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Are Legal Families Related to Financial Reporting Quality?

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Abstract

A large body of financial accounting research explores the quality of accounting in different countries. A bedrock assumption in most of that research is that common law provides a firmer foundation for good accounting transparency than does civil law. Researchers usually regress their proxy for accounting quality on an indicator variable that designates the firm's country as a common or civil law jurisdiction (along with other regressors).

What is the support for that nearly universal assumption? We seek an answer for that question. We trace the distinctions by legal scholars that characterize the two families. We study the bedrock research by La Porta, Lopez-de-Silanes, Shleifer and Vishny (1998) that is the nearly universal citation to support the civil/common dummy. We analyze the design and development of research designs that use law in accounting studies. We conclude that the use of the civil/common distinction as applied in accounting studies cannot be supported. We offer suggestions better to investigate the ways in which the law interacts with financial reporting.

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INTRODUCTION

In a globalizing world, trade in international financial markets is increasing, with more companies raising equity in foreign markets and more investors buying shares in foreign countries. Accompanying the increase is greater demand for financial reports that are consistent, comparable, and "transparent." Better reporting is claimed to be linked to lower cost of capital and better resource allocation (Botosan, 1997; Francis et al., 2009). The factors that are associated with high quality reporting have been widely studied. One of the more intensively invoked factors is the law.

In this paper we extend that investigation by asking, "What is the strength of the evidence connecting the law with accounting quality? How does the law affect accounting quality?" This extends the predominant theme in previous research, which is, "Does law affect accounting quality? Yes or no?"

The answer to that question would be obviously "yes." Every industrialized country has laws governing reporting to shareholders. The challenge is to generalize, to develop a theory, to find broad patterns in the law that systematically affect quality. That quest has settled on legal "families" or "origins" as the classification that explains differences among countries better than any other. In accounting research the dominant claim is categorically that common law countries produce higher quality financial reports than civil law countries.

Few papers in this corpus go beyond the "either-or," "common-civil" question to ask, "Why? How?" It has been enough to show "that" a difference is detectable (the t-statistic on the civil-common dummy's coefficient is >2).

We think this is a good start. But "$t > 2$" is a weak basis for claiming to understand the relation between law and accounting. We go beyond that starting point to ask "*Why* and *how* does law affect accounting quality?

We do this in the spirit of Barth et al. (2001, p.99):

> It takes considerable time and effort to learn about questions of interest to various financial reporting constituencies, to understand the institutional details of the accounting amounts being studied, and to develop research designs capable of addressing research questions that correspond to questions of interest.

As noted, little is known except "that" legal families are apparently related to quality. Better to understand, we review the field of comparative legal systems, looking for fundamental differences between the families of legal systems that might lead to different financial reporting practices. This is necessary to further our understanding because many studies in comparative international accounting invoke differences in the law to explain differences in the reporting. Mostly they simply *assert* differences without identifying where in the law the differences lie.

We take this approach to searching for those relevant differences: First we consider law at a general level, asking whether the division of the law into "families" is a strong and pervasive distinction, one capable of explaining different outcomes among families. Second, we peel back a layer to look within the families, asking whether the "family" division is a reasonable approximation of inter-family differences, or whether on the contrary there are intra-family differences among countries that renders the bare "either or" legal-family distinction too imprecise. Third, taking another step from the general to the particular, we consider the effects of legal systems on one aspect of the law: investor protection. It is investor protection literature that is the heart of the study of financial reporting. Last, we consider individual accounting studies, linking what we have discovered about the law to the assumptions embodied in the studies about the accounting. Based on that analysis we offer some guides for improving future research on the relationship of the law and financial accounting.

We conclude, among other things, that a careful examination of legal traditions cannot support the claim that common law is associated with higher accounting quality than civil law. There are however other aspects of the law that have not been adequately investigated. We make suggestions for increasing the understanding of the law's effect on reporting.

1 LEGAL FAMILIES

The nearly universal assertion in accounting studies of financial reporting is that the legal family—common or civil—is a fundamental determinant of quality. To explore the plausibility of that claim, we review the salient differences between these families according to legal scholars.

At the top level there is general agreement that a distinction can be made: "Despite their shared inheritance, the civil and common law traditions have developed in sufficiently different ways that they are now universally regarded as belonging to different legal families" (Glendon et al., 1982, p.15). As reported below, noted scholars of comparative law express some reservations about this opinion.

Here is a rough distinction between civil law and common law families (David and Brierley, 1985, passim).

- The role of precedent in civil law, not absent, is more limited.
- The role of enacted legislation is more important in civil law.
- The role of legal scholarship has formed the foundations of civil law but has much diminished in the past century.
- Civil law is more codified, which has not been, historically, a distinction. While the law has its origins in the Roman Empire, only since the 19th centuries have the laws been substantially codified (France: Code Napolèon, 1804 (Horne 2004); Germany, 1896).[1]

Notice that the items on this list generally refer to the law in the past. According to these same scholars, the degree of difference is not as great as might be thought. David and Brierley (1985) acknowledge a distinction

[1] Justinian's compilation of laws in the sixth century was abandoned in the Middle Ages (Glenn, 2007, p.131).

between common law and civil law.[2] However, they point out that the usual distinctions are not as strong as commonly supposed. Looking at the law today:

> "Formal doctrine in France [a civil law country], for example, holds to the tradition that judicial decisions are not a source of law; it is nonetheless true that the decisions of the *Cour de cassation* or the *Conseil d'Etat* can have, in some circumstances, an authority in fact hardly less than that attributed to legislation" (David and Brierley, 1985, p.14).[3]

Zweigert and Kötz (1998) are also skeptical about the current state of affairs:

> The dichotomy between statute-law of the Continental variety and the case-law of the Common Law is by no means as fundamental as theorists of the sources of law keep trying to tell us (p.90).
>
> Thus quite large areas of French private law have ceased to be *droit écrit* [written law; codes] and have become common law... (p.96)
>
> …the dichotomy, once so familiar, between the Common Law as a creation of the judiciary and the Civil Law as a creation of the legislature has lost much of the plausibility it enjoyed even at the beginning of the [twentieth] century. It is beyond dispute that the English courts have lost their leading role as creators of law to Parliament and to ministers with powers to issue statutory instruments, especially in modern social law, while on the Continent the courts base themselves on the actual words of the aging codes only in the most technical sense and the legislator in enacting *new* provisions is perfectly willing to adopt general formulae which throw the burden of legal creativity on to the courts. Today the old question whether statute or judicial decision is the primary source of law gives us very little help toward understanding the basic difference between Common Law and Civil Law. The more important question, in our view, is whether in deciding individual cases judges on the Continent and in England use *methods of finding and applying law* which are different in character" (p.201, italics in original).

Ultimately, Zweigert and Kötz treat the legal traditions as distinct, but as a matter of historical development more than as a distinction of today. The passages above point to a diminishing gap between the application of law in civil and common families.

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[2] Civil law is also described as "Romano-Germanic," "Roman," "code," and "civilian."
[3] The *Cour de cassation* is a court that has the power to quash an incorrect interpretation rendered by another court, and even to explain the correct interpretation. However, the case is sent back to the lower court, and that court is not bound by the interpretation offered. The *Cour de cassation's* interpretations, thus, are not officially a source of law (Merryman and Pérez-Perdomo, 2007, pp.39-41).

A further narrowing of the difference is the trend within the European Union to harmonize a wide range of policies, such as taxation, competition, and corporate governance.[4] As we will see below this is particularly germane when considering accounting studies since the samples are disproportionately large public companies, and hence very likely to include many European companies.

The idea of "codification" finds a place in accounting research studies, which usually refer to civil law as "code" law. While this is not an incorrect use of the term, it implies a greater difference than actually exists. The contrast between common law as judge-made law, and civil law as the product of legislation, is exaggerated.

> One often hears it said, sometimes by people who should know better, that civil law systems are statutory systems, whereas common law is uncodified and is based in large part on judicial decisions….There is probably at least as much legislation in force in a typical American state as there is in a typical European or Latin American nation (Merryman and Pérez-Perdomo, 2007, p.27).

The premise that judges are hard at work setting precedents <u>only</u> in common law countries is doubtful: "lawyers … in Civil Law jurisdictions work with precedents all the time and pretty much in the same way as their Common Law counterparts" (Spamann, 2006, p.13).

"The fact is that courts do not act very differently toward reported decisions in civil law jurisdictions than do courts in the United States" (Merryman and Pérez-Perdomo, 2007, p.47).

In a study of the German and English commercial law, Pistor (2005, p.19) states that

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[4] Alexander and Eberhartinger (2009) describe the extent of conformity to the Fourth Directive's requirement for a "true and fair view" among European Union countries, with emphasis on Austria and Germany.

> The comparison of 'good faith' doctrines in common and civil law also helps refute the widely held notion that the main difference between the major legal systems is the greater 'rigidity' or formalism of law in codified systems, or the more limited power of judges in civil law as opposed to common law system.

Here again, the portrayal of civil law as distinct from common by being more "codified" is dismissed by another legal scholar.

As further evidence of the extent that in the present day the legal systems have converged, the preeminent study of the effects of civil and common laws on finance (La Porta et al., 1998) is based on a comparison of codes—presumably the distinguishing feature of civil law—between common and civil law countries. Unless codes in common law countries were a representative manifestation of the law, then such a study would not be reasonable.

Study by scholars of international law suggests that the historical development of the two families is distinct. Changes in recent years—increasing importance of legislation, increasing use of precedent in civil law countries, and forces inducing harmonization—have made the historical law distinctions less relevant, especially within Europe.[5]

1.1 Further Classification of Civil Law

Legal scholars propose families of law *within* the civil law family. Because some of the accounting and finance studies that are the subject of this analysis (e.g., Bushman et al., 2006; Ball et al., 2008) use a further, four-part partition of legal families as a substitute for the two-part, civil/common distinction, we extend our discussion of legal families.[6]

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[5] A study by Djankov et al. (2003) shows that France is slightly less formalized than Germany, despite the fact that the Germanic family is less formalized than the French family.

[6] The civil law family has been subdivided into the French, German and Scandinavian families.

David and Brierley give only weak support for the further distinction among civil law traditions.

> It would be difficult to find any element which would lead to distinguishing an autonomous Latin, Germanic, Graeco-Italian or even Scandinavian group (David and Brierley 1985, p.128).
>
> …the opposition, albeit very superficial and artificial to our mind, [is] often made between the "Latin" and "German" legal groups (David and Brierley, 1985, p.148).

Despite David and Brierley's reservations, there is nevertheless support for such a four-part taxonomy (e.g., Zweigert and Kötz, 1998). But even here, notice that there is a great deal of "force fitting" to squeeze, for instance, Japanese law into the "Germanic" tradition.

> Eclectic in content, in so far as it took into account a number of different European codes, [the 1898 Japanese civil code] was in the end nonetheless drawn up essentially along German Lines. (David and Brierley, 1985, pp.539-40)
>
> Since 1945…an Anglo-American influence has been at work on, and is sometimes in competition with, the Romanist influence. (David and Brierley, 1985, p.540)
>
> But it is still very much open whether, behind the façade of westernization, Japan really has undergone any kind of fundamental transformation, and whether it has accepted the idea of justice and law such as understood in the West. (David and Brierley, 1985, p.540)

We believe that there is weak support for the "four family" categorization.

1.2 Homogeneity within Families

Accounting studies perform analysis at the company level, and a company is subject to a single nation's law, not a general characterization of its legal family. In this section we go beyond the question of the strength of the distinction between legal families, and ask, "Is the law homogeneous among civil law countries? Is it homogeneous among common law countries?" Only if the *within* differences are small relative to the *between* differences do we have a robust basis for comparison.

Lele and Siems (2007a) investigate the homogeneity of the law <u>within</u> the common law countries India, the UK and the US. They build the study on "functionality," which means that it does not matter whether a particular

protection is met by company law, corporate governance codes, securities regulations or listing requirements. Although these three countries are all common law countries, Lele and Siems find marked differences. Furthermore, contrary to the usual assumptions about the primacy of judge-made law under common law, they observe that in India: "[In all 28 changes of shareholder protection] not a single change is attributable entirely to the authoritative restatement of the law by the judiciary."

La Porta et al. (2006) believe that judges are able more quickly to adapt to changing social conditions, and hence keep investor protections more in tune with the needs of the day. Lele and Siems do not find support in their sample countries:

> [C]ontrary to the predictions of the adaptive mechanism according to which judges in common law countries are deemed to be better equipped to define law on a case-by-case basis… at least in the field of shareholder protection the most common form of bringing changes in the law has been through legislation (p.5).

Legal scholarship is not very supportive of the idea that "within" differences are small:

> Law in the United States is generally seen as adhering to a common law 'family', but today it is far from obvious. In many respects U.S. law represents a deliberate rejection of common law principle, with preferences given to a more affirmative ideas clearly derived from civil law. (Glenn, 2007, p.249)

Another example: Alexander and Eberhartinger (2009) describe a yawning gap between two "Germanic family" countries, Austria and Germany, in respect to their treatment of an EU-mandated requirement for a "true and fair view" applied to financial reports.

There are reasons to believe that the differences between the civil and common law are small and getting smaller. To conduct a reliable study of the effects of legal families on financial reporting, it is necessary to distinguish between the *existence* of a difference and the *importance* of a difference. Existence is a weak basis for an experimental design; only if one can support important, substantive effects on the operation of the legal

system can one justifiably build a comparative study of the effect of different legal systems on financial reporting practice.

The distinction between civil and common law is weak, as is the homogeneity of national systems within their respective families. Can we find support for the "civil common" approach of accounting research within empirical evidence from a narrower field of law usually cited in that accounting research?

2 LAW AND INVESTOR PROTECTION

Now we turn from the general treatment of legal families to the specific provisions of law that form the basis for accounting studies. We review the studies of shareholder and creditor protection, since this is the starting point for almost all the accounting studies of inter-country financial reporting.

La Porta et al.'s (1998) study is cited in accounting as the justification for classifying countries into legal families, despite criticisms of their work. Cools (2004, p.3) comments on the influence of the article: "*Law and Finance* is a standard reference in corporate and financial law."

In their study, La Porta et al. analyze statutes in 49 countries, measuring the protection that they give to investors (shareholders and creditors). They also consider that it is not just the letter of the law, but also the effectiveness of enforcement, that protects investors.

La Porta et al. (1998) has drawn wide attention in two spheres. First, it has been used extensively in comparative empirical studies in finance, economics and accounting. Second, it has drawn attention from legal scholars who have analyzed its accuracy and adequacy. In so doing, their work and the work it has stimulated have expanded our knowledge of the law's effect on markets. We turn first to the second sphere. Without doing this we cannot know

whether the studies in the first sphere, which include the accounting studies that we discuss below, have yielded reliable results.

We classify the critiques into three groups. First, some studies that ask whether the index as created in La Porta et al. (1998) is, *as they have structured it*, adequate for their purpose. Second, other studies ask whether the classification in practice was done accurately. Third, some studies ask whether the index method is informative.

First, La Porta et al. base their conclusions on *statutory* (i.e., code) differences between legal systems. Where differences exist, however, one cannot conclude that corporate stakeholders are treated differently. For example, even when the letter of the law differs—perhaps one finds a statutory provision in one country but not in another—it does not automatically follow that the outcome is different.

> The protection of private persons against arbitrary governmental or administrative action can, for example, be confided to the courts in some countries and in others to internal administrative mechanisms, parliamentary commissions, or mediators (David and Brierley, 1985, p.15).

In other words *a law* must be considered within the context of the legal system. Further to the point raised earlier about the role of case law in civil law countries, Cools (2004) shows that case law, not statutes, in Belgium and France (civil law countries) provides shareholder protection in the form of cumulative voting by shareholders for the board of directors. This aspect of shareholder protection is one of the six items in La Porta et al.'s "anti-director rights index." They score Belgium as zero because this protection is not to found *in statute*.

It may be, for example, that while the one-share, one-vote law (which is one of the items in La Porta et al.'s inventory) is missing from a country, it does not follow that one-share, one-vote voting is not practiced. For reasons of custom, usual business practice, exchange listing, or regulator's fiat, the voting scheme may be widely followed even if not statutorily mandated. In a

related corporate governance context, for example, the Helsinki Stock Exchange recommends that listed companies have audit committees of the board of directors. Though this does not take the force of law, as it does in the US under the Sarbanes-Oxley Act, it is nevertheless usually observed (Fredriksson and Lindahl, 2009).

In comparative studies of law it has long been the practice to go beyond statutes:

> Mittermaier's[7] comparisons of particular areas of law or of legal institutions were both comprehensive and detailed. *He did not stop at the statutory texts*, but went into the reality of law as practiced in the courts, and even into its factual, political and social background (Zweigert and Kötz, 1998, p.55, italics added).

Merryman and Pérez-Perdomo's (2007, p.2) view of a legal family limits the reliability of a method that confines itself to the statutes:

> A legal tradition, as the word implies, is *not a set of rules of law* about contracts, corporations, and crimes, although such rules will almost always be in some sense a reflection of that tradition. Rather it is a set of deeply rooted, historically conditioned attitudes about the nature of law, about the rule of law in society and the polity, about the proper organization and operation of a legal system, and about the way law is or should be made applied, studied, perfected and taught. (italics added).

As Spamann (2006) explains, rules are "multidimensional in content" and furthermore come from multidimensional sources that can result in lack of clarity—or even contradiction. Cunningham (2007), in a different legal analysis, shows how "multidimensionality" of the law defeats the simple rule-by-rule analysis that is exemplified in La Porta et al. (1998). He analyzes the "rules vs. principles" topic—so much advocated and so little analyzed in accounting—in the context of accounting standards (e.g., Tweedie, 2007). Cunningham shows that the "rules vs. principles" choice is a false distinction that cannot be logically defended. The multidimensional aspect of the law also renders rule-by-rule measurement of shareholder protection problematic; among other things, interactions are not considered.

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[7] C.J.A. Mittermaier, born Munich 1787, died Heidelberg 1867.

La Porta et al. are aware of some of these nuances. They mention them, but in their analysis they look at the provisions in the law and tally them. In other words, they acknowledge the limitations of their statute-count, but are unable to control for them in their arithmetic analysis. The researcher should be careful about using the numerical results without full consideration of these limitations. One must accept that any grouping will be imperfect, and there is not much more they could have done, other than acknowledge the limitation of their method.

In sum, with respect to the measures created by La Porta et al., a number of critics have argued that La Porta et al.'s (1998) work is too limited in proposing that laws-on-the-books alone capture the full extent of legal protection, that the statutes may interact, and that laws are multidimensional.

Second, regarding accuracy, there has been a number of criticisms of La Porta et al. (1998) based on their coding. Braendle (2006) makes a detailed comparison of shareholder protection laws in the US (which La Porta et al. scored "5") with laws in Germany (which they scored as "1"). He concludes that the scores do not reflect the extent of the difference, if indeed German shareholders are at any disadvantage at all. Braendle (2006) points out:

- La Porta et al. do not recognize that there may be other ways to meet shareholder protections beyond the way they assign scores to statutes.[8]
- The "0-1" scoring is black and white. There are instances where the provisions are very similar, yet La Porta et al. ratings imply that in the 0 country that protection is completely absent.[9]
- The rating scheme is too US-based. It is based on, for example, a system where there is a board of directors, and doesn't consider other countries' corporate governance practice where there are two boards.
- La Porta et al. are not consistent. In one place they give credit only if the law makes a provision mandatory, but in another place they give credit if the same provision is allowed but not required.

[8] Both Lele and Siems (2007b) and Coffee (2001) also stress the importance of functional substitutes for statute.
[9] See also Cools (2004).

- Seven scores are not enough to judge the extent of shareholder protection.

As noted above, Cools (2004) notes an error in coding for Belgium and France.

Spamann (2010) adopts the La Porta et al. (1998) variables and performs a rigorous study of 46 of their 49 countries. He consults legal experts in every country, reviews the legal codes, and analyzes the legal writings. He finds a number of errors in La Porta et al.'s coding. For example he notes that classifying statutes as mandatory, permitted, or default is done inconsistently in their work.[10] He also finds incorrect coding. (In one case, even the US is incorrectly coded.) He creates two coding schemes to recreate the index under two ambiguous interpretations in La Porta et al. He finds among the individual scored items in their "anti-director rights index" that the correlations with the corrected scores are in the range of 0.3 to 0.7. For the anti-director rights index as a whole, he finds correlations with La Porta et al. of 0.53 and 0.28 for the two indexes. When he re-compiles the scores using correct, consistent scores, he finds that there are no significant differences between common law and civil law systems.[11] Once again we find evidence in investor protection laws that weakens the view that raw categorization of countries into common and civil law categories is of primary importance.[12]

There is yet a third critique of La Porta et al. that creates further doubts about legal origin, which is that their index method, scoring investor rights, is too narrow.

[10] "Default" means that if not mentioned, the statutory provision applies, but companies are permitted to opt out of provisions in framing their corporate charters.

[11] He also finds that in the finer breakdown of legal systems in La Porta et al. (1998) the Germanic and Scandinavian systems outrank the common law.

[12] Note that coding errors are not random. Because La Porta et al. look for them in the written law, when they are sometimes found elsewhere, they are biased toward assigning a "0" where a "1" is correct. Spamann (2010) shows that the errors are more frequent in civil law systems.

Siems (2006, p.40) maintains that a "limited number of variables hardly provides a meaningful picture of the legal protection of shareholders." Lele and Siems (2007b) object to the adequacy of La Porta et al.'s eight variables. They do a comprehensive comparative study of shareholder protection using 60 variables from five countries.[13] They make some other improvements on the numerical analysis in La Porta et al., such as not forcing every variable to be either 0 or 1.

They find that Germany and France (both civil law) are closer to the UK than are the US and India (both common law) to the UK. They conclude that, "legal differences between the five countries does not confirm the distinction between common law and civil law countries" (p.17).

Pagnano and Volpin (2005) introduce political voting mechanisms among countries as a way to explain how shareholder protections arise over time. They include a variable that ranks voting along a continuum from "majoritarian" to "proportional," under the hypothesis that proportional voting mechanisms lead to less shareholder protection. Their data come from 47 of La Porta et al.'s 49 countries. They find that the voting variable, as well as legal origin (common vs. civil), is significant in explaining cross-sectional shareholder protection. However their two variables (origin, voting) are highly collinear, making it impossible to attribute different shareholder protection either to legal origin or to voting methods. To solve that problem they create a panel using data from 1990-1998. In these regressions legal origin loses statistical significance when included along with the voting variable. They conclude that, "In contrast with the results obtained on cross-sectional data, in the panel the origin of the legal system has no additional explanatory power for shareholder protection" (p.1007).

One caution about this study is that the authors <u>use</u> La Porta et al.'s (1998) "anti-director rights index" as the dependent variable. Considering the

[13] The countries are Germany, France, UK, US and India.

several criticisms cited above, one must be slightly skeptical about Pagnano and Volpin's conclusion.

As noted above, La Porta et al. (1998) treat investor protection as a function of both the law and the law's enforcement. They conducted another study (La Porta et al., 2006) using different measures of enforcement. In that work they distinguish between "private" enforcement (e.g., contracting between investors and issuers) and "public" enforcement (e.g., a securities regulator). They conclude that "private" enforcement is important and that "public" is not. They also make some conjectures about why legal origin might lead to different private enforcement. They think they find different disclosure and liability laws, though they do not venture to explain the mechanism that might have led to them.

Their enforcement measures have also been subject to scrutiny. Jackson and Roe (2009) observe shortcomings in La Porta et al. (2006) methods of measuring the enforcement component. Jackson and Roe argue that La Porta et al.'s conclusion—that private means of enforcement work, but public means are unimportant—is a flaw in their research design; specifically their measure of public enforcement. Jackson and Roe (2009) take a "resource-based" view of investor protection: the bigger the country's budget for securities regulation, the more effective the enforcement. This approach uses inputs to measure outputs. It would be infeasible to measure investor protection, so this approach is as good as one could hope for. Their results show that when more resources are devoted to securities enforcement, then markets are more developed. At a minimum, one must note that the enforcement approach that supports La Porta et al. (1998) has been seriously challenged by La Porta et al. (2006) and Jackson and Roe (2009). Both prongs of the 1998 work (the law and the law's enforcement) have been seriously questioned. Those questions have led to later works that improve the understanding of the role of the law on investor protection.

On the basis of careful analysis of La Porta et al.'s (1998) methodology from three perspectives, there seems to be reason for caution in accepting their codes *in toto* and building an empirical study around them. In fact, the *authors themselves* acknowledge the defects and re-create the anti-directors index, which as they report is correlated at 0.60 with their 1998 measure (Djankov et al. 2008, p.455). La Porta et al.'s paper is seminal and highly influential. However, like other seminal works, later investigations have found shortcomings and have made improvements (with some of which the authors agree). As strong, original and important as is this research, to "cut and paste" their early results into subsequent research is not strong assurance of valid results.

3 LAW IN ACCOUNTING RESEARCH

In this section we review and evaluate the literature that uses legal factors to explain variation in financial accounting reporting quality. Our purpose is to arrive at a summary of strongly supported conclusions, to say, "We know this:"

As scholars perform research on the factors that determine accounting quality, they have been adding new variables beyond those that measure legal aspects. Without criticizing this effort, our question is not "How well do we understand the role of institutional factors on accounting quality?" It is, "What do we know about the influence of the law?"

3.1 The Law

Any interdisciplinary research, and in particular that exploring the interaction of the law and financial reporting, rests on a fundamental knowledge of two disciplines. We find that although law is invoked as a determinant of reporting quality, there is a poor understanding of the law.

There is little to say about the theoretical justification for using the La Porta et al. (1998) "civil" vs. "common" (**CC**) scores in accounting research. We find no references to comparative legal studies in accounting literature that invokes law.

Where one does find some discussion of the effects of legal families, it tends to be confused:

"Common law countries are likely to exhibit greater shareholder protection than code law countries because their public shareholders are more willing to provide funding to companies" (Ding et al., 2007, p.12). If anything, the direction of causation probably runs the other way: investors invest because of greater protection.

"[C]ommon laws are adapted to contracting in open, public markets, while code laws are appropriate for contracting between a small number of parties" (Ding et al., 2007, p.12). This by no means enters the distinction between civil and common law, as described above.

"Code law (e.g., French and German law), on the other hand, was developed to allow governments to control setting and interpretation of laws" Soderstrom and Sun (2007, p.27). This shows an imperfect grasp of the development of the law. Both common and civil law are governmental functions, and both serve the purpose of setting rules for an orderly society: "A government of laws and not of men." Both civil law and common law aim to effect the principles of certainty, equity, and flexibility in the face of changing circumstances (Merryman and Pérez-Perdomo, 2007, chapter 8).

"Common laws—including accounting standards—evolve by becoming accepted in practice" (Ball et al., 2000). It does appear that common law was accepted, rather than being imposed. The <u>same</u> can be said for civil law (Glenn, 2005, p. 31). As noted above, legislation plays a greater role today

relative to court decisions, but "general acceptance" is not a distinguishing feature of common law.

One of the first studies to embed legal family at the heart of international accounting, and the one most widely cited in the accounting literature, is Ball et al. (2000). The hypothesis development asserts that civil law countries develop accounting standards under a more "politicized" process. No source for this assertion is given. We have not found this in our review of legal scholarship. There may exist evidence that regulatory processes in civil law countries are highly politicized; if so, the study would have more credibility by citing it.

Further weakness in the matter of law is revealed in statements such as "Common law enforcement is a private matter, involving civil litigation" (p. 13). Most basic law texts distinguish between private and public law: "A fundamental distinction is made in all civil law systems between public and private law. That classification, which is only latent in common law, is basic to our understanding of the civil law" (Glendon et al., 1982). Private law governs relations between individuals, while public law governs relations between the individuals and the state. While common law does not make as sharp a distinction between the two as does civil law (see Merryman and Pérez-Perdomo 2007, chapter 9), common law most certainly includes the government. Common law cannot be described as "a private matter." [14]

Beyond the shortage of supporting legal scholarship, there is a logical shortcoming in the "politicization" argument. They contrast civil and common as: "code law systems with highly politicized influence versus common law systems in which accounting practices are determined primarily in the private sector" (p.3). Although the statement is not entirely clear, it implies that since accounting standards in common law countries are

[14] The authors do not recognize, perhaps, that the Securities Act of 1933 and the Securities and Exchange Act of 1934 are codes of investor protection.

"determined primarily in the private sector," then in civil law countries they must be developed in the governmental sector. Alexander and Eberhartinger (2009) support this view. That being so, then governmental processes are "highly politicized," implying that private sector processes are not. It is not apparent why political forces (from "major political groups") could not be brought to bear on a private-sector rule maker. In fact one can call to mind instances of just such pressures.[15] These "stakeholders" presumably have the same objectives, regardless of country, so it is not compelling to assert it is only in civil law countries that they influence accounting standards. Conceivably they could be more successful in civil law countries, but such a conclusion would require some evidence.

In Ball et al. (2008) legal origin is also viewed as a proxy for the degree of political influence on financial reporting: political forces, not market forces, determine reporting.

Guenther and Young (2000, p.59) take the same view that in common law countries the government stays out of standard-setting. They argue that in the U.S. and the U.K. "accounting principles are developed in the private sector by the accounting profession. Influence from the public sector is relatively small." This is certainly debatable, based on footnote 15 as well as the fact that the SEC retains power to set accounting standards. It seems plausible that their effect is more than "relatively small" in that the FASB almost surely considers the SEC's opinion before making its pronouncements.

Having assumed the link between legal family and the politicization of the law, Ball et al.'s (2000) next step in the argument is that the "major political groups" create governance systems in the civil law countries that reward the

[15] The FASB (private sector) standard setter was exposed to severe political pressures when it attempted to impose a standard that would show executive stock option expense on the income statement. Also see Zeff (2003, p.199) for descriptions of political interference in accounting for exploration costs and tax credits.

insiders such as managers, unions and bankers, at the expense of smaller shareholders.

The story and the empirical design equate civil law countries with "insider management" countries, and common law countries with "outsider" countries. This seems to be inconsistent with the facts. Zimbabwe (common law) does not have more widespread shareholdings than Germany. Within the developed world, the Netherlands is characterized as an "outsider" ownership country (Daske et al., 2006), even though it is civil law.

Ball et al. (2000) may be arguing that it would logically follow that a highly politicized regulatory system would create governance practices that disproportionately reward managers, unions and bankers, at the expense of smaller shareholders. Violating the rights of minority shareholders, of which this seems to be a variation, is a criticism of governance systems sometimes cited (e.g., Johnson et al., 2000; Atanasov et al., 2008; Atanasov et al., 2009). The condition for this situation logically seems to come from high concentrations of ownership, rather than from legal family. As La Porta et al. (2007) show, there is a high correlation between ownership and legal family. But the causal link would run from concentration to denial of minority shareholders' rights. If the civil law, and not concentration, induces that denial, there is neither logic nor evidence to support that connection.

The last step in the argument is that the system that protects these insiders results in different quality of financial reports. Because the insiders have "private 'inside' access to information" (p.15), "the demand for timely public disclosure in code-law countries is not as great as in common-law countries" (p.15). From the insiders' perspective, it seems plausible that they have less need for public financial reports. But what about the outsiders—the minority shareholders? Are they satisfied that because the insiders do not need high quality reports, then they, the minority holders, will have to do without? It is not supportable to classify as "inside" the very countries that are seeking to

expand share ownership as a means of financing (e.g., the Neuer Markt in Germany, Nouveau Marché in France). It is not supportable to classify as "inside" the countries (i.e., those dominated by "insiders") that acquiesced in the adoption of the shareholder-friendly IFRS by the European Union, which consisted of 14 civil law and two common law countries at the time of adoption.

For the most part, accounting studies justify their use of the legal family categorization by appeal to La Porta et al. (1998). With few exceptions, such as those cited just above, they do not attempt a logical connection between the way the law evolved in civil and common law countries, and the means by which that tradition has resulted in different financial reporting practice.

In sum, the accounting research shows an inadequate understanding of the law. This severely weakens the principal research objective, which is to show the effect of the law on financial accounting. To reiterate, interdisciplinary research requires knowledge of (at least) two disciplines. This research is weak in understanding how the law might map onto financial reporting.

There was some brief mention of legal systems in accounting before 2000 (the date of Ball et al.). With a single exception these mentions were offhand, and not a major aspect of the research. The exception is Nobes (1998). He makes the point that accounting systems in former colonies are the systems of the colonial parent. The legal families of the former colonies are the legal families of the colonial parent. Thus, there is no cause and effect from the legal system to accounting practice. There is however a high correlation, which seems to have confused later researcher into believing that the one caused the other.

3.2 The Fallacy of Division

This refers to the fallacy of attributing to each member of a set what is true on the average for the set as a whole.

La Porta et al. (1998) sought patterns, to establish where certain legal groupings had detectably different effects on investor protection. They found, on average, that they do. In particular they found that the average common law country had stronger laws than civil law for protecting shareholders and creditors.

How have their findings been used to investigate the effect of law on financial reporting?

With some exceptions, the findings are based on the fallacy of division: what is true on average is true of the parts. In application, what is true for the legal family on the average is also true for each individual country's law. A typical test regresses data about accounting quality for a firm on the legal family (**CC**) for that firm's country.[16]

Exactly the same flaw is found in studies (e.g., Francis et al. 2009) that use scores according to the Germanic/French/Scandinavian categories. According to La Porta et al.'s (1998) findings, if one made a random draw from the Germanic sample, one would expect a lower frequency of laws allowing shareholders first opportunity to buy new issues of stock than in a random draw from the common law countries.[17] This seems appropriate when one wishes to characterize families of law. But that is far from saying that this form of protection—first opportunity to buy—is a feature of U.S. law but not German law (even in their scoring, there is no difference between the countries). Likewise, their finding that shareholder protection is better in Germanic law countries than in French law countries does not imply that

[16] Armstrong et al. (2010), Ball et al. (2008), Barth et al. (2010), Brown et al. (2006), Bushman and Piotroski (2006), Bushman et al. (2004), Daske et al. (2008), Ding et al. (2007), Francis and Wang (2008), Frost et al. (2006), Gaio (2010), Hung (2001), Khanna et al. (2004), Kwon et al. (2007), and Webb et al. (2008)

[17] This is one of La Porta et al.'s measures of shareholder protection.

shareholder protection is better in Germany than in France (by their scoring, it is not).[18]

We believe that for purposes of characterizing shareholder and creditor protection among families, La Porta et al. (1998) use a reasonable approach (notwithstanding the criticisms reviewed above). La Porta et al.'s comparative study uses an equal weighting of countries—one observation per country. But when one designs an accounting study, using widely available computer-readable databases, one does not end up with an equal weighting of firms across countries. Using La Porta et al.'s equally weighted scores is poorly suited to a study of large companies. One might find that a majority of companies from the six countries in the Germanic legal family were German companies. Yet when the researcher applies La Porta et al.'s findings, he or she is assigning a 1/6 weight to Germany's laws and 1/6 to Taiwan's laws, etc. (e.g., Ball et al., 2008).[19] Taiwan's legal system is accorded this 1/6 weight despite the possibility that there might be no companies from Taiwan in the sample. In general, this typical accounting experimental design gives disproportionately too much weight to the laws of Peru, Jordan, Sri Lanka, etc., and too little weight to the laws of France, Germany, U.S.A., U.K. and other large industrialized countries.

Even when country scores are used, another fallacy is present: what is true in the law is true of accounting. This comes from the implicit assumption that all companies operate in closed economies. Consider a creditor. If he or she wishes to assert a legal claim against the borrower, he or she will use the country's law. In other words, the "consumer" of the law is the citizen of that country. Now, consider a small company that reports financial performance to its owners. It will be bound by the accounting rules of the local economy (local GAAP). In just the way creditors "consume" national

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[18] Merryman and Pérez-Perdomo (2007, p.ix) note that France and Germany are "least typical" of the French and German families, since most civil law countries have adopted elements of *both* German and French law, but Germany adopted little of French law and France adopted little of German law.
[19] The weighting in the **CC** scheme is 1/31 to Germany, 1/31 to Taiwan, etc.

laws, the market "consumes" locally determined accounting rules. But suppose that the company is quite large, and cannot meet its capital needs from local investors or stock exchanges. Often, these large companies will cross-list on other countries' stock exchanges. The company will now be bound by *extra-national* accounting requirements. To be listed on U.S. exchanges, until very recently (2007) the company was required to show (audited) income prepared under U.S. GAAP. It is not unusual for a company from a civil law country to cross-list on a common law country's stock exchange; Pagnano et al. (2002, table II) give strong evidence of this. This pattern further confuses any effect of **CC**.

Most accounting studies draw from databases that include predominantly large companies; that is, the companies that are most likely to be bound by *extra-national* accounting rules. As a matter of research design, a number of studies, contrary to facts, assumes that the characteristics of the company's nationality dictate the quality of its accounting.[20] This ignores the fact that the "customer" for the company's financial reports is the global, and not merely the national, market. The typical test of accounting "quality" regresses the company's accounting on characteristics of its national law (at least in those studies that use country scores and not the even weaker **CC** approach that assumes the company is subject to a weighted average of civil or common country laws).

In summary, the research in this area is often based on testing hypotheses that have not been thoughtfully adapted from what law and finance scholars have discovered about classifying legal systems into families. The legal findings have not been adapted to *company-level* analyses that test the conditions faced by the unit of analysis: the company.

3.3 Design of Studies

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[20] Armstrong et al., 2010; Brown et al., 2006; DeFond and Hung, 2007; Ding et al., 2007; Hail, 2007; Leuz et al., 2003; Verriest, 2007; Wysocki, 2005

In this section we review the statistical methods of analyzing the effect of law on reporting quality, and find some common approaches.

3.3.1 The Variables: Attribution to Previous Research

A large literature has accumulated in accounting research that draws on the "law and finance" studies, mainly La Porta et al. (1998). How well or poorly does the use of La Porta et al. serve the research aims of learning about the effect of the law? We do not critique the whole scope of the research design, or the use of control variables, or the way other research questions are pursued. We address the narrow question of how studies analyze of the effect of law on financial accounting quality.

Some studies justify the La Porta et al. scores by representing La Porta as having <u>found</u> accounting quality to be higher in the common law family.

- Bailey et al. (2006) say that they use an "index *constructed by* La Porta et al. (1998) to rate the quality of information in annual reports across countries" (p.187, italics added).
- Soderstrom and Sun (2007, p. 4) say, "They [La Porta et al. (1998)] find that common law countries have better accounting systems and better protection of investors than code law countries."
- Hung and Subramanyam (2007, p.624) write: "[in Germany] we can be assured that there is adequate enforcement of accounting rules (La Porta et al., 1998)."

What <u>do</u> La Porta et al. (1998) have to say? Their shareholder and creditor legal measures are silent on financial reporting. In their third measurement, enforcement, there is some indication of the quality of enforcement of accounting. In their analysis, they assess enforcement by considering these measures.

- Efficiency of the judicial system
- Rule of law
- Corruption

- Risk of expropriation
- Likelihood of contract repudiation by the government
- Accounting standards

The measure of accounting standards is not theirs. They import scores from a study of 1990 annual reports (p.1125). Forty-one of their 49 countries are covered. Accounting enters as one of 6 measures in one of the 3 categories of investor protection. It establishes that the "score" reported by an accounting rating organization (which is omitted from their references), combined with the other five measures, is related to legal family.

A claim that La Porta et al. found accounting quality to be higher in common law countries is tainted by the fallacy of division (see above): it is higher on average for common than civil law, but it is nevertheless higher for Scandinavian (civil law) countries than for common law countries. The data, at least applied to later accounting studies, are out of date. This is a good thing! If, contrary to the evidence, accounting was an important factor in conclusions about the superiority of enforcement in common law countries in protecting investors, then a study that regressed accounting quality on **CC** (or La Porta et al.'s enforcement score) would be misspecified. It would be regressing accounting quality on a measure that is, in part, accounting quality. What could one learn from a significant coefficient on **CC**?

Many studies simply refer to La Porta et al. (1997, 1998) to support their research design that includes legal protection of investors. They often cite Ball et al. (2000) as having "shown" or "found" or "provided evidence" or "documented" the saliency of legal family on accounting. Several studies import the civil-common <u>dummy</u> (see footnote 16). In a previous point about the "fallacy of division" we maintained that the assumption that all, e.g., civil countries are the same is misguided. Other studies (in some cases the same studies) import the <u>scores</u> they find in La Porta et al. (1998) (see footnote 20). Still others <u>refer</u> to La Porta et al. (1998) or Ball et al. (2000) as a basis for classifying companies, without using a law score as a

regressor: Daske et al. (2006), Guenther and Young (2000), Lara and Mora (2004), Pincus et al. (2007). Studies that use variables because they have been used before, without justification, contribute little to establishing the theoretical link or causal relationship between legal origin and accounting.

Studies often select smatterings of what they see in La Porta et al. This is problematic because first, the reasons are seldom given. Kwon et al. (2007) include La Porta et al.'s anti-director rights index (one of their several measures for shareholder protection found in the law) and they include La Porta's enforcement score. Why do they use only one of the shareholder protection measures? And why do they omit La Porta's third score, for creditor protection in the law? This is a puzzle.

Francis and Wang (2008) study the effect of Big Four auditors on accounting quality. As independent variables that measure shareholder protection, they include both the civil-common indicator variable and La Porta et al.'s (1998) anti-director rights index (ADRI) variable. This deviates from the approach taken by La Porta et al. The link La Porta et al. propose is from stronger ADRI to better protection. By adding up the ADRI and other scores, and grouping them into legal families, they concluded that common law countries were better. N.B.: the civil/common distinction was not derived *independently* of the ADRI. To imagine that both common law and high ADRI scores contribute to protection is an approach that is inconsistent with La Porta et al.

There are still other papers that include civil-common *in addition to* the country measures that La Porta et al. (1998) use to build up their conclusions about civil common. Bushman and Piotroski (2006) structure their study to use one of La Porta et al.'s (1998) underlying factors of their civil/common conclusion in one place (table 4) and two of the factors in another (table 6), while *also* including the civil-common dummy variable. See Bushman, Piotroski and Smith (2004), Francis et al. (2009) and Frost et

al. (2006) for other examples of mixing family classification with the factors that went into the family classifications.

One study that shows understanding of La Porta et al.'s (1998) formulation is Brown et al. (2006). It performs regressions using either the **CC** or the ADRI variable. It is silent on the reason, but one might infer that the high pair-wise correlation, suggesting that legal family and anti-director rights are alternatives, leads to this empirical specification.

Guenther and Young (2000) use both ADRI and **CC**, but theirs is not a regression analysis and they do not justify **CC** on a basis of La Porta et al. (1998). The research design is reasonable.

3.3.2 The Variables: New Variables for the Law

One study of which investigates the effect of law on earnings conservatism (Bushman and Piotroski, 2006) includes a variable called "judicial impartiality." It comes from a survey where respondents answer whether a trusted legal framework exists to challenge the legality of government actions. The authors do not explain the link between citizen trust in government and better financial reporting. They do, however, interpret this measure of trust in government as a measure of "efficiency" (p.126). There is no reason to believe that a slow, cumbersome legal system could not nevertheless deliver fair, honest, unbiased justice. ("Though the mills of God grind slowly, yet they grind exceeding small." - Longfellow). This "impartiality" variable is uncorrelated with legal origin. Perhaps it is unrelated to the civil-common legal systems because trust in government is not a distinguishing feature of legal families.

None of the studies acknowledge criticisms of La Porta et al. (1998) in the literature of the law, and are either unaware of, or too early to take

advantage of, the authors' own correction of deficiencies in La Porta et al. (1998); that is, Djankov et al. (2008).[21]

We have suggested several reasons to question the strength of research designs, both the data used and the variables chosen. Presumably when one uses both the input variables (e.g., ADRI) and also the output variable (**CC**), one has a high level of collinearity. It is well known that the coefficients are unreliable in this situation. Since so much of the interpretation of the role of law rests on the direction and significance of the coefficient, there is reason to doubt the strength of the conclusions.

3.4 Findings

In this section we try to "step back" and see what the accounting research literature tells us about the law. What have we learned?

When little is said about why a variable enters a regression, then there can be little to discuss in the findings. It is not unusual to find this. The entire discussion of why Hail (2007, p.9) includes legal protection measures is "[list of variables] all taken from La Porta et al. (1998)." This seems weak motivation. The entire discussion of the results is "… investor protection variables are negative and highly significant" (p.10).

Francis and Wang (2008) study the effect of Big Four auditors on accounting quality. They pay little attention to their use of legal scores, either in explaining their purpose or interpreting their results.

There are other examples of using various La Porta et al. (1998) measures without much interpretation. Kwon et al. (2007) study the effect of auditor industry specialization on accounting quality. They discuss law in a paragraph. The "discussion" is simply that they import scores from La Porta et al. (1998).

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[21] Available in working paper form from 2005.

Alternately, they include a variable in their regressions to reflect the effect of investor protection, either enforcement or anti-director rights (ADRI). The two scores are correlated with each other at .25 and .31 (pp.41-42). The enforcement index gets highly significant results (their table 5). They state that "similar results are obtained" for ADRI. This is curious in that two variables that don't have much to do with each other (i.e., low correlation) give the same results. One wonders how the enforcement score affects audit quality in contrast with the ADRI score (minority shareholder protection). There is no discussion in the paper.

Sample composition seems to matter. Bushman and Piotroski (2006) find that legal origin is associated with accounting conservatism (a measure of quality) in their full sample. Two-thirds of that sample consists of firms from the U.S., the U.K. and Japan. When the test is performed on the one-third of firms that are not U.S., U.K., or Japan, the result goes away: "legal origin is unable to explain variation in bad news timeliness [conservatism]" (p. 139). One thing we do learn is that differences within legal families are apparently large.

Perhaps because Bushman and Piotroski's primary research interest is not in this study on legal protection, their "legal protection" results are dismissed hastily. The legal family indicators are significant while the legal protection variables are not. This is puzzling in that the basis for La Porta et al.'s 1998 study is that the legal protections differ systematically according to the legal family. Finding no connection between legal *protection* and accounting quality, but finding a connection between legal *family* and accounting quality deserves some consideration, but gets almost none.[22]

[22] The legal family dummy variable applies the "weighted average" score to each company. The weakness in this approach is discussed above.

The research above studied measurements of "accounting quality." One recent study estimates market reaction to the adoption of IFRS in Europe (Armstrong et al., 2010). It uses a civil-common dummy on the basis that accounting quality is lower in civil law countries. The basis for this is that Ball et al. (2000) reported that they found that effect (see critique above). They find statistical significance to the coefficient of the dummy variable. Being a civil law country decreases the market-adjusted (but not risk-adjusted) returns by 0.1%. Whether this is economically significant is arguable. We doubt there is much to be learned about the law's effects based on such a small result. And of course, whether the civil-common dummy is really reflecting the effect of legal differences, or the effect of more fundamental differences that happen to be correlated with the country's legal family (an omitted variable), is not determinable from their results.

The paper by Pincus et al. (2007) offers an interesting opportunity to consider the common-civil differences in financial reporting. They study whether an "accrual anomaly," widely studied with U.S. data, happens outside the U.S. Market efficiency implies that a company's accruals are associated with future share returns in a predictable way. The "anomaly" is the failure of this prediction. It is a deviation of share returns from their values based on the theory. The paper asks whether the anomaly is observed in non-U.S. data and whether it might be associated with legal origin. (They think it might be associated with legal origin because a "stakeholder model[23] of corporate governance leads to a more widespread appreciation of the persistence characteristic of accruals.") The amount of the deviation can be taken as a measure of market inefficiency. They include the common-civil indicator variable in their regressions.

In their analysis they form one group of firms from 9 common law countries and another group from 11 civil law countries. Analyzing the two groups separately they find the anomaly is more pronounced in common law

[23] They think this is a civil law characteristic.

countries. They offer us an unusual opportunity by reporting data on the 20 individual countries. We look at these data to see whether the overall, "common is different from civil" conclusion is sound.

Observing their differences in their measurement of the anomaly, we rank the 20 countries by the degree of market inefficiency. Following their pooled results (9 common compared with 11 civil) one would expect to find that the common law countries systematically differ from the civil law countries.

Insert figure 1 about here

We show in Fig. 1 these "deviation" measures (the difference between the regression coefficients, for 20 countries). We label these "inefficiency measures," since the farther they are from zero, the more inefficient is the country with respect to the pricing of accruals.

The range of coefficient differences is larger for the civil law sample, but the very low end of the range is the result of two extreme observations. Of the 11 inefficiency measures for the civil law countries, 9 of them are within the range of the common law countries. In other words, there isn't much here to support a claim that common and civil law countries differ.

We analyze the 20 scores with one-way analysis of variance (ANOVA). The F-statistic does not reach a significance level of p=0.05, so we cannot reject a null hypothesis that civil law and common law are no different in the ways they influence accounting in respect of the "accrual anomaly."

Their data contradict the statement that "the accrual anomaly is related to the presence of a common law tradition…" (Pincus et al., 2007, p. 180). This evidence cannot support a detectable difference between the legal families.

A careful review of the literature turns up only weak results, weakly interpreted. **CC** sometimes achieves *t>2,* but beyond that there is little than can be said about the interaction of law with accounting.

3.5 Methods

The typical starting point in the accounting research is that "others have shown" that investor protection differs between law families. On that basis, the civil/common dummy is the favored regressor. However, research in law and finance has developed reasons to suspect that there are other factors that may be correlated with **CC** that are more plausible explanations. Unless this correlated omitted variable possibility is considered, the threat of spurious correlation between accounting quality and legal family is present, and limits the credibility of results and conclusions. In this section we explore the accounting literature that assesses the effect of law on financial accounting in terms of its validity.

Suppose, despite the limitations suggested in our review of La Porta et al. (1998), that we could be convinced of the saliency of the "legal family" distinction, and reliance on statutes-as-written as a reasonable reflection on differences in investor protection. Even if we accepted this, it is necessary to see how La Porta et al.'s scores were applied. In this section we return to La Porta et al. to see how their findings are used in framing the experimental design found in the accounting studies.

One might say, "Either there are observable differences in respect of accounting between civil law and common law countries or there are not. In the end it's an empirical matter, isn't it?" Well, no. Finding differences in financial reporting between countries is one thing; attributing them without any justification to the type of legal system is taking things too far. The problem could be a matter of "confounding" if there are other factors besides **CC** that affect accounting quality, or else it could be a matter of "spurious correlation" if there are other factors instead of **CC** that cause the variation in

accounting quality. There are, for instance, studies that show that cultural differences can lead to different accounting practice (Association française de la gestion financière 2007[24]). Unless one can find, within the legal system, reasons that could plausibly account for the observed differences, one might attribute to legal families causes that come from other sources: culture, development of markets, or voting mechanisms. A relationship between the law and financial reporting could be the same kind of spurious correlation detected by Pagnano and Volpin (2005), discussed above.

Cools (2004) notes that ownership concentration is greater in civil than in common law countries. This vests more power in the shareholders in civil law countries, so one could spuriously attribute to the legal system differences that actually arise from concentrations of ownership.[25]

The first methodological concern is that accounting studies accept that the **CC** variable is really measuring legal factors, without considering other plausible factors that might be associated with investor protection. The second concern is the relationship of financial accounting to other types of investor protection.

In respect of the law, one might be convinced that the work of La Porta et al. (1998), Djankov et al. (2008) and others is strong support for the ranking of common law countries above civil law countries in the strength of investor protection. Similarly one might be convinced that investor protection is stronger in Germanic law than in French law countries, etc. If one accepts this, does it follow that financial reporting, as one aspect of investor protection, should be better in common law countries?

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[24] This collection of essays by French finance practitioners mentions cultural differences in the application of IFRS; e.g., essays by Allard and de Greling, p.11, Danjou p.21, and Jardin p.31.

[25] More properly one should say "voting concentration" rather than ownership concentration, since she notes that there are pyramidal schemes for increasing voting influence above that of share ownership.

This leap, from investor protection as reported by La Porta et al. (1998) to earnings quality, founders because at least with respect to the biggest firms (the ones most often studied in the accounting literature) the general level of investor protection is quite distinct from the specific level of accounting integrity, for two main reasons.

First, auditing usually follows a set of international standards (International Standards of Auditing) (Giles et al., 2004), whereas bankruptcy laws, minority shareholder rights, etc., have no such international standards. They are locally determined.

Second, accounting reports carry audit opinions by the Big Four auditors. These auditors compete globally. Poor, substandard performance in one country affects the reputation of the global firm. Again, unlike the other investor protections, this imposes an international, not purely local, process on accounting quality. Academic research supports this view.

> We conclude that the role of investor protection on earnings quality around the world is mediated by the incentives of Big 4 auditors to enforce higher earnings quality as investor protection regimes become stricter… Our study [shows] that stronger investor protection regimes per se do not appear to affect the properties of accounting earnings without also considering the quality of enforcement by Big 4 and non-Big 4 auditors (Francis and Wang, 2008, p. 58).

Simunic and Stein (1987) also make the general point about reputation capital.

In both of these methodology issues, the question is whether the design can achieve internal validity: can the researcher be confident that the independent variables are responsible for variation in accounting quality?

In addition to concerns about the strength of the **CC** dichotomy as having systematic effects on earnings quality, there is a further concern with the use of the dummy variable. This specification implies small differences *within* a

legal family, and large differences *between*. Much of the work has shown that there are large differences *within* each legal family (e.g., Siems, 2007; Lele and Siems, 2007a; Jackson, 2007, Fig. 3).

In a previous section we raise three concerns about the "fit" between La Porta et al.'s (1998) work and accounting quality: the small and indirect role of financial reporting in their work, the importance of international auditors and international audit standards, and the assumption that companies operate in closed economies. Particularly when La Porta et al. show how they built up their "common is better than civil" evidence, it is hard to justify using a dummy ("one size fits all") measure of the law when the underlying data, which are created at the country level, are available.

Failure to consider alternative explanations invites unsupportable conclusions. West (2002) discovered that teams from countries of the French legal family had better success in the World Cup. He wrote:

> Perhaps teams from countries with systems based on the French model (such as 1998 champions France and 2002 champion Brazil) perform well due to the remaining vestiges of the Napoleonic Code that somehow remove discretion from coaches and managers in the same manner that the civil law system curtails judicial activism. Or maybe—just maybe—some other forces are at work. (p.5)[26]

The matter of plausible alternatives, or (stated more statistically), spurious correlation, leads us to suggestions for improving future research designs.

4 GUIDE FOR FUTURE RESEARCH

On the basis of our review of the accounting and law literature, we propose some ideas that may help to draw stronger results as to the connection between financial reporting and legal systems. Economics and finance have studied diligently the interrelationships of investor protection with the law, and as investor protection is also a concern of accounting scholars, it is a fruitful area into which to extend research.

[26] This quote was lifted shamelessly from Siems (2007).

4.1 Learn the Law

As noted throughout our paper, this is interdisciplinary research, and demands that the researcher be conversant with the structure of the law in order to understand <u>how</u> it affects securities regulation, etc. There is a wealth of material by lawyers and finance scholars on nations' laws. Much of it goes far beyond the seminal work by La Porta et al. (1998). Spamann (2010), for example, has directly consulted with legal experts in 46 of La Porta et al.'s 49 countries. He does this to go beyond the "black letter" law to understand how it is implemented in the nation's judicial system, and to understand nuances and interpretations that are not revealed in a 0-1 coding of, say, "management does not stay" under bankruptcy law (La Porta et al. 1998).

We hope that the survey in the earlier part of this paper will be a starting point to identify the relevant literature.

4.2 Choose the Right Variables

The target of La Porta et al. (1998) and many subsequent works was the broad area of investor protection. While financial reporting is also investor protection, it is not <u>all</u> of investor protection. It may be, for example, that blocking shares from being sold just before an annual meeting is one aspect of investor protection (La Porta et al. use it), but not credibly connected with the transparency of financial reporting. On the other hand, it might be argued that mechanisms to protect minority shareholders (another measure in La Porta et al.) have an effect because the firm's management must meet the demands of those outside the "inner circle" of closely connected family members or bankers, a circle which may not have a taste for high levels of accounting transparency.

Studies often use "enforcement" measures as La Porta et al. (1998) did, as a complement to the text of the law. The point we make here is to be selective

about what that index, taken from another source for a different purpose, is really measuring.

Some studies (e.g., Byard et al., 2011) use World Bank scores (Kauffmann et al., 2009). It would be a remarkable coincidence if these "governance indicators" were related to the level of investor protection provided by financial reports, as a careful analysis of the scores shows. Kauffmann et al. themselves note that the indicators are "a first tool for broad cross-country comparisons…They are often too blunt a tool to be used in formulating specific governance reforms…" (p.5). There are no original data in Kauffmann et al.; it is a compilation of 35 surveys taken by other organizations. They form six summary indicators, some of which are obviously inappropriate for enforcement of reporting; e.g., the ability of citizens to participate in selecting their government. But even within a potentially appealing category like "regulatory quality," one finds all manner of irrelevant inputs: trade policy (p.43), how problematic is crime (p.44), price controls (p.50), how easy to start a company (p.53), investment climate for rural businesses (p.58), importance of tax evasion (p.60). Similarly, "rule of law" (Armstrong et al., 2010; Boonlert-U-Thai et al., 2006; Daske et al., 2008; Leuz, 2010): kidnapping of foreigners (p.47), violent crime (p.50), money laundering (53), access to water for agriculture (p.58), trafficking in people (p.69).

Yes, it would be possible to cull from the 441 variables in Kauffmann et al. a selection of variables that are plausibly associated with transparent financial disclosure. However there are more focused indicators already available. The most popular measures are those taken directly from La Porta et al. (1998). They are used by, e.g., Frost et al. (2006). They were developed with investor protection in mind. But it would be a mistake to use La Porta et al.'s 1998 data, because La Porta et al. (2006) have created a refined index of investor protection which improves, *in their opinions*, their earlier work. It

uses data collected from attorneys in the sample countries, and avoids such broad measures as "rule of law" in their 1998 work.

One has another choice. Jackson and Roe (2009) offer an index also targeted at securities law enforcement. It competes with La Porta et al. (2006), but the researcher has at least an enforcement index that might really measure enforcement.

Greater care in selecting, explaining and justifying the "legal" variables will lead to a better, more reliable understanding of the law's effects.

*4.3 Abandon **CC***

When doing firm-level research (this has been 100% of accounting studies of the law to date) there is no justification for using aggregated data when the component data are easily available. The common/civil measure is an aggregation across countries and it does not describe investor protection conditions in any one of the countries. The same is true for the Scandinavian/German/French family indexes in La Porta et al. It is a mixture of conditions that exist in the data point's country along with several other countries that are irrelevant.

Consistent with an earlier recommendation, we advise that the researcher go beyond La Porta et al. (1998). In fact it would be a serious mistake to use the data they find there, since those same authors have taken heed of the criticisms of others and have published an amended, corrected scoring for their 49 countries (Djankov et al. 2008).[27] Detailed studies by others offer an even greater range of choices, some of which may fit better with the financial accounting focus.

[27] La Porta et al. (2006) and Djankov et al. (2008) both propose scores for shareholder protection that they believe improve on their earlier work (La Porta et al., 1998). The first of these references uses a different set of variables and verifies the scoring by consulting with attorneys in 49 countries. The second reference revises the scores reported in La Porta et al. (1998) in response to criticisms (all of which are covered, above). It also offers a second index that it concludes is better.

4.4 Dare to be Different

While the "common/civil" approach was a reasonable place to start, the review of the legal literature above suggests that as legal systems exist today (e.g., the securities <u>codes</u> in the US) the relevance of the law family distinction is of doubtful explanatory power. There have been beginnings of other ways to classify legal systems using categories that are more likely to reflect differences in practice today (e.g., Siems, 2007). One problem that Siems' work addresses is the "legal transplant" problem (Milhaupt, 2001), referring to the major alterations a legal system undergoes when moving from, say, the UK to Malaysia. Although it is simple to classify Malaysia as a common law country, it ignores the alterations that took place along the trip from England, and leads to conclusions like "Their standards derive from common law sources that are viewed as high quality…However their preparers' incentives imply low quality" Ball et al. (2003, p.235). It is by no means clear that the "low quality" derives from "preparers' incentives," implicitly ruling out features of Malaysian law, both as written and as practiced, that deviate from legal practice at the Inns of Court. New avenues of inquiry exist, and exploring them promises to yield new and more informative results.

4.5 Don't Be Confounded

There are reasons to suspect that there could be other explanations for inter-country variation in accounting quality. It has been proposed that language (Stulz and Williamson 2003), ownership concentration (Cools, 2004), management power (Cools, 2004), spending on regulation (Jackson and Roe, 2009) and other factors can cause differences in reporting quality.
To confront this "correlated omitted variables" problem, it is not good scholarship, nor does it contribute to robust results in respect of legal influences, simply to include **CC** and ignore the rest. It is by no means a simple matter to disentangle the separate effects of correlated factors, but it

is not always impossible. Consider the discussion of Pagnano and Volpin (2005) above.

4.6 Think Globally

As discussed above, the forces that shape disclosure are not confined to the country of residence. Larger firms that trade on foreign stock exchanges are subject to securities laws of that foreign country. Stock exchanges have listing requirements that may go beyond national laws. The New York Stock Exchange required audit committees before they were mandated by the Sarbanes-Oxley Act of 2002. There is documented evidence that cross-listing influences the disclosure of information (e.g., Fernandez and Ferreira, 2008; Hope et al., 2011; Lang et al., 2006)

The econometric approach is straightforward. An indicator variable could be used to signify a cross-listing. It could be cross-listing or no, or it could be a set of dummies for different exchange if it is believed that disclosure regulation differs in important ways. Or the analysis could be performed with and without the cross-listed firms. Or the stock exchange listing requirements could be studied for provisions that might affect a foreign lister in ways that differ from its home country. This last point could become quite complex, but the other methods are easily implemented.

5 CONCLUSION

We have traced scholarship that undergirds accounting research that considers the law to influence financial reporting quality. The usual form of that influence is taken to be by way of the "legal family." Starting with the question, "how can the legal family lead to different reporting outcomes?" we explore the literature of the law. There is an immense literature on the distinguishing characteristics of civil law and common law families. The historical development has been very different between them. In recent times, because of expanded contact among countries, and greater trade among nations, the distinctions have been eroding. For example, the US, a

common law country, has its security laws (which greatly affect reporting to investors) primarily in the form of a code, which is historically a feature of civil law. At the level of common vs. civil, the distinctions, at least as far as commerce is concerned, are becoming harder to find.

There remains, however, some justification for treating the legal families as distinct. So, to avoid dismissing the "legal family" effect out of hand, we take the position that as a "mean" effect it exists. But what is the "variance"? What is the spread of the national laws that make up these legal families? How much difference is there "within" the two legal families? The existing comparisons point to wide variations with the legal families. For example, some scholars believe that the UK laws (the UK is a common law country) for investor protection are closer to Continental Europe (civil law countries) than they are to the UK's common law cousin, the US (Lele and Siems 2007b).

At the heart of the matter is "Law and Finance." This monumental article (La Porta et al., 1998) is universally considered as support for the "common vs. civil" law difference in investor protection. It is a seminal article and extensive in its scope and depth. But like any seminal article, many of its methods and conclusions have come under the careful scrutiny of other scholars. A general conclusion about those later works is that the article is not as strong as it might have seemed a dozen years ago. While it might still be usable, though preferably in its later incarnation, researchers should be aware of, and notify their readers about, the limitations.

Analyzing the interconnection between law and accounting is thoroughly interdisciplinary, but the few accounting studies that tackle legal families as focus of research show very scant understanding of the law. When it is discussed at all, it is either superficial or wrong. More often, a legal variable (the civil-common dummy or a country score) is added to the right hand side as a "control variable." In this "plug and play" method, the justification is

barely mentioned; usually only that it follows prior studies. Because it plays only a minor role in the drama, its statistical significance is mentioned, and it gets no further mention or interpretation.

It would be encouraging to think that over time researchers are becoming more sophisticated, but this does not seem to be so. A recent manuscript includes:

> La Porta et al. (1998) and subsequent studies *[authors cite the outdated reference and perhaps bury the appropriate one, Djankov et al. 2008, in "subsequent."]* indicate that legal origin differences affect institutional features of financial markets *[authors detect an association; it cannot be said that the legal system affects the features; it is also likely that legal systems <u>are affected by</u> forces that arise in finance markets.]* including the financial reporting environment *[if the basis for this is La Porta et al. 1998, then it is 20 years out of date, since La Porta et al used CIFAR, from 1990 annual reports]*, and that key legal origin groups are common law and code law. This is because code law countries have weaker enforcement *[this is not true; what is true is that with regard to investor protection, <u>the average</u> civil law country has a lower score on investor protection]* and auditing *[this is not true, since LLSV and the other referenced studies did not detect lower quality of audits]*. (reference withheld)

To assume differences in accounting quality are a direct effect of a legal family is unsupportable, as we argue in this paper. Researchers who want to understand variations in international financial reporting should try to understand what this dummy variable proxies for. Holthausen (2009, p.448) lists as factors that might affect reporting: managers' incentives, auditor quality and incentives, regulation, enforcement, ownership structure and other institutional factors. Are any of these variables what drives the significance of **CC**?

What we know about the effect of the law on financial reporting hangs by a *t*-statistic. Future research is needed to get underneath this apparent, but unexamined, connection between accounting and the law. A number of suggestions can be found in the literature, but none have so far been examined to determine the apparently spurious correlation of **CC**.

- Cools (2004) suggests both ownership concentration and management power.
- Pagnano and Volpin (2005) attribute differences to voting rules.
- Stulz and Williamson (2003) find language and religion affect investor protection.
- Roe (2000) claims the factors like socialist political movements affect corporate governance (of which financial reporting is one aspect).
- Pistor (2005) shows the relevance of the coordinated vs. liberal market economies (i.e., stakeholder vs. shareholder models) in commercial law.
- As noted in section 2, listing requirements escape capture in the "legal family" definition, but could plausibly affect financial reporting quality.
- Jackson and Roe (2009) claim that resources spent on securities regulation improves market functioning.[28]

As a result, little can be concluded in this literature about how, or even whether, law affects accounting quality. Statistical associations are often reported, but it is hard to attribute them to the law, when no logical connection is attempted, and furthermore when there are competing explanations that are not considered. It has been more than ten years since Ball et al. (2000) showed that a finding in finance can be replicated in accounting. Now it is time to take the second step, and ask "Why?" This paper offers some suggestions to guide future studies.

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[28] They also find that when measures of public enforcement and measures of private enforcement are included in the regressions that model market development, the dummy variable for "civil" or "common" is insignificantly different from zero.

REFERENCES

Alexander, D. and E. Eberhartinger, 'The True and Fair View in the European Union', *European Accounting Review, Vol.18,* No. 3, 2009.

Armstrong, C. S., M. E. Barth, A. D. Jagolinzer and E. J. Riedl, 'Market Reaction to the Adoption of IFRS in Europe', *Accounting Review*, Vol. 85, 2010.

Association française de la gestion financière, *Investor Perspectives on IFRS Implementation.* Paris, December, 2007.

Atanasov, V., B. Black and C. S. Ciccotello, 'Unbundling and Measuring Tunneling', *working paper*, College of William and Mary, 2008.

Atanasov, V., B. Black, C. S. Ciccotello and S. Gyoshev, 'How Does Law Affect Finance: An Examination of Equity Tunneling in Bulgaria', *Journal of Financial Economics,* Vol 96, 2009.

Bailey, W., G. A. Karolyi and C. Salva, 'The Economic Consequences of Increased Disclosure: Evidence from International Cross-listings', *Journal of Financial Economics,* Vol. 81, 2006.

Ball, R., S. P. Kothari and R. Ashok, 'The Effect of International Institutional Factors on Properties of Accounting Earnings', *Journal of Accounting and Economics,* Vol. 29, 2000.

Ball, R., A. Robin and J. S. Wu, 'Incentives versus Standards: Properties of Accounting Income in Four East Asian Countries and Implications for Acceptance of IAS', *Journal of Accounting and Economics*, Vol. 36, 2003.

Ball, R., R. Ashok and G. Sadka, 'Is Financial Reporting Shaped by Equity Markets or by Debt Markets? An International Study of Timeliness and Conservatism', *Review of Accounting Studies,* Vol. 13, 2008.

Barth, M. E., W. H. Beaver and W. R. Landsman, 'The Relevance of the Value Relevance Literature for Financial Accounting Standard Setting: Another View', *Journal of Accounting and Economics,* Vol. 31*,* 2001.

Barth, M. E., W. R. Landsman, M. Lang and C. Williams, 'Are International Accounting Standards-based and U.S. GAAP-based Accounting Amounts Comparable?' *working paper*, Stanford University, April, 2010.

Boonlert-U-Thai, K., G. K. Meek and S. Nabar, 'Earnings Attributes and Investor-protection: International Evidence', *International Journal of Accounting*, Vol. 41, 2006.

Botosan, C. A., 'Disclosure Level and the Cost of Capital', *The Accounting Review*, Vol. 72, No.3, 1997.

Braendle, U. C., 'Shareholder Protection in the USA and Germany: On the Fallacy of LLSV'. *German Law Journal, 7,* 2006.

Brown, W. D., H. He, and K. Teitel, 'Conditional Conservatism and the Value

Relevance of Accounting Earnings: An International Study', *European Accounting Review,* Vol. 15, 2006.

Bushman, R. M., and J. D. Piotroski, 'Financial Reporting Incentives for Conservative Accounting: The Influence of Legal and Political Institutions', *Journal of Accounting and Economics,* Vol. 42, 2006.

Bushman, R. M., J. D. Piotroski, and A. J. Smith, 'What Determines Corporate Transparency', *Journal of Accounting Research,* Vol. 42, No. 2, 2004.

Byard, D., Y. Li, and Y. Yu, 'The Effect of Mandatory IFRS Adoption on Financial Analysts' Information Environment', *Journal of Accounting Research*, Vol. 49, No. 1, 2011.

Coffee, J. C., 'The Rise of Dispersed Ownership: The Roles of Law and the State in the Separation of Ownership and Control', *Yale Law Journal,* Vol. 111, 2001.

Cools, S., 'The Real Difference in Corporate Law between the United States and Continental Europe: Distribution of Powers', *Discussion paper #490*, Harvard Law School, 2004.

Cunningham, L. A., 'A Prescription to Retire the Rhetoric of 'Principles-Based Systems' in Corporate Law, Securities Regulation, and Accounting'.,*Vanderbilt Law Review*, Vol. 60, 2007.

Daske, H., G. Gebhardt and S. McLeay, 'The Distribution of Earnings Relative to Targets in the European Union', *Accounting and Business Research,* Vol. 36, 2006.

Daske, H., L. Hail, C. Leuz and R. Verdi, 'Mandatory IFRS Reporting around the World: Early Evidence on the Economic Consequences', *Journal of Accounting Research*, Vol. 46, No. 5, 2008.

David, R. and J. E. Brierley, *Major Legal Systems of the World Today*. (3rd ed.). London: Stevens & Sons, 1985.

DeFond, M. and M. Hung, 'Investor Protection and Analysts' Cash Flow Forecasts Around the World', *Review of Accounting Studies,* Vol. 12, 2007.

Ding, Y., O-K. Hope, T. Jeanjean and H. Stolowy, 'Differences between Domestic Accounting Standards and IAS: Measurement, Determinants and Implications', *Journal of Accounting and Public Policy*, Vol. 26, 2007.

Djankov, S., R. La Porta, F. Lopez-de-Silanes and A. Shleifer, 'Courts', *Quarterly Journal of Economics*, Vol. 118, 2003.

Djankov, S., R. La Porta, F. Lopez-de-Silanes and A. Shleifer, 'The Law and Economics of Self-Dealing', *Journal of Financial Economics,* Vol. 88, 2008.

Fernandez, N., and M. A. Ferreira, 'Does International Cross-Listing Improve the Information Environment', *Journal of Financial Economics*, Vol. 88, 2008.

Francis, J., and D. Wang, 'The Joint Effect of Investor Protection and Big 4 Audits on Earnings Quality around the World', *Contemporary Accounting Research*, Vol. 25,

2008.

Francis, J. R., S. Huang, I. K. Khurana and R. Pereira, 'Does Corporate Transparency Contribute to Efficient Resource Allocation?' *Journal of Accounting Research*, Vol. 47, No. 4, 2009.

Fredriksson, A. and F. Lindahl, 'Did Auditors Need Reforming? The Need for SOX', *The Finnish Journal of Business Economics*, 2009.

Frost, C. A., E. A. Gordon and A. F. Hayes, 'Stock Exchange Disclosure and Market Development: An Analysis of 50 International Exchanges', *Journal of Accounting Research*, Vol. 44, No. 3, 2006.

Gaio, C., 'The Relative Importance of Firm and Country Characteristics for Earnings Quality around the World', *European Accounting Review,* Vol. 19, 2010.

Giles, J. P., E. K. Venuti and R. C. Jones, 'The PCAOB and convergence of the global auditing and accounting profession', *The CPA Journal Online,* (http://www.cpajournal.com/), 2004.

Glendon, M. A., M. W. Gordon and P. G. Carozza, *Comparative Legal Traditions in a Nutshell*. (2nd ed.), St. Paul: West Group, 1982.

Glenn, H. P., *On Common Laws*, Oxford University Press, 2005.

Glenn, H. P., *Legal Traditions of the World: Sustainable Diversity in Law,* Oxford University Press, 2007.

Guenther, D. A. and D. Young, 'The Association Between Financial Accounting Measures and Real Economic Activity: A Multinational Study', *Journal of Accounting and Economics,* Vol. 29, 2000.

Hail, L., 'Discussion of Investor Protection and Analysts' Cash Flow Forecasts Around the World', *Working paper*, University of Pennsylvania, 2007.

Holthausen, R. W., 'Accounting Standards, Financial Reporting Outcomes, and Enforcement', *Journal of Accounting Research,* Vol. 47, 2009.

Hope, O-K, T. Kang, and J. W. Kim, 'Voluntary Disclosure Practices by Foreign Firms Cross-Listed in the United States', *unpublished manuscript*, 15 April 2011.

Horne, A., *La Belle France: A Short History,* New York: Random House, 2004.

Hung, M., 'Accounting Standards and Value Relevance of Financial Statements: An international Analysis', *Journal of Accounting and Economics,* Vol. 30, 2001.

Hung, M., and K. R. Subramanyam, 'Financial Statement Effects of Adopting International Accounting Standards', *Review of Accounting Studies*, Vol. 12, 2007.

Jackson, H. E., 'Variation in the Intensity of Financial Regulation: Preliminary Evidence and Potential Implications', *Yale Journal of Regulation,* Vol. 24, 2007.

Jackson, H. E., and M. J. Roe, 'Public and Private Enforcement of Securities Laws:

Resource-based Evidence', *Journal of Financial Economics,* Vol. 93, 2009.

Johnson, S., R. La Porta, F. Lopez-de-Silanes and A. Shleifer, 'Tunneling', *American Economic Review*, Vol. 90, 2000.

Kauffmann, D., A. Kraay and M. Mastruzzi, *Governance Matters VIII: Aggregate and Individual Governance Indicators,* World Bank, 2009.

Khanna, T., K. G. Palepu and S. Srinivasan, 'Disclosure Practices of Foreign Companies Interacting with U.S. Markets', *Journal of Accounting Research,* Vol. 42, 2004.

Kwon, S. Y., C. Y. Lim and P. Mui-Sian Tan, 'Legal Systems and Earnings Quality: The Role of Auditor Industry Specialization', *Auditing: A Journal of Practice and Theory,* Vol. 26, 2007.

La Porta, R., F. Lopez-de-Silanes, A. Shleifer and R. W. Vishny, 'Legal Determinants of External Finance', *Journal of Finance*, Vol. 52, 1997.

La Porta, R., F. Lopez-de-Silanes, A. Shleifer and R. W. Vishny, 'Law and Finance', *Journal of Political Economy,* Vol. 106, 1998.

La Porta, R., F. Lopez-de-Silanes and A. Shleifer, 'What Works in Securities Laws?', *Journal of Finance,* Vol.61, 2006.

La Porta, R., F. Lopez-de-Silanes and A. Shleifer, 'The Economic Consequences of Legal Origins'. *Working Paper No. 13608,* National Bureau of Economic Research, 2007.

Lang, M., J. S. Raedy and W. Wilson, 'Earnings Management and Cross Listing: Are Reconciled Earnings Comparable to US Earnings?' *Journal of Accounting and Economics*, Vol. 42, 2006.

Lara, J. and A. Mora, 'Balance Sheet versus Earnings Conservatism in Europe', *European Accounting Review*, Vol. 13, 2004.

Lele, P. and M. M. Siems, 'Diversity in Shareholder Protection in Common Law Countries', *CESifo DICE* 1/2007 (Center for Economic Studies (CES) & the Ifo Institute for Economic Research, Database for Institutional Comparisons in Europe), 2007a.

Lele, P. and M. M. Siems, 'Shareholder Protection: A Leximetric Approach', *Journal of Corporate Law Studies,* Vol. *7*, 2007b.

Leuz, C., 'Different Approaches to Corporate Reporting Regulation: How Jurisdictions Differ and Why', *Accounting and Business Research*, Vol. 40, No. 3, 2010.

Leuz, C., D. Nanda and P. D. Wysocki, 'Earnings Management and Investor Protection: An International Comparison', *Journal of Financial Economics,* Vol. 69, 2003.

Merryman, J. H. and R. Pérez-Perdomo, *The Civil Law Tradition*, Stanford: Stanford University Press, 2007.

Milhaupt, C. J., 'Creative Norm Destruction: The Evolution of Nonlegal Rules in Japanese Corporate Governance', *University of Pennsylvania Law Review,* Vol. 149, 2001.

Nobes, C., 'Towards a General Model of the Reasons for International Differences in Financial Reporting', *Abacus*, Vol. 34, No. 2, 1998.

Pagnano, M., A. A. Röell, and J. Zechner, 'The Geography of Equity Listing: Why Do Companies List Abroad?' *Journal of Finance*, Vol. 57, No. 6, 2002.

Pagnano, M. and P. F. Volpin, 'The Political Economy of Corporate Governance', *American Economic Review,* Vol. 95, 2005.

Pincus, M., S. Rajgopal and M. Venkatachalam, 'The Accrual Anomaly: International Evidence', *The Accounting Review,* Vol. 82, 2007.

Pistor, K., 'Legal Ground Rules in Coordinated and Liberal Market Economies', *European Corporate Governance Institute* (*ECGI) working paper series in law*, 2005.

Roe, M. J., 'Political Preconditions to Separating Ownership from Corporate Control', *Stanford Law Review,* Vol. 53, 2000.

Siems, M. M., 'Shareholder Protection Across Countries: Is the EU on the Right Track?', *CESifo DICE* 3/2006(Center for Economic Studies (CES) & the Ifo Institute for Economic Research, Database for Institutional Comparisons in Europe), 2006.

Siems, M. M., 'Legal Origins: Reconciling Law and Finance and Comparative Law', *McGill Law Review,* Vol. 55, 2007.

Simunic, D., and M. Stein, 'Product Differentiation in Auditing: Auditor Choice in the Market for Unseasoned New Issues', *Research monograph* 13, Canadian Certified General Accountants Research Foundation, 1987.

Soderstrom, N. S. and K. J. Sun, 'IFRS Adoption and Accounting Quality: A Review', *European Accounting Review,* Vol. 16, 2007.

Spamann, H., 'On the Insignificance and/or Endogeneity of La Porta et al.'s 'Anti-Director Rights Index' Under Consistent Coding', *discussion paper*, Harvard Law School, 2006.

Spamann, H., 'The "Antidirector Rights Index" Revisited,' *Review of Financial Studies*, Vol. 23, 2010.

Stulz, R. and R. Williamson, 'Culture, Openness and Finance', *Journal of Financial Economics,* Vol. 70, 2003.

Tweedie, D., 'Can Global Standards Be Principle Based?' *Journal of Applied Research in Accounting and Finance,* Vol. 2, 2007.

Verriest, A., 'The Evolution of Accounting Quality: An International Comparison', *working paper*, Katholieke Universiteit Leuven, August, 2007.

Webb, K. A., S. F. Cahan, and J. Sun, 'The Effect of Globalization and Legal Environment on Voluntary Disclosure', *International Journal of Accounting*, Vol. 43, 2008.

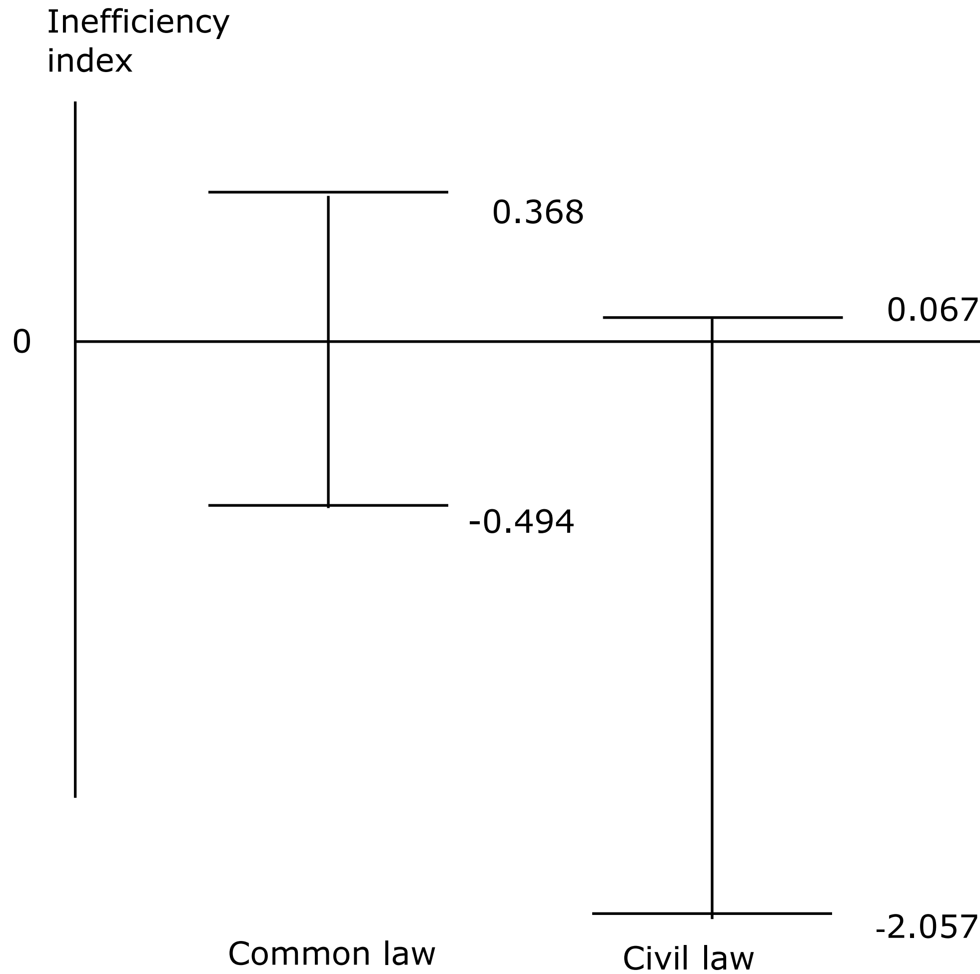
West, M. D., 'Legal Determinants of World Cup Success,' Discussion paper, University of Michigan #20-009, 2002.

Wysocki, P. D., 'Assessing Earnings and Accruals Quality: U.S. and International Evidence', *working paper*, MIT, October, 2005.

Zeff, S. A., 'How the U.S. Accounting Profession Got Where It Is Today: Part I', *Accounting Horizons*, Vol. 17, 2003.

Zweigert, K. and H. Kötz, *An Introduction to Comparative Law*, (3rd ed.), Oxford: Clarendon Press, 1998.

Figure 1: Accrual ‘inefficiency’ in sample of 20 countries drawn from common and civil law families



Note: Source of data: Pincus et al. (2007), table 3. The ‘accrual anomaly’ refers to the ‘overweighting’ of accruals in a model that uses accruals to predict future earnings. The measure of “inefficiency” shows the difference between the ‘market efficiency’ value of the coefficient on accruals and the estimated coefficient in the sample drawn from 20 countries. A value of zero is ‘efficient.’ The data show a larger spread for the civil law sample (n=11) than the common law sample (n=9). The larger range of the civil law sample is due to two observations; the other nine observations fall within the same range as the common law sample. An ANOVA test of the two samples does not reject equality.