evidence from Takeover Regulation Reforms in Europe, *Oxford Review of Economic Policy* 21, 243-268.
- Hall, P. and D. Soskice, *Varieties of Capitalism: The Institutiojnal Foundations of Comparative Advantage*. Oxford: Oxford University Press, 2001.
- Hansmann, H. and R. Kraakman, 2001, The End of History for Corporate Law. *Georgetown Law Journal* 89, 439-468.

- Hermes, N., Postma, T. and O. Zivkov, 2006, Corporate Governance Codes in the European Union, *International Journal of Managerial Finance* 2(4), 280-301.
- Khanna, T., Kogan, J. and K. Palepu, 2006, Globalization and Similarities in Corporate Governance: A Cross-Country Analysis, *Review of Economics and Statistics* 88(1), 69-90.
- LaPorta, R., F. Lopez de Silanes, Schleifer, A. and R. Vishny, 1997, Legal Determinants of External Finance, *Journal of Finance* 52, 1131-1150.
- LaPorta, R., F. Lopez de Silanes, Schleifer, A. and R. Vishny, 1998, Law and Finance, *Journal of Political Economy* 106, 1113-1155.
- Landauer, T., Foltz, P., Laham, D., 1998, An Introduction to Latent Semantic Analysis *Discourse Processes* 25, 259-284
- Manning, C., Schutze, H., 2001, *Foundations of Statistical Natural Language Processing* MIT Press, page 558
- Pistor, K., Raiser, M. and S. Gelfer, 2000, Law and finance in transition economies, *Economics of Transition* 8, 325-368.
- Roe, M., 1996, Chaos and Evolution in Law and Economics, *Harvard Law Review* 109, 641-668.
- Wojcik, D., 2006, Convergence in Corporate Governance: Evidence from Europe and the Challenge for Economic Geography, *Journal of Economic Geography* 6, 639-660.
- Zattoni, A. and Cuomo, F., 2008, Why Adopt Codes of Good Governance? A Comparison of Institutional and Efficiency Perspectives, *Corporate Governance: An International Review*, 16, 1-15.

Table 1: Chronology of Code Adoption and Revision

The sample below consists of twenty-three EU member countries. They were selected based on their adoption of governance codes, the size of their capital markets, and their contribution to the diversity of their legal regime. The first year that the country adopted its corporate governance code appears in the second column, followed by revisionary history. The last column totals the number of revisions for the country.

Country/Regime	Year of first Adoption	Year of first Revision	Year of last Revision	Number of Revisions
Common Law				
United Kingdom	2000	2003	2006	2
German Civil				
Austria	2002	2005	2007	3
Germany	2000	2002	2007	5
Switzerland	2002	-	-	0
French Civil				
Belgium	2004	-	-	0
France	1998	2003	2003	1
Greece	1999	2001	2001	1
Italy	2002	2006	2006	1
Luxembourg	2006	-	-	0
Netherlands	2003	-	-	0
Portugal	1999	2001	2007	3
Spain	2006	-	-	0
Scandinavian Civil				
Finland	2003	2006	2006	1
Norway	2004	2005	2007	3
Sweden	2007	-	-	1
Former Socialist				
Czech Republic	2001	2004	2004	1
Estonia	2005	-	-	0
Hungary	2002	2007	2007	1
Latvia	2005	-	-	0
Poland	2007	-	-	0
Romania	2000	-	-	0
Slovakia	2002	-	-	0
Slovenia	2004	2005	2007	2

Table 2: Theme Identity in National Corporate Governance Codes

In this table we decompose the LSA similarity measure into distinct components following the methodology of Boukus and Rosenberg (2006). Their approach is similar to 'principle component analysis' in which key terms are identified by a computer algorithm but the interpretation of the terms is left to the researcher. The key terms are listed in the third column and our interpretation of them appears in the fourth column. We limit our analysis to the first 5 themes in order to strike a balance between variance-explained and parsimony. The second column, variance-explained, is the amount of variance that the given theme explains in the governance code.

LSA Themes	Variance Explained	Keywords most frequently occurring in this theme	Governance Focus
Theme 1	64.15%	board, committee, general, director, remuneration, meeting, business, report	Internal Governance / Board Organization
Theme 2	9.09%	ownership, state, entity, coordinating, country, policy, government	State legal and regulatory effects
Theme 3	3.69%	supervisory, audit, effective, internal, controls, review, guidance	Accounting / Disclosure
Theme 4	3.17%	bodies, associations, public, guidelines, compliance, articles, principles, recommendations	Industry effects
Theme 5	2.96%	committee, investor, rights, vote, chairman, disclosure	Shareholder protection

Table 3: Legal Regime and Code Clustering

Countries grouped to regimes too which they are most similar. Column 3 holds the similarity statistic used to group each country. The statistic was computed by analyzing latent semantic features of each code, calculating the cosine similarity between those features and the features of each regime, and then matching the country to the regime for which the cosine similarity was highest. When our grouping differs from La Porta, the last column shows where the change occurred.

Regime	Code Revision	Similarity	P-value	La Porta change
Common Law	United Kingdom (2006)	---	---	
German Civil	Germany (2007)	---	---	
	Austria (2007)	.945	< 0.1%	
French Civil	France (2003)	---	---	
	Belgium (2004)	.958	< 0.1%	
	Italy (2006)	.892 ⁵	< 0.1%	
	Luxembourg (2006)	.919 ⁶	< 0.1%	
	Switzerland (2003)	.950	< 0.1%	German Civil
Global Governance Practices	Finland (2006)	---	---	
	Czech Rep (2004)	.927 ⁸	< 0.1%	Former Socialist
	Greece (2001)	.989	< 0.1%	French Civil
	Hungary (2007)	.760 ⁹	< 0.1%	Former Socialist
	Netherlands (2003)	.755 ¹⁰	< 0.1%	Scandinavian
	Norway (2007)	.916 ¹¹	< 0.1%	Scandinavian
	Poland (2007)	.919 ¹²	< 0.1%	Former Socialist
	Portugal (2007)	.786 ¹³	< 0.1%	French Civil
	Romania (2000)	.969 ¹⁴	< 0.1%	Former Socialist
	Slovakia	.902 ¹⁵	< 0.1%	Former Socialist
	Slovenia (2007)	.949	< 0.1%	Former Socialist
	Spain (2006)	.856 ¹⁶	< 0.1%	French Civil
	Sweden (2007)	.969 ¹⁷	< 0.1%	Scandinavian
Baltic Civil	Estonia (2005)	.984 ¹⁸	< 0.1%	
	Latvia (2005)	.984 ¹⁹	< 0.1%	

⁵ Italy's correlation path to France: Switzerland (.915), France (.892)

⁶ Luxembourg's correlation path to France: Belgium (.932), France (.919)

⁷ We choose Finland 2007 to be the 'Global Archetype' because it has the highest correlations to more 'Global regime' nations than any other. Using Finland 2003 (listed firms) yields the same clustering results, however using Finland 2007 (unlisted firms) enabled subsequent convergence calculations. Our thematic analysis is not affected by this choice.

⁸ Czech Republic's correlation path to Finland: Slovakia (.976), Spain (.958), Romania (.942), Greece (.941), Poland (.927), Finland (.927)

⁹ Hungary's correlation path to Finland: Poland (.814), Romania (.797), Greece (.781), Slovenia (.768), Sweden (.761), Finland (.760)

¹⁰ Netherlands' path to Finland passes through all the other regimes.. It starts with Poland (.906) and reaches Finland at the 13th order (.755)

¹¹ Norway's correlation path to Finland: Sweden (.939), Finland (.916)

¹² Poland's correlation path to Finland: Romania (.967), Sweden (.937), Slovakia (.934), Czech Rep (.927), Greece (.922), Finland (.919)

¹³ Portugal's correlation path to Finland: Greece (.793), Finland (.786)

¹⁴ Romania's correlation path to Finland: Sweden (.971), Finland (.969)

¹⁵ Slovakia's correlation path to Finland: Czech Rep (.976), Poland (.934), Spain (.927), Romania (.922), Greece (.917), Finland (.902)

¹⁶ Spain's correlation path to Finland: Czech Rep (.958), Slovakia (.927), Greece (.890), Romania (.880), Finland (.856)

¹⁷ Sweden's correlation path to Finland: Romania (.971), Greece (.970), Finland (.969)

¹⁸ Estonia has first order correlation to Latvia (.984). Second order correlation to Switzerland is only (.847).

¹⁹ Latvia has first order correlation to Estonia (.984). Second order correlation to Switzerland is only (.822).

Table 4: Proportional Theme Weights for Countries and Regimes

In Panel A we decompose each country code into its constituent themes and sort them by those themes. This table is normalized so that small countries can be compared to large countries, that is, the sum of each of the constituent themes for each country is equal to 100%. In Panel B we arrange each country into its LaPorta et al (1997) regime. We then average the theme weight for all the countries in each regime. The regimes are then sorted by those themes.

Panel A: Countries sorted by theme weights

Internal / Board		Legal / Regulatory		Accounting / Disclosure		Industry effects		Shareholder Protection	
Sweden	61%	Finland	19%	Estonia	49%	Hungary	51%	Slovakia	39%
Switzerland	56%	Norway	17%	Latvia	46%	Portugal	36%	France	37%
Finland	49%	Portugal	17%	Austria	45%	Norway	30%	UK	35%
Romania	44%	Slovenia	15%	Germany	44%	Slovakia	24%	Spain	33%
Greece	43%	Switzerland	13%	Luxembourg	41%	Netherlands	23%	Czech	32%
Norway	40%	Sweden	13%	Spain	32%	Czech	19%	Italy	31%
Poland	40%	Estonia	13%	UK	29%	Germany	16%	Belgium	27%
Luxembourg	39%	Romania	12%	Belgium	29%	Austria	15%	Poland	25%
France	37%	Poland	11%	Italy	29%	Romania	13%	Netherlands	23%
Portugal	36%	Greece	10%	Slovenia	28%	UK	13%	Sweden	21%
Slovenia	32%	Austria	10%	Greece	22%	Latvia	13%	Romania	20%
Italy	32%	Hungary	10%	Netherlands	22%	Finland	12%	Finland	18%
Latvia	32%	Latvia	9%	Poland	20%	Switzerland	10%	Slovenia	16%
Czech	31%	France	8%	Czech	17%	Belgium	9%	Switzerland	16%
Belgium	30%	Spain	8%	France	15%	Greece	9%	Greece	16%
Slovakia	27%	Netherlands	8%	Romania	10%	Slovenia	8%	Germany	12%
Estonia	26%	Germany	7%	Slovakia	10%	Luxembourg	7%	Hungary	11%
Austria	26%	UK	6%	Hungary	7%	Estonia	5%	Luxembourg	8%
Spain	25%	Belgium	5%	Norway	5%	Poland	4%	Portugal	8%
Netherlands	23%	Italy	5%	Switzerland	5%	Italy	4%	Norway	7%
Germany	21%	Luxembourg	5%	Sweden	4%	France	3%	Estonia	6%
Hungary	21%	Czech	1%	Portugal	3%	Spain	2%	Austria	4%
UK	18%	Slovakia	1%	Finland	3%	Sweden	1%	Latvia	1%

Panel B: La Porta regimes sorted by theme weights

Internal / Board		Legal / Regulatory		Accounting / Disclosure		Industry effects		Shareholder Protection	
Scandinavian	50.06%	Scandinavian	16.34%	German	31.18%	Former Soc.	17.23%	Com Law	34.83%
German	34.24%	German	10.14%	Com Law	28.98%	Scandinavian	14.22%	French	22.89%
French	32.91%	Former Soc.	9.00%	French	24.18%	German	13.90%	Former Soc.	18.72%
Former Soc.	31.63%	French	8.34%	Former Soc.	23.42%	Com Law	12.76%	Scandinavian	15.20%
Com Law	17.77%	Com Law	5.65%	Scandinavian	4.18%	French	11.65%	German	10.55%

Panel C: Alternate regimes sorted by theme weights

Internal / Board		Legal / Regulatory		Accounting / Disclosure		Industry Effects		Shareholder Protection	
Global	37.29%	Global	11.18%	Baltic	47.63%	Global	19.25%	Com Law	34.83%
French	36.20%	Baltic	10.99%	German	44.27%	German	15.88%	French	25.45%
Baltic	28.85%	German	8.54%	Com Law	28.98%	Com Law	12.76%	Global	19.57%
German	23.44%	French	7.49%	French	25.10%	Baltic	9.10%	German	7.87%
Com Law	17.77%	Com Law	5.65%	Global	12.71%	French	5.75%	Baltic	3.44%

Table 5: Distribution of Codes Across Issuer Type, Country and Legal Regime

Government issuer refers to national legislatures or governmental commission/ministries. Industry issuers are industry or trade associations and groups. Exchange issuers are national stock exchanges. Composite issuers refer to groups that contain representatives from at least two of the preceding groups. The legal regimes are constructed on the basis of comparability of code themes. Current code refers to the most recent code while all codes includes the current code plus all revisions to the code.

Panel A: Distribution of Code by Issuer Type

Issuer	Current Codes	All Codes	Percentage
Government	6	17	26.1
Industry	8	15	34.7
Exchange	7	10	30.4
Composite	2	5	8.7

Panel B: Distribution of issuer type by legal regime and country

Legal Regime	Country and Year of Most Current Code	Issuer Type
Common Law	United Kingdom (2006)	Government
German Civil	Germany (2007)	Government
	Austria (2007)	Composite
French Civil	France (2003)	Industry
	Belgium (2004)	Composite
	Italy (2006)	Exchange
	Luxembourg (2006)	Exchange
	Switzerland (2003)	Industry
Global Practices	Finland (2006)	Industry
	Czech Rep (2004)	Government
	Greece (2001)	Industry
	Hungary (2007)	Industry
	Netherlands (2003)	Government
	Norway (2007)	Industry
	Poland (2007)	Exchange
	Portugal (2007)	Government
	Romania (2000)	Industry
	Slovakia (2002)	Exchange
	Slovenia (2007)	Exchange
	Spain (2006)	Government
	Sweden (2007)	Industry
Baltic Civil	Estonia (2005)	Exchange
	Latvia (2005)	Exchange

Table 6: Summary Statistics for Each Issuer Type

Panel A contains the mean percentage of code variation explained by a particular theme. Panel B presents the standard deviation of these mean values for each theme by issuer type. Government issuer refers to national legislatures or governmental commission/ministries. Industry issuers are industry or trade associations and groups. Exchange issuers are national stock exchanges. Composite issuers refer to groups that contain representatives from at least two of the preceding groups.

Panel A: Average thematic content by issuer type

Issuer Type	Internal / Board	Legal / Regulatory	Accounting / Disclosure	Industry Effects	Shareholder Protection
Exchange	32.57%	9.69%	34.18%	7.43%	16.13%
Government	24.60%	6.64%	29.03%	17.78%	21.95%
Industry	39.47%	13.39%	9.76%	20.09%	17.29%
Composite Group	26.67%	8.16%	41.78%	15.15%	8.23%

Panel B: Standard deviation of thematic content by issuer type

Issuer Type	Internal / Board	Legal / Regulatory	Accounting / Disclosure	Industry Effects	Shareholder Protection
Exchange	4.31%	5.07%	12.54%	6.68%	12.47%
Government	5.73%	3.60%	13.11%	7.18%	11.79%
Industry	10.73%	3.31%	7.24%	14.01%	9.12%
Composite Group	2.18%	1.95%	7.26%	3.52%	10.43%

Table 7: Theme Evolution by Issuer Type

This table holds the results of 20 OLS regressions in which the five code themes are the dependent variables and the year the code is issued is the independent variable. Government issuer refers to national legislatures or governmental commission/ministries. Industry issuers are industry or trade associations and groups. Exchange issuers are national stock exchanges. Composite issuers refer to groups that contain representatives from at least two of the preceding groups. Statistical significance at the one percent level is indicated by ***, five percent statistical significance is represented by ** and ten percent significance at *.

Panel A: Exchange issuer codes

Theme	Coefficient	P-value	R-squared	
Internal / Board	1.30	0.107 *	0.291	Earliest Code: 2002
Legal / Regulatory	1.09	0.273	0.148	Latest Code: 2007
Accounting / Disclosure	0.55	0.829	0.006	Total Number: 10
Industry Effects	-1.40	0.283	0.142	
Shareholder Protection	-1.53	0.541	0.048	

Panel B: Government issuer codes

Theme	Coefficient	P-value	R-squared	
Internal / Board	-0.09	0.873	0.002	Earliest Code: 1998
Legal / Regulatory	0.59	0.076 *	0.194	Latest Code: 2007
Accounting / Disclosure	0.61	0.635	0.015	Total Number: 17
Industry Effects	0.16	0.818	0.004	
Shareholder Protection	-1.27	0.260	0.084	

Panel C: Industry issuer codes

Theme	Coefficient	P-value	R-squared	
Internal / Board	0.76	0.448	0.045	Earliest Code: 1998
Legal / Regulatory	0.57	0.050 **	0.264	Latest Code: 2007
Accounting / Disclosure	-1.25	0.048 **	0.268	Total Number: 15
Industry Effects	1.63	0.202	0.122	
Shareholder Protection	-1.71	0.029 **	0.315	

Panel D: Composite group issuer codes

Theme	Coefficient	P-value	R-squared	
Internal / Board	0.13	0.851	0.012	Earliest Code: 2002
Legal / Regulatory	0.76	0.083 *	0.567	Latest Code: 2007
Accounting / Disclosure	0.81	0.712	0.047	Total Number: 5
Industry Effects	-0.22	0.836	0.015	
Shareholder Protection	-1.48	0.636	0.075	

Table 8: Convergence to the Common Law Regime

Panel A shows how each national code converges to the U.K. code. Data is obtained by extracting the correlation between a country's code and the most recent U.K. code existing at the time. We compute the values in the 'Change' column by subtracting the most recent correlation from the oldest correlation. Panel B provides a theme-by-theme comparison between each country's code and that of the U.K. We compute these numbers from the data in Table 4, Panel A by dividing the theme weight for each country by the theme weight for the U.K.

Panel A: Change in correlation between the U.K. and the other countries

Regime	Country	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Change
Common Law	UK											
German Civil	Germany			0.762		0.665	0.599		0.603	0.655	0.658	(-10.4%)
	Austria					0.659			0.607	0.654	0.648	(-1.1%)
French Civil	France						0.836					
	Belgium							0.893				
	Italy					0.909				0.772		(-13.7%)
	Luxembourg									0.822		
	Spain									0.724		
	Switzerland					0.852						
Global Practices	Finland							0.763		0.799		3.6%
	Czech Rep				0.836			0.718				(-11.8%)
	Greece				0.863							
	Hungary					0.699					0.647	(-5.2%)
	Norway							0.674	0.664	0.786	0.777	10.3%
	Poland										0.752	
	Portugal					0.703		0.616			0.613	(-9.0%)
	Romania			0.826								
	Slovakia			0.803								
	Slovenia							0.639	0.635		0.694	5.5%
	Sweden										0.877	
Baltic	Estonia								0.473			
Socialist	Latvia								0.456			

Panel B: Theme-by-theme comparison between each country and the U.K.

		Internal / Board	Legal / Regulatory	Accounting / Disclosure	Industry Effects	Shareholder Protection
Common Law	UK					
German Civil	Germany	1.22	1.41	1.42	1.33	0.30
	Austria	1.42	1.78	1.48	1.24	0.11
French Civil	France	2.02	1.88	0.43	0.44	1.06
	Belgium	1.64	1.07	0.95	0.69	0.81
	Italy	1.76	1.30	1.08	0.21	0.78
	Luxembourg	2.14	0.96	1.35	0.52	0.25
	Spain	1.35	1.67	1.05	0.14	1.01
	Switzerland	3.07	2.67	0.16	0.74	0.48
Global Practices	Finland	2.21	3.17	0.46	1.17	0.43
	Czech Rep	1.65	0.35	0.62	1.45	0.91
	Greece	1.85	2.23	0.67	1.03	0.64
	Hungary	1.37	2.07	0.19	3.31	0.44
	Norway	2.20	3.44	0.18	2.17	0.25
	Netherlands	1.27	1.67	0.73	1.74	0.69
	Poland	2.20	2.25	0.65	0.33	0.75
	Portugal	1.70	1.78	0.42	1.71	0.74
	Romania	2.40	2.45	0.34	1.00	0.61
	Slovakia	1.74	2.94	1.44	0.48	0.10
	Slovenia	1.80	3.02	1.21	0.38	0.32
	Sweden	3.36	2.62	0.14	0.07	0.63
Baltic Civil	Latvia	1.73	1.88	1.50	0.95	0.02
	Estonia	1.44	2.53	1.62	0.41	0.19

Table 9: Evolution of Theme Weights by Country and Regime

Panel A presents changes in code themes over time for each of the sample countries. Panel B shows the thematic evolution of national governance codes grouped by the alternative set of legal regimes. Panel C presents thematic evolution of the codes by the LaPorta et al (1997) regime classifications. The 'Mean' statistic is the average of a given theme's explanatory content across all codes revisions for a given country. The 'Change' statistic is the difference in thematic content between the latest code revision and the earliest code revision. This statistic can not be computed for countries with only one code revision. The 'StdDev' statistic is the standard deviation of a given theme's explanatory content across all code revisions for a given country. This statistic can not be computed for countries with only one code revision.

Panel A: Country analysis of code evolution

Regime	Country	Internal / Board			Legal / Regulatory			Accounting / Disclosure			Industry effects			Shareholder Protection		
		Mean	Change	StdDev	Mean	Change	StdDev	Mean	Change	StdDev	Mean	Change	StdDev	Mean	Change	StdDev
Common	UK	18%	-3%	2%	5%	-1%	2%	30%	1%	3%	13%	-2%	1%	33%	5%	3%
German	Germany	22%	-7%	3%	7%	-0%	0%	43%	5%	2%	18%	-7%	3%	10%	9%	3%
Civil	Austria	26%	2%	2%	9%	3%	1%	45%	0%	1%	17%	-3%	1%	4%	-1%	2%
French Civil	France	37%	-0%	0%	9%	-2%	1%	13%	4%	2%	6%	-6%	5%	35%	5%	4%
	Belgium	30%			5%			29%			9%			27%		
	Italy	32%	-1%	0%	7%	-3%	2%	33%	-8%	6%	3%	2%	1%	26%	10%	7%
	Luxembourg	39%			5%			41%			7%			8%		
	Spain	25%			8%			32%			2%			33%		
	Switzerland	56%			13%			5%			10%			16%		
Global Practices	Finland	40%	17%	12%	16%	6%	4%	14%	-22%	16%	16%	-8%	6%	14%	7%	5%
	Czech Rep	30%	2%	2%	2%	-2%	1%	19%	-4%	3%	19%	-0%	0%	30%	4%	3%
	Greece	34%	18%	13%	11%	-2%	1%	20%	4%	3%	14%	-9%	6%	21%	-11%	8%
	Hungary	25%	-8%	6%	10%	-1%	1%	6%	3%	2%	44%	13%	9%	15%	-7%	5%
	Norway	40%	-0%	1%	17%	0%	0%	5%	1%	1%	29%	-1%	3%	8%	0%	2%
	Netherlands	23%			8%			22%			23%			23%		
	Poland	40%			11%			20%			4%			25%		
	Portugal	31%	12%	5%	9%	14%	6%	13%	-19%	8%	23%	26%	11%	25%	-33%	14%
	Romania	44%			12%			10%			13%			20%		
	Slovakia	32%			15%			44%			6%			3%		
	Slovenia	33%	1%	1%	15%	1%	0%	37%	-16%	8%	5%	2%	4%	10%	13%	6%
	Sweden	61%			13%			4%			1%			21%		
Baltic Civil	Latvia	32%			9%			46%			13%			1%		
	Estonia	26%			13%			49%			5%			6%		

Panel B: Alternate regime analysis of code evolution.

Regime	Internal / Board			Legal / Regulatory			Accounting / Disclosure			Industry effects			Shareholder Protection		
	Mean	Change	StdDev	Mean	Change	StdDev	Mean	Change	StdDev	Mean	Change	StdDev	Mean	Change	StdDev
Common Law	18%	-3%	2%	5%	-1%	2%	30%	1%	3%	13%	-2%	1%	33%	5%	3%
German Civil	24%	-5%	3%	8%	3%	1%	44%	5%	2%	17%	-10%	2%	7%	7%	4%
French Civil	36%	-1%	9%	8%	-5%	3%	25%	-5%	13%	6%	-4%	4%	26%	16%	10%
Global Practices	35%	42%	9%	12%	16%	5%	17%	-53%	13%	19%	21%	13%	18%	-27%	10%
Baltic State	29%		4%	11%		2%	48%		3%	9%		5%	3%		4%

Panel C: La Porta regime analysis of code evolution

Regime	Internal / Board			Legal / Regulatory			Accounting / Disclosure			Industry Effects			Shareholder Protection		
	Mean	Change	StdDev	Mean	Change	StdDev	Mean	Change	StdDev	Mean	Change	StdDev	Mean	Change	StdDev
Common Law	18%	-3%	2%	5%	-1%	2%	30%	1%	3%	13%	-2%	1%	33%	5%	3%
German Civil	27%	-5%	10%	8%	3%	2%	40%	5%	12%	17%	-10%	3%	8%	7%	5%
French Civil	32%	52%	6%	8%	9%	4%	22%	23%	11%	13%	1%	10%	25%	15%	10%
Scandinavian	44%	17%	10%	16%	6%	2%	8%	-21%	8%	20%	-9%	12%	12%	8%	6%
Former Soc.	32%	-5%	6%	11%	-2%	5%	27%	-16%	16%	15%	14%	15%	15%	10%	10%