PACKET INFO

Instructor:	**Steven Shavell & Louis Kaplow**
Course Title:	**Seminar: Law and Economics**
Readings Title:	**Item #10: April 10, 2007**
Notes:	**Mark Roe and Jordan Siegal, *Political Instability and Financial Development*** **Written assignment due BEFORE 10:00 a.m. on the day of the seminar.**

Item # 10
SEMINAR IN LAW AND ECONOMICS
Professors Louis Kaplow & Steven Shavell

Tuesday, April 10, 2007
Pound 201, 4:45 p.m.

POLITICAL INSTABILITY AND FINANCIAL DEVELOPMENT

Mark J. Roe and Jordan I. Siegel*
April 2, 2007

Abstract

Political instability impedes financial development and is a primary determinant of differences in financial development around the world. Conventional measures of political instability — such as Alesina and Perotti's (1996) well-known index of instability and a subsequent index derived from Banks' (2005) work — persistently predict a wide range of national financial development outcomes for recent decades. These results are quite robust to legal origin, to trade openness, to latitude, and to other measures that have obtained prominence in the past decade. These findings are for a range of key financial outcomes for all available years and for all available countries over several decades — data that has been previously examined only partially. Surprisingly, despite the widespread view in the law and finance literature of legal origin's importance, not only is political stability highly robust to legal origin, but, for many years, our results for key indicators and specifications neither show Common Law to be consistently[0] *superior nor French Civil Law to be consistently inferior to other legal families in generating strong financial development outcomes. The robust significance of political stability tells us that there are powerful channels to financial development running through political stability that go a long way toward explaining cross-country differences in financial development.*

* Harvard University, mroe@law.harvard.edu and jsiegel@hbs.edu. We thank Harvard Business School's Division of Research and Harvard Law School's John Olin Center for Law, Economics, and Business for research support.

Political Instability and Financial Development

Mark J. Roe and Jordan I. Siegel*

April 2, 2007

Abstract

Political instability impedes financial development and is a primary determinant of differences in financial development around the world. Conventional measures of political instability — such as Alesina and Perotti's (1996) well-known index of instability and a subsequent index derived from Banks' (2005) work — persistently predict a wide range of national financial development outcomes for recent decades. These results are quite robust to legal origin, to trade openness, to latitude, and to other measures that have obtained prominence in the past decade. These findings are for a range of key financial outcomes for all available years and for all available countries over several decades — data that has been previously examined only partially. Surprisingly, despite the widespread view in the law and finance literature of legal origin's importance, not only is political stability highly robust to legal origin, but, for many years, our results for key indicators and specifications neither show Common Law to be consistently[0] *superior nor French Civil Law to be consistently inferior to other legal families in generating strong financial development outcomes. The robust significance of political stability tells us that there are powerful channels to financial development running through political stability that go a long way toward explaining cross-country differences in financial development.*

* Harvard University, mroe@law.harvard.edu and jsiegel@hbs.edu. We thank Harvard Business School's Division of Research and Harvard Law School's John Olin Center for Law, Economics, and Business for research support.

POLITICAL INSTABILITY AND FINANCIAL DEVELOPMENT

Mark J. Roe and Jordan Siegel

TABLE OF CONTENTS

LIST OF TABLES

Political Instability and Financial Development

INTRODUCTION

Financial development is now widely seen as necessary or useful to propel economic growth, to create wealth, and to develop a nation (Levine (1997); King and Levine (1993); Mishkin (2006: 25); Sylla et al. (1999)). This has become conventional wisdom and has induced international agencies and development officials around the world to seek to build financial markets by strengthening their supporting institutions, in the hope that economic development will quickly follow, as the World Bank's (2006) report reflects. An older view had finance less central — recall Joan Robinson's famous "where industry leads, finance follows," Robinson (1952) — but a wide consensus has emerged in recent decades that a nation unable to develop the institutions that support financial markets will find that its overall economic development suffers.

Yet, despite efforts to develop finance and its associated institutions, financial development around the world has been uneven, with some of the prominent explanations for variation in financial development tied to a nation's legal origin, its trade openness, and its legacy of colonial endowments. But there is reason to think that other explanations could be in play. First off, proponents do not assert that the particular causal factor they investigate solely determines financial development. Second, each explanation has been challenged — often by proponents of a competing explanation. Third, findings in adjacent disciplines suggest that factors such as political instability strongly affect overall economic development. Perhaps they affect financial development as well.

Hence, there is good reason to search for other important determinants of, and impediments to, financial development. As we make clear in the rest of this paper, a nation's political stability is a powerful and heretofore missing explanation in the law and finance literature for modern financial development. By political instability, we do not mean the advanced nations' shifting coalitions, Arrow-type policy cycling, or other democratic swings in elections, governments, or policy. We instead mean

the severe, sharp disorder that nations, usually less developed ones, suffer via military coups, irregular changes in government, and political violence. Such instability quite plausibly impedes institutions such as investor protection that support finance. Cross-country variation in the depth of such simple, severe political disorder powerfully explains much of the variation in financial outcomes around the world in the past forty years and is robust to prevailing explanations. Indeed, not only is political stability robust to major competing explanations, but at least one of the now conventional explanations ─ legal origin — emerges from our data weaker than might have been anticipated, as the standard specifications for legal origin are for many years insignificant in the long year-by-year regressions that we run. We discuss this anomaly and why it deserves further study, after we present our main results.

We also address causality and the possibility of collinearity after we present our main results. Overall, instability is not strongly collinear with prior explanatory variables and a VIF (variance inflation factor) analysis shows it not to have been strongly influenced by the most prominent prior causal elements. To anchor causality as running from instability to financial outcomes, we use a two-stage IV model. We do so despite that reverse causality would contradict a wide consensus in the last decade's finance thinking that national financial development is grounded in strong supporting institutions: Key institutions for financial development would function poorly if beset by severe political instability, making it odd if finance developed strongly *while* the polity was unstable and if financial development *thereafter* stabilized that polity. Both the two-stage evidence and prior law and finance theory fit best with a key causal channel running *from* political instability *to* financial backwardness. And the year-by-year regressions over four decades show a regular and powerful correlation between political stability and strong financial development on the one hand and political instability and weak financial development on the other.

I. CURRENT EXPLANATIONS FOR FINANCIAL MARKET DEVELOPMENT

Several explanations have become prominent in explaining financial development around the world: legal origin, colonial endowments, trade openness, and political economy configurations. Each as

currently presented explains much but not all of the variation in financial development around the world. Relative political instability should be added here and, as our results show, is quite robust to the current explanations for differences in financial development. Consider each prominent explanation in turn.

A. Legal Origin

Legal origin has been advanced as a primary cause of, or impediment to, financial development. Common law nations protect investors with well-developed legal remedies, while civil law nations, particularly French civil law nations, do not, La Porta et al. (1997, 1998) and Beck, Demirgüç-Kunt, and Levine (2001) report. Glaeser and Shleifer (2002: 1194) conclude that "[o]n just about any measure, common law countries are more financially developed than civil law countries." If legal institutions cannot protect potential outside investors, they will not invest, thereby impeding financial development. Law-oriented commentators, however, such as Coffee (2001), Mahoney (2001: 504), and Roe (2006), are skeptical of key parts of the legal origins view. They see the tools used in each legal origin as not so different that one origin or another faces serious institutional impediments to protecting investors if the nation seeks to protect investors (Roe (2006)), that common law systems rely on codes just as do civil law systems (Mahoney (2001)), and that the financial differences tie to something that correlates with legal origin but does not directly arise from core legal institutions (Coffee (2001)). One example of the latter was the extent to which self-regulatory organizations such as stock exchanges were historically free to regulate trading and protect investors (Cheffins (2001: 473), Coffee (2001: 34)).

Still, the prominence of the correlations found until now between legal origin and several financial outcomes, see Glaeser and Shleifer (2002) and La Porta et al. (1997, 1998), suggest that some institutional feature, perhaps one not yet sufficiently vivid, accounts for the reported correlations. However, four factors, even before the data we present below, suggest that legal origin is not the whole story. First, even the strongest legal origins correlations typically have a low R-squared, suggesting that more than origin alone is at work. Second, the tests run with legal origin focus on outcomes from a few years, typically in

the 1990s; possibly the results do not hold over longer time periods. Good, annual data can now be analyzed for basic financial development outcomes going back to the 1960s.

Third, two recent studies questioned the role of legal origin and associated legal structures. Several economists were surprised to find that "ethnic fractionalization [was] a robust determinant of property rights protection. Despite the attention it has received in the literature, the impact of legal origin on protection of property rights appears fragile and dependent on the inclusion of transition economies in the sample" (Ayyagari, Demirgüç-Kunt, and Maksimovic (2006)). (As we show below, ethnic fractionalization and inequality have been the most prominent explanations for political instability.) In another setting, Detragiache, Gupta, and Tressel (2005) found corruption levels were more important than legal origin.

Beck and Levine (2005: 271) summarize work finding only weak connections between financial outcomes and legal origin:

> Some careful case-studies, however, challenge the importance of investor protection laws. For example, Franks et al. [(2006)] trace the history of investor protection laws and corporate ownership in the United Kingdom. They note that in a landmark court case, Foss v. Harbottle (1843), the judge found that no individual shareholder could sustain an action against the company, thereby rejecting the notion of minority investor protection. Not until 1948 did Parliament begin to enact limited legislation to protect minority shareholders and Franks et al. [(2006)] stress that it was not until 1980 that Parliament enacted strong minority shareholder rights statutes. According to the law and finance view, the U.K. should have had comparatively inactive equity markets and concentrated ownership in the 19th and early 20th centuries and then had more dispersed ownership and greater equity market activity after 1948 and especially after 1980.
>
> The evidence, however, is at best mixed. Ownership concentration was similar in 1900 and 1960, which is not consistent with the law and finance prediction, but market liquidity did jump substantially with enactment of stronger shareholder rights legislation.

We add below to this list. A surprising number of basic financial outcomes did not fit the legal origin view — that the Common Law leads to superior financial development outcomes and that French Civil Law leads to inferior outcomes. See in particular Table 11. This suggests that other institutional features may be in play, perhaps including political instability.

A fourth reason why legal origin is unlikely to be the whole story comes from Rajan and Zingales' (2003) data, which show that financial markets in civil law nations were by many measures as well

developed as those in common law nations in 1913. They argue that the divergence in financial development between civil and common law nations is not a persistent phenomenon, but one tied largely to the power of financial incumbents and trade policy.

B. Trade Openness

Rajan and Zingales (2003) thus use trade openness to explain why in some nations incumbents are unable to stymie financial development, which would benefit upstarts — or why they turn and prefer financial development, because they themselves need new financing to better compete with international entrants into the domestic market. The concept is that incumbents in nations closed to trade often wish to stifle upstart domestic product market competitors. Denying the upstarts access to new finance (which the incumbents already have) is one way to stifle them. But, if the nation is open to trade, the incumbents know that foreign competitors in the product market will take away market share even if domestic ones cannot finance themselves, so the benefits of stifling financial development are small. Moreover, in globalized product markets, the incumbents themselves benefit from getting access to stronger financial channels, Rajan and Zingales (2003: 21) argue. We do not dispute the importance of trade openness, but to view it as affecting much current financial development does not preclude other institutional explanations — such as the degree to which a nation's polity has been stable. Neither theory nor data — the regressions have R^2 values that leave much variation unexplained — compel a view that it's the only significant factor determining financial development. And an unstable, crisis-prone polity may have trouble maintaining open trade and implementing other fruitful economic policies.

C. Colonial Endowments

Colonial legacy has also been brought forward as determining property rights and, eventually, financial and economic development. Acemoglu, Johnson, and Robinson (2001) and Engerman and Sokoloff (2002: 88) provide powerful argumentation and data for this proposition. In the endowments view, neither legal origin nor trade policy nor recent financial policy primarily determines economic development. Rather, colonies developed via extractive industries or plantation agriculture run by a

small, elite group of colonizers using a large, indigenous labor force tended to have weak property rights. In contrast, colonies largely settled by immigrants from the mother country and related countries developed stronger property rights, stronger educational traditions, and persistently stronger financial and economic development.

Thus, differing colonial legacies induced differing institutional structures, structures which facilitated, or impeded, economic and financial development back then and persisted until the present day, sufficiently intact to have important continuing effects. Engerman and Sokoloff (2002) focus on initial colonial conditions that fostered equality or inequality. In their view, geographic conditions best suited to the production of labor-intensive cash crops induced "institutions that provided [its citizens] narrow access [to opportunities, making such nations] less capable of realizing the potential of the new technologies, markets, and other economic opportunities that developed over the nineteenth century." But differing colonial geographic conditions induced differing institutions. So, where the geography was conducive to less labor intensity and better suited to smaller family-owned plots, equality was greater and the colonizers and colonists built more open, opportunity-enhancing institutions. Although they posit that contrasting agricultural conditions (and their effects) persist today, Engerman and Sokoloff emphasize the enduring importance of the institutions that arose during the colonial era.

Colonial legacy surely has had continuing effects in the late 20th and early 21st centuries and our results are most consistent with the existing colonial legacy literature. But we focus below though on recent political instability, whatever might be the institutions, endowments, and legacies that produced that instability. After all, some nations, like Argentina, squandered good endowments and others overcame colonial impediments. Other intervening causes — again such as the nation's recent capacity for political stability — could be just as important as legacy or inequality from centuries ago. South Korea and Taiwan are examples from the post-World War II era. Hence, there is reason to believe that even if endowments and colonial legacy are important parts of the story, they do not end the story. Modern conditions surely influence financial development as well. In any case, the political instability

cause, which we highlight, could fit with the colonial endowments theory, to the extent that the original endowments are a continuing primary cause of modern stability and instability.

D. Political Economy Explanations for Developed Democracies

Several political economy explanations have emerged recently and hold promise. Rajan and Zingales (2003) focus on the power of incumbent interests, who prefer to stifle financial development because further financial development could provide the foundation for financing upstarts who could undermine the incumbents' positions. Perotti and von Thadden (2005) focus on the median voter in richer democracies. Where the median voter has lost his financial assets in, say, the interwar inflation in Europe, but has strong human capital, the median voter will prefer industrial stability, without the disruptions that securities markets bring. Pagano and Volpin (2005) and Gourevitch and Shinn (2005), the latter from the political science literature, argue that shifting coalitions among managers, employees and shareholders can explain the degree to which a polity will provide shareholder protection. Roe (2000, 2006), from the legal literature, argues that for Europe and East Asia, post-World War II left-right conflict, and the effort to co-opt internal left-oriented groups and political parties, explains key financial outcomes there in the post-World War II decades. When labor power makes strong claims on firms' cash flows in a democratic polity, he argues, concentrated owners will have a comparative advantage over dispersed owners in forming a countervailing coalition. Moreover, in democratic nations with strong left power after World War II, governments were less likely to support the capital markets institutions, such as well-funded regulators or business courts, that would protect outside stockholders and bondholders.

Although these particular political economy theories are promising, several of the well-modeled theories have limited relevance for the developing world. They can explain coalitions and institutions in the wealthier, already-developed nations, telling us why, say, France, Germany, and Italy have had more concentrated ownership and weaker financial markets overall than the United States in the past half-century. But theories of democratic politics in the world's wealthy, stable polities are ill-suited for explaining the varying degree of financial development in Third World and transition nations. Nor do

they for the most part purport to explain finance in those nations. Political economy may well be primary in the developing world, but another political economy explanation would be called for.

II. A Political Instability Explanation for Financial Market Development

A. Extreme Instability

As an "ideal" type, consider first extreme instability, such as that of a violent and destructive civil war. As Lindgren (2005: 10-12) reports, "[t]oday most armed conflicts are civil wars… . They accounted for 77% of armed conflicts [during the years] 1989─2003." Not only are such armed conflicts not rare (Banks 2005), they are not cheap, costing many affected nations more than half of its total GNP, as Fitzgerald (1987) shows for Nicaragua and Richardson and Samarasinghe (1991) show for Sri Lanka. Lindgren (2005: 10-12) summarizes and tabulates results on economic losses due to civil wars. On average, such conflicts — many of which last for more than a decade — bring about losses of more than 50% of the nation's pre-conflict GDP.

The sources of the economic losses identified are several. Capital flight — of both domestic and foreign financial interests — will show up as weakened financial development. Related to capital flight is the decrease in investment it induces, which reduces both the demand for institutional support for capital market institutions and the power of interest groups that would clamor for capital protection. Collier (1999: 178) finds that civil disturbances heavily damage transaction-intensive capital activities. Increased capital flight and decreased demand for investment obviously affect financial development negatively.

Moreover, public officials who might otherwise seek to develop financial markets would be deployed to other tasks during periods of extreme instability. And other economic effects of violent disorder will cause collateral damage to financial development. For example, the capital that flees is not just financial capital, but also human capital. As skilled people emigrate or flee, their flight damages the base for economic and financial development. Entrepreneurs who remain are unwilling to invest in physical assets, for obvious reasons. And that diminished demand for investing in physical assets

translates into a smaller demand for financial assets. "In this risky environment many entrepreneurs cho[o]se to engage [only] in economic pursuits that yield fast and large returns[,] … further aggravating the already bleak prospects for a conflict economy," Lindgren (2005: 5) states. Shorter-term investments typically require less sophisticated capital market institutions than longer-term investments.

Instability often renders social capital investments, such as entrepreneurs' developing and maintaining reputations for reliable dealing, no longer worthwhile (Collier (1999: 169-170)). Potential and existing entrepreneurs see little point in investing in their reputational and social capital if the discount rate is very high and they expect to be unable to draw on any social and reputational capital, due to the nation's extreme political and social instability. Political instability makes formal rules more unstable (Maurer (2002)), legal reform projects fail since players doubt they can be implemented (Dye (2006: 190)), and enforcement tools for protecting property deteriorate (id.: 195). More generally, civil wars "are likely to undermine the state," Collier (1999: 168-169) concludes, as they weaken "both its institutions such as property rights, and its organizations such as the police. … [A]s the army and its powers are expanded, the police force and the rule of law diminish. The enforcement costs of contracts consequently rise and the security of property rights is reduced." Governments cannot commit to broad, long-term property rights protections under conditions of political instability, as Haber, Razo, and Maurer (2003: 19) explain was the case for Mexico:

> [G]overnments under siege, or factions aspiring to be governments, cannot afford to tie their hands. This produces two problems for asset holders. First, they cannot know with any degree of certainty the content of government policies in the future. Second, asset holders know that the government has strong predatory incentives concerning property rights — regardless of its stated ideology. If the [current] government is not predatory, someone else [may well] be … .

B. Less-than-Extreme Instability: Instability Short of Civil War

One might dismiss violent civil insurrection from the prior section as an anomaly, unlikely to explain enough of financial development, or the lack thereof, around the world. But there are two reasons, one direct and one indirect, not to. First, the incidence of serious political instability, including serious violence, is simply not small. Fifty-seven countries had three or more instances of severe political

instability, even short of civil war, since the 1980s, Banks (2005) reports. Related to the prevalence of violence is its continuing effect. "Peace," Collier (1999: 181) finds, "does not recreate either the fiscal or the risk characteristics of the pre-war economy: there is a higher burden [afterwards] and a greater risk of renewed war." Second, the issue here is not binary, with some nations experiencing violent conflict and the rest experiencing placid development. Some nations approach internal conflict, and that proximity — even if conflict never materializes — can have the same detrimental effects, albeit presumably in weakened form, of actual conflict: capital flight, distracted public officials, unstable rules, entrepreneurial short-sightedness, and so on. Potentially unstable governments cannot credibly commit to longer-term policies that encourage entrepreneurial behavior and related financial activity. Unstable governments often turn predatory in order to survive and are more likely to seize financial assets rather than less easily severed physical assets; political and social instability thus distorts and reduces financial activity. Hence, if we can measure disorder, including crises just short of armed conflict, we may be able to better explain the differing degree of financial development around the world.

C. Stability

A politically stable nation provides stronger foundations for financial development than an unstable one. Marketplace reputations are worth developing. Governments can turn to building the institutions of financial development when basic issues of order have been resolved. Capital flight decreases. Entrepreneurs can focus their efforts on developing their businesses instead of mitigating the impact of local political instability. As their businesses grow, the entrepreneurs demand for financing increases.

Historical indications from Japan, Britain and the United States, which we discuss next, are suggestive here. From them a pattern might be induced.

1. The Meiji restoration, the Chinese devolution, and the American 19th century. Japan began to develop modern financial and corporate institutions before it even had a corporate law (Miwa and Ramseyer (2002)). China is developing financial markets now without strong contract, corporate, or securities laws (Allen, Qian, and Qian (2005)). Franks, Mayer, and Rossi (2006) see stock markets

developing in Britain before it had good securities law. In each case, reputational markets seem to play a role as coming first. And for the United States, law-oriented academics have documented that the United States in the nineteenth century had poor corporate law (at least as compared to its modern corporate law) and no securities law, as discussed by Coffee (2001: 10, 25-29), Roe (2000: 590-591), and especially Rock (2001: 251-254). Yet it developed a stock market. Reputational characteristics of boards, founders, and financiers, characteristics that presumably needed stability to flourish, seem to have been foundational for American finance. See DeLong (1991), who describes J.P. Morgan's investment bank as a key American reputational intermediary at the end of the nineteenth century. Each of these nations was politically stable during the relevant period — Japan after the Meiji restoration, the United States after the Civil War, China today, and Britain a century ago.

2. From social stability to reputational markets to private ordering to regulation. We could induce an evolutionary pattern. A nation develops political stability, exogenously. It's off the invasion path, civil wars are resolved, and there's enough regularity in society. Political stability and social regularity allow reputational markets to develop. Individuals find it worthwhile to invest in their own reputations, firms can invest in their own reputation for fair dealing, and institutions such as stock exchanges can begin as mild self-enforcers of reputation. These reputational markets are the first step in studies of corporate growth of Meiji Japan (Miwa and Ramseyer (2002)), early-twentieth-century Britain (Franks et al. (2006)), J.P. Morgan's America (DeLong (1991)), and modern China (Allen, Qian, and Qian (2005)).

Where there's political stability and societal regularity, the firm that suffers a poor reputation in dealing with its stockholders loses the confidence of its contracting partners, destroying value inside the firm, and thereby hurts the wrongdoing insiders (Alexander (1999: 492-96)). Some insiders calculate that they would lose too much in firm value even if they could demolish distant shareholders to their own advantage. These reputational markets then regularize, using private ordering such as stock market rules or informal institutions. This private ordering eventually leads to more formal regulation. The developmental sequence could thus be from political stability first, to reputational markets second, to private ordering third, and then, lastly, to regulation. Severe political instability anywhere in the chain

would easily disrupt this process. Nations too unstable for reputational markets and private ordering to take hold — because of recurrent war or revolution — lack the foundation for stock markets and reputational supports.

3. Government finance. Instability can deter deep government debt markets or, if severe enough, any government debt placement at all. Rousseau and Sylla (2006: 4) indicate the importance of government action to develop finance. A government that builds a stable currency, an effective tax-collecting bureaucracy, and a functioning central bank can more credibly sell its own securities than a government that does not. And government securities placement is a precursor to private finance, as private players historically piggy-backed on the government-influenced institutions. Severe political instability would undermine government credibility, thereby impeding it from selling much of its own debt. But without the basic institutions of public finance ─ a class of bondholders looking to expand the range of their investment, with the nation having the basic institutions of securities trading via the government debt market — private players have nothing onto which they can piggy-back.

4. Macroeconomic channels? Political instability could induce poor macroeconomic policy, with poor macro policy then stymieing financial development. Indeed, Aisen and Veiga (2006) see political instability as inducing higher inflation generally, and Maurer (2002: 135) sees instability as bringing about poor macroeconomic policies in Mexico. An unstable government may be unable to formulate or implement good macroeconomic policies and that failure could be what causes finance to atrophy.

In any case, our purpose here is not to tightly specify the channels via which political instability impedes financial development, but to show that such channels are plausible and that political instability can sharply impede financial development.

D. Is Political Instability Independent of Existing Explanations?

Instability could of course derive from colonial endowments, trade openness, or legal origin, each of which currently plays a prominent role in the law and finance literature. Hence, we want to control for

these factors. As we discuss below, instability predicts financial outcomes and is robust to all of the prominent explanations for variation in financial development.

Conceptually, political instability could well be independent of these other determinants of financial development. Even if there's a primary underlying foundation to stability or instability, that foundation might not derive from the currently dominant determinants in the finance literature. For example, adjacent inquiries have highlighted economic inequality as a foundational source of instability and have provided significant supporting evidence. See especially Alesina and Perotti (1996), as well as Benabou (1996), Boix (2003), and Easterly (2001). We confirm these findings in Table 12.

Other independent considerations have been advanced as impeding stability, such as ethnic and religious strife, see Alesina and Spolaore (1997), Angeles (2006), Collier (2000: 9, 11-13), and Easterly and Levine (1997: 1223). Easterly and Levine (1997: 1214) quote a leading African social scientist: "[C]onflict among nationalities, ethnic groups, and communal and interest groups" after African independence resulted in a "struggle for power [that] was so absorbing that everything else, including development, was marginalized." This view suggests that current forces independent of common existing explanations for the strength of financial development played a role in political instability. Unequal societies tend to also be ethnically heterogeneous, Glaeser (2005) reports, and distributional fights in unequal societies impede economic growth, Alesina and Rodrik (1994) indicate. Putnam (2006) suggests that ethnic fractionalization undermines trust. If trust and reputational markets form the foundation for the initial development of financial markets, see Franks, Mayer, and Rossi (2006) and our discussion above in Section II.C.2., then ethnic fractionalization could, via decreased trust and decreased reputational capacity, deter financial development.

In assessing whether instability merely proxies for origins and endowments, one can consider several national pairings. For example, Nigeria — a common law country — experienced instability exceeding that of nearby Ivory Coast — a civil law country — suggesting that local conditions and not origins have much to do with instability. (Nigeria had five years of political instability during 1960─2003, according to Banks (2005), while the Ivory Coast only had two such years.) Indeed, as

measured by the number of military coups since independence, Nigeria has been the *most* unstable African nation, Amadife (1999: 620) narrates. Dye (2006: 173-175) and Coatsworth (1993) describe how at independence and crucial moments thereafter, several Latin American nations had opportunities to reconfigure their institutions to stabilize them for the long haul, but did not. And, while colonial endowments could also determine twentieth century instabilities, some nations — Argentina and Chile come to mind — had impressively strong endowments from the colonial era but experienced significant instability in the last half of the twentieth century, suggesting that modern conditions sometimes overwhelm colonial endowments.

Hence, there's reason to measure modern, ongoing political instability, see if it predicts financial outcomes, and determine whether the results, if significant, are robust to alternative explanations for variation in financial development.

III. DATA DESCRIPTION

Thus, we seek here to better understand how financial markets develop, by measuring the effect of political instability on those markets. To do so, we need measures of political stability and measures of financial market outcomes. Two major indices of political stability are available, one from Alesina and Perotti (1996) and another from Banks (2005). Because there are multiple ways to measure financial development, we use multiple indicators of the development of both debt and equity markets. We check to see whether we get similar results across the multiple indicators.

A. Measures of Political Stability

We focus on political instability as predicting financial development primarily by using Alesina and Perotti's (1996: 1207-1208) Sociopolitical Instability (SPI) index, which measures the average political instability by country for 1960-1982. They use principal component analysis to construct their index, based on a nation's number of politically-motivated assassinations, the number of people killed in domestic mass violence (as a percentage of the nation's total population), the number of successful and

attempted coups, and a categorical variable for whether the nation is a democracy or a dictatorship, set at 1 for democracies, 0.5 for semi-democracies, and 0 otherwise. Because the index uses deep disruptions — such as military coups and political assassinations — simple electoral change, even if frequent and sharp, does not count as unstable; violent change, even if infrequent, does. This has been a widely used and respected measure of political instability.

Alesina and Perotti (1996) show that the SPI index predicted total public and private sector investment by country during the years 1960─1985 and we follow them in testing whether the SPI index predicts private debt and equity market development. Because we do not want to rely on just one measure on political crises, and because we want to test for the effect of more recent disorder, we build our own subsequent index. We need a subsequent index because the data from which Alesina and Perotti derive their SPI index was only collected through 1982 (Taylor and Jodice (1983)).[1] We therefore turn to the Cross-National Time Series (CNTS) database that Banks (2005) compiled for later political instability. This database, an earlier version of which served as the basis of Barro-Lee's (1994) measures of political instability, has data on political instability through 2003. We focus on its "government crisis" variable and, because we saw evidence from our initial tests using the SPI index of lingering effects of past instability, we generate a moving index of political instability.[2] We take data on government crises by year for each country and use alternatively a 1 percent, 5 percent, or 10 percent decay rate for assessing the impact of past government crises over the prior 20-year, 25-year, 30-year, 35-year, or 40-year period. We get the strongest results using a 1 percent decay rate over the prior 30-year period, although the results are generally robust to the alternative definitions.

[1] Alesina and Perotti (1996) typographically report that data as going through 1985 but, as the overlapping authors report in Alesina, Ozler, Roubini, and Swagel (1996), the data go to 1982. We reconstructed and confirmed the underlying Alesina-Perotti index from its components; the reconstruction, with the slightly differing index for democracy that was available to us, had a correlation approaching 1.00.

[2] Because the most serious forms of political violence (as shown both in Banks' data and illustrated in Figure 2 and 3) declined in recent years, Banks' government crisis variable stood out as plausibly explaining the instability component to recent financial development in the developing world. It included major eruptions of major political violence up to but not including coups. In the post-1980 environment, there was a strong secular decline in coups and civil wars, resulting in a lack of variation in these variables such that they no longer explained differences in financial development. However, severe political instability up to but not including coups and civil wars continued to be widespread and variation on this measure proved highly significant in explaining ongoing equity market development.

B. Measures of Financial Outcomes

For outcomes, we primarily use stock market depth and banking breadth, as measured by stock market capitalization/GDP and bank loans/GDP, for two related reasons. First, the two are generally seen as core indicators of a nation's financial depth, so significant findings are less likely to be secondary anomalies. Second, perhaps because they are core indicators, better data is available for more countries and more years.

For debt markets, we start with data from the World Bank's World Development Indicators (WDI) of the amount of bank credit to the private sector divided by GDP. We also use a closely related measure from WDI of the total amount of credit received by the private sector divided by GDP. Both measures are available for years 1965─2004. Next, from a 2006 update of a publicly available database that Beck, Demirgüç-Kunt, and Levine (2000) compiled, we use their variable for the size of the private bond market divided by GDP, as well as a separate variable for the size of the public bond market divided by GDP.[3] Those last two variables are available for years 1990-2003.

For equity markets, we first focus on stock market capitalization divided by GDP and the number of listed firms per thousands in population, two equity market variables available from WDI for years 1988─2004. Next, from the 2006 release of the database Beck, Demirgüç-Kunt, and Levine (2000) compiled, we use their coding of the variable for stock market capitalization divided by GDP. The latter data is available for a larger number of years (1976─2003), allowing us to see whether the effects persist year-by-year over more than a quarter of a century.

For the independent variables beyond political instability, we start with legal origin because of its prominence. We use LLSV's basic coding (1999) and, following LLSV in their later work, code any missing countries using the CIA Factbook.[4] We later add other independent variables and controls for trade openness, latitude, governmental structure, and per capita income.

---

[3] This Year 2006 data came from http://www.econ.brown.edu/fac/Ross_Levine/Publications.html.

[4] We used the CIA Factbook 2006 at https://www.cia.gov/cia/publications/factbook/index.html.

C. Further Data

Because we are also although secondarily interested in identifying plausible causes of political instability in addition to its effects, we examine income inequality, the variable that Alesina and Perotti (1996) use to predict political instability. We collect data on the relative proportion of national income going to the middle class (defined as the third and fourth quintiles) from Perotti (1996) in 1960 or the closest annual observation available after 1960. We supplement that data with measures of Gini coefficients in the WIDER World Income Inequality Database for years 1970-2000.[5] Following the recommendation of those who compiled WIDER database, we focus on the Gini measures they rated as being of the highest quality. For comparability, we chose those observations closest to each decade point (1970, 1980, 1990, and 2000). For most countries, this allowed us to use observations from the precise decade point, but for others the only high-quality Gini measure available is from up to three years before or after the decade point.

Ethnic fractionalization as a key cause of instability is the most prominent further explanation, although even its explanatory power often comes from how it facilitates economic inequality. It thus might interact with inequality, the explanation for which Alesina and Perotti (1996) provided strong supporting evidence. (Although MacCulloch (2001) and Posner (1997) argue that total wealth may be more important to political stability than equality, most findings are to the contrary.) We use Alesina, Devleeschauwer, Easterly, Kurlat, and Wacziarg's (2003) measures of ethnic fractionalization.

We follow Rajan and Zingales (2003) in looking for a reversal in financial development between civil and common law nations. We use the measure of natural geographic openness that Frankel and Romer (1999) created (originally called "constructed trade share") and that Rajan and Zingales then famously used in the finance literature. We use this variable to see if the reversal they primarily identify for western Europe also occurred within our larger sample of countries. To further confirm that political instability was robust to trade openness, we also used other measures of trade openness — (imports plus

[5] The WIDER database can be accessed at http://www.wider.unu.edu/wiid/wiid.html.

exports)/GDP and (imports plus exports)/GDP instrumented by constructed trade share. (Our political instability results below are robust to using either alternative measurement of trade openness.)

Next, because some authors believe that close-to-the-equator latitude drove most negative economic development outcomes, we control for latitude. Data on latitude is from You and Khagram (2005) as also used previously in Treisman (2000). To control for simple wealth effects, we use the log of GDP per capita by year. Data on GDP per capita in constant U.S. dollars for the years 1965─2004 came from the World Bank's Word Development Indicators (WDI) database.

IV. RESULTS

To begin, banking sector development in 1980, as proxied by bank credit provided to the private sector divided by GDP, has a pair-wise correlation with the SPI index of -0.47 ($p<.001$). A one-standard deviation increase in political instability is associated with a 24.3 nominal percentage decrease in banking sector development for 1980 — nearly one-half of a standard deviation in the dependent variable. This large result reduces to a more plausible level when we added GDP per capita, but it stays economically substantial. (We report this simple regression in panel A of Table 1.) This suggested to us a basis to further investigate political instability as impeding financial development.

Our basic specification overall is to regress alternative measures of financial development by year on political instability, controlling for the log of GDP per capita, and then add controls for legal origin, natural geographic openness, and other characteristics. Because we want to see whether any significant relationship persists over time, we run a long series of separate annual cross sections. We run the annual cross-sectional regressions using ordinary least squares and use robust standard errors to generate the t-statistics reported throughout the tables.

So to see whether political instability was an omitted variable in past studies of financial development, we focused our attention primarily on Alesina and Perotti's (1996) instability index, testing whether it directly determines financial development. Our first look at the effect of political instability on debt market development is the simple one mentioned in the first paragraph above, with just a control for

log of GDP per capita. In Panel A of Table 1, we find that the SPI index is a strong determinant of bank credit divided by GDP throughout the four decades from 1965 to 2004. In Panel B we obtain similar results for SPI as determining private debt divided by GDP for the same four-decade period. The more political instability in a nation, the lower its level of debt market development.

Next, we look at the impact of political instability on stock market capitalization. As we report in Table 2, political instability is a negative and highly significant determinant of stock market capitalization divided by GDP, again using just the simple GDP per capita control. The World Bank's WDI data on stock market capitalization is available for between 41 and 54 countries depending on the year, and this is a large range of nations, one comparable to that used in prior studies. We also used the 2006 update of Beck, Demirgüç-Kunt, and Levine's (2000) stock market capitalization database and obtained yet stronger results for SPI. And we also examined whether political instability also (negatively) predicted the number of listed firms divided by population in panel C of Table 2, which shows the SPI index to be a negative and statistically significant determinant of the number of listed firms during the 1988-2004 period.

In both the simple Tables 1 and 2 and the ones that follow with wider controls, we present the results of annual cross-sectional regressions for all available years. We do this because some finance inquiries have looked at financial outcomes for a narrow set of years, usually from the mid- to late 1990s. We found early on in this research that the results for several controls varied by year over recent decades and we wanted to test whether political instability was consistently robust to our primary controls across years and decades. To report this visually, we show annual cross-sectional regressions in the tables — annual snapshots — which show a persistent robustness of political instability to current common explanations. We complement this analysis later with a structural model with instrumented political instability.

We next control in partial models for legal origin, trade openness, and then latitude, reporting results in the Appendix in Tables 1A et seq. and 2A et seq. Political instability was quite robust in these partial models. We briefly describe here the results on instability of each control, as much to describe the

results in the full model (which we present in Table 3) as to describe the results in the partial models. So, we control for legal family in the bank and private debt tables in the Appendix 1A and 1B and then again in the full model in Table 3 by taking the five dummies for legal family (French Civil Law, Common Law, Scandinavian Law, Socialist Law, and Germany Civil Law), omitting the German Civil Law dummy from the regression, using it as the reference case. (We lack observations in the SPI index for Russia, China, or the other former communist countries, making the sample somewhat smaller than otherwise. But it has a comprehensive set of civil law and common law countries.) Political instability is quite robust to legal origin.

For stock market development, we had stock capitalization data for only some years of the political instability index. (The instability index covers a period ending in 1982; the most extensive stock market capitalization data go back to 1976.) But the stock market capitalization data was usually robust in the overlapping years and had some predictive value thereafter. We were surprised not by the general robustness of political instability, which we expected, but by the erratic results for legal origin displayed in the Appendix in Tables 2C-J and in the full model Table 4. Across a variety of specifications and years there is insufficient evidence to conclude that Common Law is superior to German Civil Law in generating stock market development. And, although Common Law is often (but not consistently) superior in direct comparison to French Civil Law for producing stock market development, even that result is not robust to basic robustness checks we discuss below. Yet, standard thinking in the past decade in law and finance has had it that Common Law legal systems consistently produce superior equity market outcomes than other legal families. The debt outcomes surprised us as well. The year-by-year differences between Common Law origin and French Civil Law origin were surprisingly insignificant over many years, as seen in Appendix Tables 1C-J. German origin countries had more developed debt markets. We return below to the weakness of the connection between financial outcomes and standard legal origin thinking, after we report our primary results.

Could constructed trade share have driven these basic political instability results? As we show in Appendix Tables 1E and 1F, and in the full model in Table 3, it did not for credit market development.

Political instability is highly robust to trade in predicting bank credit divided by GDP, as well as private credit divided by GDP from 1965─2004, typically with $p<.01$. To measure trade share we used natural geographic openness (which Rajan and Zingales call "Constructed Trade Share"). In Appendix Table 1E, we include constructed trade share as a control variable explaining bank credit to the private sector divided by GDP; in 1G we include it in a partial model explaining private credit divided by GDP. Political instability persists as a negative and statistically significant determinant of debt market development after controlling for constructed trade share.

For stock market capitalization, the results are similar: The SPI index negatively and typically significantly determines stock market capitalization divided by GDP even when controlling for constructed trade share, as Tables 2E-G in the Appendix and Table 4 show. Surprisingly, constructed trade share is often insignificant and, for multiple years, has a negative coefficient in predicting stock market capitalization divided by GDP. This surprising negative association further confirms that trade openness is not driving our results. The SPI index continues to be a negative determinant of the number of listed firms divided by population for much of the 1988─2004 period, and the results are more often statistically significant when conditioned by trade openness.

Could an omitted variable for latitude have driven our results? Because latitude and GDP per capita are highly collinear, we include one at a time in Appendix Tables 1G-J and 2G-J. (When we include both, their collinearity leads one to be significant in some years and the other significant in other years.) Because latitude has no clear theoretical significance or direct conceptual meaning (but proxies for other channels, primarily those leading to national wealth), we believe it makes better sense to control directly for wealth effects, which have a clear conceptual meaning. Regardless, even when controlling for latitude, political instability is generally significant in explaining debt market development and stock market capitalization divided by GDP. For stock market capitalization, the statistical significance of the SPI index persists for the beginning, middle, and end of the 1988─2004 period that WDI covers. Latitude is only statistically significant during a small time-window (1997─2001), the period of the global equity bubble which was most pronounced in the richer nations.

In Tables 3 and 4, we show our full model, one including each key control. The SPI index continues to have a direct, negative, and largely statistically significant impact on bank credit divided by GDP for the years 1965─1987, even when controlling for legal origin, constructed trade share, and GDP per capita. After 1987, the prior effect of the SPI index goes away once economic development is included directly as a control. But since the SPI index measures political instability through the year 1982, the lingering effects of past stability would be expected to fade over time. We also see SPI's robustness this when we examine stock market capitalization divided by GDP in the full model in Table 4.

To further assess the impact of political disorder in nations having differing levels of wealth, we ran the key tests we report in Tables 3 and 4 by dividing the sample into OECD and non-OECD countries, to see if the effects were located primarily in the non-OECD countries. They were. Despite the lower number observations by dropping 30 OECD nations, the predictive power of political instability persisted and indeed was often stronger than for the full sample. Variation in instability though did not predict financial differences for the OECD nations, suggesting that there's a threshold of stability and deep-crisis-avoidance that needs to be met, that many developing nations do not meet it, and that, once met, other factors determine financial differences.[6]

We ran similar tests with the alternative data for stock market capitalization that Beck, Demirgüç-Kunt, and Levine (2000) collected, covering more years more completely, and find that the SPI index has somewhat greater statistical robustness. As we show in panel B of Table 4, the SPI index continues to significantly and negatively affect their stock market capitalization measure into the 1990s. And, as we show in Table 5, the SPI index continues to significantly and negatively affect both private and public bond market capitalization measures, even until the end of the period.

[6] Because OECD-member countries are highly politically stable and variation in political instability is highest among non-OECD member countries, political instability's effect on financial development is strongest in non-OECD member countries, as can be seen in the Appendix. But the strong political instability results though were not driven by simple wealth differences: First, we control directly for log GDP per capita in all primary tables and find that political instability was still a highly robust determinant of financial development. Second, and most importantly, we show that the results for political instability are significantly robust to the use of instruments, as seen in Table 13.

The SPI index measures overall instability during the 1960─1982 period. For the most part the financial outcomes we report are for the subsequent quarter-century. But in some models for which we have outcome data going back before 1982, we use Alesina and Perotti's index to look at those earlier outcomes. We do so for two reasons, beyond the fact that their index is the most respected measure of political instability, cited or used well over 100 times. One, political instability was highly time-invariant in the post─World War II era, giving reason to use the highest quality measure for the variable. As a robustness check, we confirmed that political instability from years 1948-1964 (using the primary source data used for the Alesina-Perotti political instability index) significantly explained financial development in 1965. Secondly, in any case, most of the outcomes are for the decades subsequent to the primary instability measurement and, as the outcome years for debt market variables approach 1982, the issues becomes more and more trivial anyway.[7]

Did political instability more recent than that covered by the SPI index affect financial market development? To find out, we used our alternative moving index of government crises and tested its effect. Government crises as measured by Banks (2005) were approximately one-third to one-half as frequent in the 1990s as they were in the 1960s and 1970s. The relative frequency depended on the precise years compared, but the overall frequency of government crises declined dramatically. We therefore expected political instability would lose its explanatory power steadily as time passed. Interestingly, we find that our moving index has explanatory power even during the 1990s and early 2000s.[8] The measure is not as robust as SPI was for the 1960s and 1970s. After the secular decline in political instability in the 1980s, none of our indicators of political instability predict variation in debt market development. Perhaps debt markets, for reasons that need to be the subject of future research, are less affected by ongoing lower-grade political instability than by the earlier higher levels of instability in some nations. In contrast, even the lower-level political instability appears to affect equity market

[7] We present a further model in Tables 12 and 13 suggestive that reverse causality is not a significant concern here, after we present our primary results and robustness tests.

[8] The underlying source data for Alesina-Perotti (1996) index was not collected after 1982. Banks' Cross-National Time Series database (which formed the basis for Barro-Lee's well regarded and much-used measures of political disorder) goes up through 2003.

development. We can hypothesize about this contrast in findings, but it most likely needs to be the subject of a new line of research. In any case, Banks' instability measure is negatively and often statistically significantly related to stock market capitalization. We find that result using the World Bank's WDI data in panel A of Table 6 and get marginally more robust results using Beck, Demirgüç-Kunt, and Levine's (2000) data in panel B. These political instability results are robust to using an alternative stock market measure: external market capitalization/GDP for 1996-2000, which is the specific dependent variable studied in La Porta et al. (2006). We report this in Appendix Table 6D.

We sought next to discern whether outcomes changed when inequality changed, as inequality is a common explanation in the economic development literature for variation in political instability. We did not find a tight connection when we examined whether any recent decline in inequality was associated with a recent decline in political instability. Only a small number of countries had significantly reduced income inequality at the same time that political instability was widely declining. Perhaps increased democratization over the course of the 1980s and 1990s did not reduce income inequality but did reduce the longer-standing connection between income inequality and political instability.

Does one component or another of SPI primarily predict financial outcomes? The SPI index has two major components, one arising from the severity of political crises (measured by coups, attempted coups, assassinations, and domestic violence) and one based on the regularity of a nation's democracy. However, when we decomposed the index, we found no persistent result privileging crises over democracy or vice versa. Both seem important. The regularity of elections was important, but alone does not dominate the results. Possibly a stable democratic polity with a broad, property-owning middle class insists on property protection (including outside investor protection), and stability gives the government the means to provide it.

We next check for whether there was a late-1990s era effect in which only the small number of countries that reduced their income inequality saw further significant increases in recent stock market capitalization. Consistent with that hypothesis, we find in Table 7 that even controlling for wealth effects and starting-period inequality effects, stock market capitalization increased significantly in those

countries that significantly reduced their income inequality between 1990 and 2000. We measure the reduction in income inequality by dividing the Year 2000 Gini coefficient by the Year 1990 Gini coefficient. Those that reduced their income inequality have lower resulting ratios. We measure equity market development by the ratio of a nation's 2003 stock market capitalization (divided by its GDP) to its 1995 stock market capitalization (divided by 1995 GDP). We choose those years because they come before and after the global equity market bubble. The results are suggestive, and we do not mean to conclude that income equality drives financial development. But these results and the other drivers of political instability merit further study.

We next wondered whether our political instability results were associated with judicial branch variables, such as judicial independence, judicial review, and case law, although we were skeptical that any of these would be causative. Our reading of the political science literature was that judicial review and independence were more likely to *reflect* underlying consensus (and stability) than to cause it. As Whittington (2005: 583, 594), a political scientist, states: "For … frequent [judicial] constitutional invalidation of legislation and executive action, to be sustained over time, the courts must operate in a favorable political environment." And, "[p]olitical scientists have been skeptical of the significance of truly countermajoritarian judicial review, which would seem unlikely to find political support in a democratic political system." Analogous analyses see players deferring to an arbitrator — the judiciary — when they have a lot to lose from violent political disorder, which well-to-do disagreeing players would have (Stephenson (2003)).

For judicial independence, legal scholars often view the judicial branch as less politically powerful than the legislative and executive branches. Bickel (1962: 1) begins his legal classic by stating that, despite being "the most extraordinarily powerful court of law the world has ever known," the American Supreme Court is the "*least* dangerous branch of the American government" (emphasis added). Judicial "independence" may thus derive from a polity having a sufficiently strong consensus on norms and institutions such that the first-order political institutions accept review from a second-order one, like the

judiciary. Such a polity is stable, but judicial independence reflects the underlying stability of the other branches.

For case law, we were skeptical of the sharpness of modern distinctions between case law and code-based systems. As Mahoney (2001) and Roe (2000, 2006) point out from the legal literature, in the last century the United States has widely used codes, relying on a Uniform Commercial Code for much contracting, secured bank financing, and check-clearing financial law and on a securities code and a code-writing regulator, the SEC, for much corporate-securities-oriented law. Still, perhaps judge-based case law is somehow more predictable and better attuned to commerce, with judges announcing rules. For code-based law, in contrast, the legislature writes rules — often with expert help — and instructs judges to apply them. Although legal predictability is vital for business, see, e.g., Weber (1950: 277, 342-343), classical opinion differed as to whether cases or codes yielded more predictability. Traditional Anglophile-based commentators used to see case law as more transparent: judges, they asserted, clearly stated the facts of their case, their reasoning, and their conclusion. But case law's critics said that the judges' opinions are often inconsistent with those of other judges and on occasion opaque standing alone. Even when the opinions of judges using case are clear, businesspeople need legal counsel to understand them. Code-based systems (including, in the modern era, much American commercial and corporate law) get converse accolades and criticisms: proponents saw codes as sufficiently clear to be predictable, with businesspeople often able to access the codes directly. Critics of code-based civil law systems see their judicial opinions as opaque. Overall, Bentham (1882: 13; 1998: 10-11, 20) harshly criticized common law decisions, which he found confused, confusing, opaque, and unpredictable. Weber (1978: 814) thought the same: "England," he says, "achieved capitalistic supremacy among the nations not because but rather in spite of its judicial system." On the other hand, North (1990: 35) argues that common law systems regulated contract better than the alternatives. We do not try here to resolve this debate (and we again note that the legal literature sees common law nations, such as the United States, as not today relying primarily on case-based law for core business law).

Still, we went forward to test the three judicial variables and found them generally not robust to the political stability index. The judicial independence index was positively associated with stock market capitalization divided by GDP using the Beck et al. data. Although the judicial independence index is statistically significant in most years, it typically loses significance after we include the SPI index in the model, as panel A of Table 8 shows. (In the Appendix we report WDI data as well, with similar results.) Indeed, the SPI index is somewhat more robust in predicting stock market capitalization after including judicial independence as a control variable.

In panel B, we focus on the case law variable and again find that the SPI index is somewhat more robust when we include the case law variable, with the case law variable usually losing significance when we include political stability. In panel C, we examined La Porta and colleagues' (2004) variable for judicial review, which measures the judges' power to strike down laws. Panel C shows that the power of judicial review relating negatively and statistically significantly to stock market capitalization. As before, the SPI index is robust to including this judicial review variable.

The negative sign of the judicial review variable is puzzling. One possibility is that judicial review is not important, as long as the legislature and the executive retain the basic power to regulate the economy, which they typically do. Moreover, if the judiciary primarily reviews issues of individual rights for constitutionality, and not economic regulation, then the judicial review variable may not pick up enough that's directly vital to economic development. For example, while judicial review overall is strong in the United States, the judiciary defers to the legislature on economic matters (but not on civil rights matters), as Tribe (2000: 1350, 1354), a well-known authority on constitutional law, indicates. In Britain, judicial review on general economic issues was weak, with it being well understood for centuries that the judiciary would *not* displace Parliament's legislative decisions (Goldsworthy (1999: 10, 235)).

Perhaps judicial review's effect on fostering finance is through another channel: by fostering individual rights via its judiciary, a society might be more politically stable. But if this channel were important, the sign ought to have been positive instead of negative. Overall, the judicial review variable's

negative sign is a mystery here. Whatever the explanation for its sign, the important result is that when we run SPI against judicial independence, SPI's significance persists.

To summarize Table 8, the political stability variable is overall quite robust to the judicial variables, which, although sometimes significant when run alone, tend to lose significance in the face of the standard political instability variable.

For completeness, we also examined whether presidentialist political systems affected financial development, because many in the political science literature, most notably Linz and Valenzuela (1994), argue that presidentialist systems can destabilize their polities. We code each country's political system for the period from 1990 to the present using the CIA Factbook. Nevertheless, as we report in the Appendix, we find no significant relationship between presidentialist systems and financial development. The SPI index retains its significance in face of the presidentialist system variable.

Finally, we note secondary results consistent with the importance of political stability. In Table 9, we examined corporate law indices. The anti-self-dealing index, from Djankov et al. (2005), which seeks to measure outside shareholders' legal rights against insiders, explains stock market capitalization during years 1988─1995, as panel A shows, but not in subsequent years, which were the years in which the index measured the actual strength of self-dealing rules. The SPI measure though is moderately robust to including the anti-self-dealing Index. In panel B, we see that Djankov et al.'s (2005) revised anti-director rights index is of mixed significance for explaining stock market capitalization for the 1988─2003 period and insignificant after 1995. Again, the contemporary measure of political instability is moderately robust to the revised anti-director rights index. We also examined the impact of Spamann's (2006) revised anti-director rights index, in which he recoded, with the help of corporate lawyers around the world, LLSV's (1998) measure of outsiders shareholders' legal rights against insiders. That index is not statistically significant for explaining stock market capitalization for most of the 1988─2003 period, while, as panel C shows, the contemporary measure of political instability is moderately robust to the Spamann index.

Finally, the revised creditor rights index (available for years 1978─2002, see Djankov et al. (2004)), is never statistically significant in Table 10 in explaining banking sector development. The SPI index is again quite robust.

Political stability strongly predicts financial development and is overall quite robust to alternative explanations.

V. DISCUSSION

A. Sources of Instability: Does Stability Derive from Legal Origin?

We now consider the possibility that currently prominent explanations for financial differences influence financial markets by affecting political stability. Even if they did, political stability would play a key, and until now largely unexamined, role in law and finance. First, we would thus have identified here a more important channel to financial development than any direct one leading from the currently prominent explanations for financial development. Second, adjacent literatures have not focused on conduits to instability such as legal origin, but on such factors as income and wealth inequality, and ethnic fractionalization. Moreover, even if the currently prominent explanations flowed through instability, other conflicts and institutions (such as income and wealth inequality and ethnic tension) might offset them, by stabilizing (or destabilizing) nations that would otherwise be stable (or unstable).

Proponents of a legal origin framework might argue that the large events of history suggest a common law capacity for accretion and evolution, while the civil law, particularly the French Civil Law, had a contrary tendency to violent disorder and revolution. One need only compare the French Revolution to the relatively peaceful English Glorious Revolution or the American Constitutional Convention to develop iconic contrasts, origins' proponents might point out. Yet, although we share this Anglophile perspective emanating from these Anglo and French icons of order and instability, other contrasts make that iconic comparison less compelling. Comparisons could be made between the French Revolution and the English Civil War that preceded the Glorious Revolution. The English Civil War was

not a tame affair and, like the French Revolution, resulted in the beheading of the King. On the American side, perhaps the French Revolution's incapacity to solve sharp societal problems without widespread violence might be compared to the American Civil War. Despite the repeated American efforts to resolve the underlying disagreement during the preceding half-century, when slavery or its consequences was generally at the center of the American political agenda, peaceful adjustment failed.

Whether or not such historical examples reveal something telling, we do note the basic result from our data: for many of the regressions, legal origin either fails to predict financial development or is not consistently robust in doing so, but political stability predicts financial development regularly and is more often robust to other influences. To exemplify, Liberia's, Nigeria's, and the Sudan's common law origin does not seem to have provided those nations — subject to violent conflict and political instability — significant advantages over civil law nations such as the Ivory Coast, Senegal, and Togo in achieving stability. We verified that during the two decades after African independence, legal origin did not predict the sixty post-independence African coups that Rake (1984: 25) compiled.

As we indicated above, we early on we wondered if political instability was the mechanism through which legal origin exercised its effect on financial development. If it did, that would cast doubt on the primacy of other channels seen as emanating from legal origin that dominated the law and finance literature of the past decade. Thus, even if legal origin strongly affected financial development by affecting instability (and presumably degrading other institutions via instability), our findings would still be, in our view, quite important. Instability would then have constituted a previously-ignored channel.

But we looked for prior evidence that legal origin caused or prevented political instability or its constituent elements and did not find any. Nor has political stability been part of the legal origins theory. Economic historians focusing on political instability have not reported legal origin as the primary channel to instability or related outcomes. For examples, see Dye (2006) and Sanders (1981). Sanders reviews the literature on political instability, indicating many inputs to instability, including corruption, ethno-linguistic fractionalization, a weak middle class, and inequality, but does not mention legal origin.

Still, we wanted to be complete, and political instability does moderately correlate with French civil law. To test whether there was a collinearity problem, we examined the models with and without the legal origin variables and with and without the political instability variables. Our doing so revealed no significant change in either set of coefficient results. Normally that would end the matter, even with higher collinearity. Moreover, the decay models suggest a persisting effect of prior instability in disrupting later finance, a result more consistent with a varying cause than with the rigid effect of origin. We also found substantial variation of political instability inside each origin — common law nations such as Liberia, Nigeria, and the Sudan have been quite unstable — that suggested no serious collinearity problem. Still, to further test the possibility of an important legal origin channel to financial development through political instability, we tested whether the coefficients on the political instability variable were significantly inflated by legal origin. They were not. The variance inflation factor for political instability was consistently less than 1.70 throughout and conventionally one has little reason to be concerned about significant inflation in the coefficient until the factor reaches 10. Similarly, examining the variance inflations factors showed that the coefficients on the legal origin and other variables were not meaningfully influenced by collinearity. The mean VIFs across varying specifications are consistently less than 3.25.

We also examined whether standard thinking in adjacent disciplines — that instability often results from inequality and ethnic fractionalization — was in play in our data. (Adjacent disciplines do not focus on legal origin.) We ran simple tests on the determinants of instability common in the economic and political science literature — income inequality and ethnic fractionalization. Income inequality, as proxied by the size of the middle class, was indeed highly robust in explaining political instability. Moreover, the modest correlation between French legal origin and political instability disappears when we control for basic economic and political factors such as a nation's dependence on crops using unskilled labor, its land inequality, and its ethnic fractionalization, as we show in Table 12. Maybe legal origin affects stability through a propensity to develop income inequality and ethnic conflict, but these

channels not only have not been previously advanced in the legal origin theory but also seem too much to ask of legal origin.

B. Weakness of Legal Origin

Although our primary purpose here was to investigate political instability's power in predicting financial development outcomes, we could not help but notice the weakness of standard legal origin theory in a wide range of results, including those we report in Table 3. The standard theory is that Common Law is superior to all other legal families in inducing strong financial development and French Civil Law inferior. We find a series of surprising facts by looking at a wider set of indicators over a longer series of recent decades. Even without the political stability indicators, the significance and sometimes the sign of the legal origins results over the longer series, covering several recent decades, is erratic, as one sees by examining Table 11. First of all, German Civil Law countries consistently outperform Common Law countries in generating debt market development, and in these results there was no robust evidence for Common Law countries achieving better stock market development than German Civil Law countries. Yet the strength of German Civil Law is not central to the legal origin theory and its strength relative to Common Law in much of our data contradicts the theory. (We presented our results using German Civil Law as the reference case and, as one sees in Tables 3 and 11, both Common Law and French Civil Law are significantly inferior to German Civil Law in explaining debt market development. Obviously, the choice of the reference set would not change the symmetry of result. When Common Law is instead used as the reference set, German Civil Law shows up as being significantly superior to the Common Law reference set in predicting debt market development for most of the period.

Second, for the vast majority of years during 1965-2004, there was no statistically significant difference between French Civil Law and Common Law nations in generating debt market development. Only in more recent years has a gap opened up. Third, although in direct comparisons for stock market capitalization over GDP, Common Law countries do appear to outperform French Civil Law countries,

even here robustness checks had those results sometimes fragile to removing outliers among the Common Law countries or to testing the results on a sample of non-OECD countries.

Overall, given the importance of banks and stock markets for financial development, our evidence fails to uniformly support Glaeser and Shleifer's (2002: 1194) conclusion that "[o]n just about any measure, common law countries are more financially developed than civil law countries." For several measures over multiple recent decades our results do not confirm their conclusion.

Since we were initially surprised by these results, we backtracked to gauge the underlying strength to legal origin, by giving it a weaker hurdle to surmount, by just using common law in a basic specification, without the other origins. Such a test departs from the dominant theory that legal origins' proponents offered and is not the way the literature (including especially LLSV) has usually modeled legal origin in multivariate regressions, since so much could be going on that correlates with a single origin when run alone. But just to see if origin could surmount such a weak hurdle, we used the basic specifications in Table 6 and just added Common Law origin alone. While it at first appears significant, it is fragile to the removal of outliers such as the United States and the United Kingdom.

These weak results for origin are overall noteworthy and should stimulate further study. Regardless, we repeat our main and persistent finding here: political stability is quite robust to origin and, regardless of the results of any further investigation of origin, the evidence here shows that political stability needs to be added to the list of the handful of core determinants of financial development around the world.

C. The Direction of Causation

Another causation channel might be more relevant and, although unlikely, cannot be fully ruled out from the data: could financial development primarily determine political stability? Did weak financial development in the 19th century primarily determine 20th century instability (as opposed to just being a supporting factor), with that financially-induced instability in turn inducing weak 20th century financial development.

While possible — and we sympathize with the idea that some institutions and outcomes are determined simultaneously, not sequentially — neither a two-stage regression nor modern law and finance theory support a conclusion that there's a first-order channel running from finance to instability. First, the two-stage regression: The fundamental geography of settlement led some nations to turn to crops that were best developed with large landholdings worked by large pools of unskilled labor. That setting produced deep inequality, both initially and over time, from which institutions that perpetuated that initial inequality emerged, a process prominent in Engerman and Sokoloff's (2002) work. Acemoglu, Johnson, and Robinson's (2001) work on how relative settler mortality in the colonies induced institutional choices that persisted and the related modeling of instability in Acemoglu and Robinson (2006) are also suggestive. It is not easy to see how financial backwardness induced both inequality and instability-generating geographic conditions here. Moreover, the economic and political science literature, to the extent it does not attribute instability primarily to inequality, attributes it to ethnic fractionalization, as seen in Alesina and Spolaore (1997). It is quite unlikely that financial backwardness induced ethnic fractionalization, although it's plausible that fractionalization induced weak financial development both directly and by increasing instability. Because unequal societies tend to be ethnically heterogeneous, as Glaeser (2005) reports, and distributional fights in unequal societies impede economic growth, as Alesina and Rodrik (1994) indicate, well-established channels run to instability that do *not* run from financial development. Overall it seems unlikely that early financial backwardness was the *primary* cause of 20th century political instability, but, again, the data does not rule out that possibility.[9]

To focus this further, using what data is available, we set up a two-stage model by first instrumenting for the SPI index, using historical and exogenous variables similar to those used in adjacent inquiries. The task had multiple data constraints. Many factors seen to be behind instability have not been measured across a large sample of nations for a large number of years. Still, as we show in model (1) of Table 12, the size of the middle class in 1960 alone explains much variation in the SPI index. We

[9] We went to the earliest years covered by the World Handbook and found statistical support for the fact that political disorder in years dating back to 1948 predicted weakness in subsequent debt market development in 1965.

expand upon the simple middle-class model in the other columns of Table 12, focusing on national geographic propensity to rely on cash crops best grown via large landholdings and large pools of unskilled labor — a traditional recipe for inequality and instability. The large landholdings/land inequality variable comes from Frankema (2006). Highly unstable countries tend to have very high average temperatures, with instability presumably due not to hotheadness but to the kind of landholdings and resultant inequality that the geography induces. Legal origin is not robust to a model of instability that includes the crop-type and other variables associated with inequality and instability, as one sees by examining column (3) in Table 12.

In Table 13, we instrument the SPI index from the column (6) results of Table 12 to predict financial development. Despite the serious data constraints, and despite that the labor intensity of agriculture is surely not the sole basis for political instability, the instrumented SPI index explain bank loans to GDP for 1965─1982, which were all the available years the SPI index covers. We separately confirmed that the instrumented SPI index significantly predicted banks loans to GDP for 1965, 1970, and 1975. We then found that the instrumented SPI index was significant in explaining the earliest available year of stock market development data from the World Bank (for 1988, which is six years after the end of the 1960─1982 period the SPI index covers). We found a similar result using for Beck Demirgüç-Kunt, and Levine (2000) alternative data for that year.[10] Although not robust for all possible years, the evidence using instrumented SPI is sufficiently consistent across time periods and indicators even in the face of the reduced sample size and lack of deeper data, as well as the likelihood of other strong bases for instability. The instruments appear to be valid ones in partly explaining financial development via political instability.[11] As such, the data reveal a significant exogenous component of political instability that strongly determines poor financial development.

[10] We also found in separate robustness checks using the available data in a panel structure that political instability as measured using Banks' data was highly robust in explaining stock market development for years 1976─2003, even when including country fixed effects and controlling for annual log GDP per capita. The results are in the Appendix.

[11] We tried the proposed instruments directly as independent variables in the second stage of the model, where financial development outcomes are the dependent variables. Those variables were rarely even marginally statistically significant at that level. Thus, the proposed instruments do much to explain the SPI index, but do little to explain these various financial development outcomes directly. They operate on financial development outcomes through the SPI index.

Moreover, second, the theory underlying much of modern law and finance would have to be largely abandoned for causation to strongly run from financial development to political stability. The main thrust of the last decade's law and finance inquiries beyond the centrality of legal origin is that government institutions of some sort — usually via the judiciary and the right of disgruntled investors to sue wrongdoers — is central to protecting investors. But it's hard to see how one could have an *unstable* political environment that nevertheless produces good government and strong investor protection while unstable (Svensson (1998: 1318-1319)), with that investor protection then producing financial development (in the midst of instability), and with that good financial development then *later* stabilizing a previously-unstable polity. The government institutions that investors need for protection are inconsistent with an unstable, unreliable polity. Hence, a significant direction of causation — to be consistent with the most basic findings of the law and finance inquiry — *must* run *from* stability *to* finance. Political stability is both largely independent of legal origin and seems a key precondition to getting good governmental and institutional structures that protect outside investors.

D. Interactions with Other Existing Theories

1. Relationship with existing theories. The data suggests political stability as propelling financial development and instability as retarding it. But this does not mean that the other theories have no relevance. The colonial endowments explanation may work its way through political instability to financial markets, because extractive settlement strategies bred colonial inequality and that inequality could have continued up through the modern era. But even so, it remains plausible that it's modern instability, and not poor endowments directly, that impedes later financial markets. The investor protection arm of modern law and finance may still be relevant, but it may depend more on relative political stability than on previously-advanced considerations. Similarly, strong endowments can facilitate markets, but the channel appears to be through their propensity to foster stability.

2. Stability and equality. Equality can induce economic development. As Murphy, Shleifer, and Vishny (1989) explain: "extreme concentration of wealth in the hands of the very rich will manifest itself

in the demand for handmade and imported luxuries rather than for domestic manufactures… . The necessity of a middle class as source of the buying power for domestic manufactures is the central message of our paper." This suggests an alternative channel to financial development: equality induces a demand for economic development and industrialization, which in turn calls forth finance in a Joan-Robinson-like process. Robinson (1952) (where industry leads, finance follows). The analysis in this paper provides a parallel track — if those who focus on equality as facilitating political stability are right. If they are, equality facilitates not just industrialization, but also sufficient stability — probably partly through a broad property-owning middle class — so that the polity does not disrupt financial development.

E. Refining

We were surprised at how well the basic political stability index did in predicting financial development, despite its bluntness. Future work, which we hope others will join in undertaking, should refine political instability's impact: Instability via a revolution that led not to persistent turmoil but to democratic resolution and rise of a middle class society, may yield stronger not weaker financial development over the long-run. Olson (1982) suggests that "the most rapid growth will occur in societies that have lately experienced upheaval but are expected nonetheless to be stable for the foreseeable future." And because the reigning index measures violence and democracy, a strong authoritarian regime might have modest financial development — because the players expect that an eventual transition to democracy will upset prevailing arrangements — but the blunt instability measure could indicate that the country, because violence is low, is stable. And isolated rebellions at the periphery of a nation could count as instability, as measured, but, if the regime's center is not threatened, the country's financial markets could develop satisfactorily.

F. Considering the Future

We want to end our discussion on a hopeful note. For reasons yet to be fully understood, political stability around the world increased noticeably during the past decade or two, as Figures 1, 2, and 3 show.

Given the strong relationship we have shown here between stability and financial development, there's more reason beyond optimistic hope to expect that efforts such as those of the World Bank to initiate financial development by building the right investor protection institutions will not go to waste. Indeed, the potential effectiveness of development authorities' building better underpinnings for financial markets in the past decade or so may have been made possible by the secular decline in political instability. It's in such politically stable settings that their technical finance-enhancing efforts seem, from the data in this paper, likely to succeed. In unstable political environments, the technical institutions of investor protection are unlikely, our data suggests, to have much impact on financial development.

CONCLUSION

Political instability is quite important to explaining variation in financial development around the world. Considerable attention has been given in the past decade to explaining which institutions foster or impede financial development, but political stability as a necessary condition, or instability as a serious impediment, has not played the prominent role the results in this paper indicate it deserves. We contribute here to understanding the variance in financial development around the world by showing that variation in political stability has a significant, consistent, and substantial impact over many decades on debt and stock market development. Political instability needs to be added to the small number of core factors that determine financial development around the world.

Well-regarded conventional measures of political instability — such as Alesina and Perotti's (1996) and Banks' (2005) indices of severe political crises such as military coups, political assassinations, and political violence — persistently and significantly predict a wide range of conventional national financial outcomes. These results are robust to legal origin, to trade openness, to latitude, and to other measures that have obtained prominence in the past decade.

While examining political instability as predicting financial development, we encountered surprises. It was not just that political instability was robust to legal origin, but our data over several decades did not support a conclusion that the differences between French Civil Law and Common Law

legal origins were as persistently and robustly important for debt market and stock market development as, because of origins' prominence in the literature of the past decade, we had expected. Regardless, financial backwardness is significantly rooted in severe political instability, with that relationship quite robust to legal origin as a control.

Political stability is foundational for finance and goes a long way toward explaining cross-country differences in financial development.

Bibliography

Acemoglu, Daron, Simon Johnson, and James A. Robinson, 2001, The Colonial Origins of Comparative Development: An Empirical Investigation, *American Economic Review* 91, 1369-1401.

Acemoglu, Daron, and James A. Robinson, 2006, *Economic Origins of Dictatorship and Democracy* (Cambridge University Press).

Aisen, Ari, and Francisco José Veiga, 2006, Does Political Instability Lead to Higher Inflation?—A Panel Data Analysis, *Journal of Money, Credit and Banking* 30, 1379-1389.

Alesina, Alberto, Arnaud Devleeschauwer, William Easterly, Sergio Kurlat, and Romain Wacziarg, 2003, Fractionalization, *Journal of Economic Growth* 8, 155-94.

Alesina, Alberto, Sule Ozler, Nouriel Roubini, and Phillip Swagel, 1996, Political Instability and Economic Growth, *Journal of Economic Growth* 1, 189-211.

Alesina, Alberto, and Roberto Perotti, 1996, Income Distribution, Political Instability, and Investment. *European Economic Review* 40, 1203-1228.

Alesina, Alberto, and Dani Rodrik, 1994, Distributive Politics and Economic Growth, *Quarterly Journal of Economics* 109: 465-490.

Alesina, Alberto, and Enrico Spolaore, 1997, On the Number and Size of Nations, *Quarterly Journal of Economics* 102, 1027-56.

Alexander, Cindy, 1999, On the Nature of the Reputational Penalty for Corporate Crime: Evidence, *Journal of Law and Economics* 42, 489-526.

Allen, Franklin, Jun Qian and Meijun Qian, 2005, Law, Finance, and Economic Growth in China, *Journal of Financial Economics* 77, 57-116.

Amadife, Egunam E., 1999, Liberalization and Democratization in Nigeria, *Journal of Black Studies* 29: 619-645.

Angeles, Luis, 2006, Income Inequality and Colonialism, *European Economic Review*, forthcoming, available at http://ssrn.com/abstract= 910501.

Ayyagari, Meghana, Asli Demirgüç-Kunt, and Vojislawv Maksimovic, 2006, What Determines Protections of Property Rights? *World Bank Policy Research Working Paper No. 3940*, available at http://ssrn.com/abstract=923247

Banks, Arthur S., 2005, *Cross-National Time-Series Data Archive* [electronic resource]. (Arthur S. Banks, Binghamton).

Barro, Robert J and Jong-Wha Lee, 1994, *Data Set for a Panel of 138 Countries*, available at http://www.nber.org/pub/barro.lee/reademe.txt.

Beck, Thorsten, Asli Demirgüç-Kunt, and Ross Levine, 2000, A New Database on Financial Development and Structure, *World Bank Economic Review* 14, 597-605.

_____. Law, Politics and Finance, 2001, *World Bank Policy Research Working Paper No. 2585*, available at http://ssrn.com/abstract=269118.

Beck, Thorsten, and Ross Levine, Legal Institutions and Financial Development, in Claude Menard and Mary M. Shirley, eds.: *Handbook of the New Institutional Economics*. (Springer, Dordrecht, The Netherlands).

Benabou, Roland, 1996, Inequality and Growth, *NBER Working Paper No. 5658*, available at http://www.nber.org/papers/w5658.

Bentham, Jeremy, 1882, *Codification of the Common Law* (New York, J. Polhemus printer).

_____, 1998, *Legislator of the World: Writing on Codification, Law, and Education*, (Oxford University Press).

Bickel, Alexander M., 1962, *The Least Dangerous Branch: The Supreme Court in the Bar of Politics* (Bobbs-Merrill, Indianapolis).

Boix, Carles, 2003, *Democracy and Redistribution* (Cambridge University Press).

Cheffins, Brian R, 2001, Does Law Matter?: The Separation of Ownership and Control in the United Kingdom, *Journal of Legal Studies* 30, 459-484.

Coatsworth, John H., 1993, Notes on Comparative Economic History of Latin American and the United States, in Walter L. Berneker and Hans Werbler Tobler, eds: *Development and Underdevelopment in America* 10-30 (Cambridge University Press).

Coffee, John C., 2001, The Rise of Dispersed Ownership, *Yale Law Journal* 111, 1-82.

Collier, Paul, 1999, On the Economic Consequences of Civil War, *Oxford Economic Papers* 51, 168-83

_____, 2000, Economic Causes of Civil Conflict and their Implications for Policy, Working Paper, World Bank, June 15.

DeLong, J. Bradford, 1991, Did J.P. Morgan's Men Add Value, in Peter Temin, ed.: *Inside the Business Enterprise* (University of Chicago Press).

Detragiache, Enrica, Poonam Gupta, and Thierry Tressel, 2005, Finance in Lower-Income Countries: An Empirical Exploration, International Monetary Fund Working Paper 05/167.

Djankov, Simeon, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer, 2005, The Law and Economics of Self-Dealing, Working Paper, available at http://ssrn.com/abstract=864645.

Djankov, Simeon, Caralee McLeish, and Andrei Shleifer, 2004, Private Credit in 129 Countries, Working paper, available at http://ssrn.com/abstract=637301.

Dye, Alan, 2006, The Institutional Framework, in Victor Bulmer-Thomas, John Coatsworth and Roberto Cortés Conde, eds: *The Cambridge Economic History of Latin America. Volume II: The Long Twentieth Century*, 169-207 (Cambridge University Press).

Easterly, William, 2001, The Middle Class Consensus and Economic Growth, *Journal of Economic Growth* 6, 318-26.

Easterly, William, and Ross Levine, 1997, Africa's Growth Tragedy: Policies and Ethnic Divisions, *Quarterly Journal of Economics* 62, 1203-1250.

Engerman, Stanley L., and Kenneth L. Sokoloff, 2002, Factor Endowments, Inequality, and Paths of Development Among New World Economies, *Economia* 3, 44-71.

FAO, 1977, Trade Yearbook 1976 (Food and Agriculture Organization of the United Nations, Rome).

FitzGerald, Edmund V., 1987, An Evaluation of the Economic Costs to Nicaragua of U.S. Aggression, in Rose J. Spalding, ed.: *The Political Economy Of Revolutionary Nicaragua*, 195-213 (Allen & Unwin, Boston).

Frankel, Jeffrey A., and David Romer, 1999, Does Trade Cause Growth?, *American Economic Review* 89, 379-399.

Frankema, Ewout, 2006, The Colonial Origins of Inequality: Exploring the Causes and Consequences of Land Distribution. Working paper. (University of Gröningen).

Franks, Julian, Colin Mayer, and Stefano Rossi, 2006, Ownership: Evolution and Regulation, Working Paper, available at http://ssrn.com/abstract=354381.

Glaeser, Edward L., forthcoming, Inequality, in Barry Weingast and Donald Wittman, eds.: *Oxford Handbook of Political Economy*.

Glaeser, Edward, and Andrei Shleifer, 2002, Legal Origins, *Quarterly Journal of Economics* 117, 1193-1228.

Goldsworthy, Jeffrey, 1999, *The Sovereignty of Parliament* (Oxford University Press).

Haber, Stephen, Armando Razo, and Noel Maurer, 2003, *The Politics of Property Rights: Political Instability, Credible Commitments, and Economic Growth in Mexico, 1876-1929* (Cambridge University Press).

Keefer, Philip, 2005, Beyond legal origin and checks and balances: Political credibility, citizen information and financial sector development. World Bank Development Research Group Working Paper.

King, Robert G., and Ross Levine, 1993, Finance and Growth: Schumpeter Might Be Right, *Quarterly Journal of Economics* 108, 717-37.

Knight, M., N. Loayza, and D. Villanueva, 1996, The Peace Dividend: Military Spending Cuts and Economic Growth, *IMF Staff Papers* 43, 1-37.

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

La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny, 1998, Law and Finance, *Journal of Political Economy* 106, 1113-1155.

_____, 1997, The Legal Determinants of External Finance, *Journal of Finance* 52, 1131-1150.

_____, 1999, The Quality of Government, *Journal of Law, Economics & Organization* 15, 222-279.

La Porta, Rafael, Florencio Lopez-de-Silanes, Cristian Pop-Eleches, and Andrei Shleifer, 2004, Judicial Checks and Balances, *Journal of Political Economy* 112, 445-470.

Levine, Ross, 1997, Financial Development and Economic Growth: Views and Agenda, *Journal of Economic Literature* 35, 688-726.

Lindgren, Göran, 2005, The Economic Costs of Civil Wars, Paper for the Ninth Annual International Conference on Economics and Security, June 23..

Linz, Juan J. and Arturo Valenzuela, eds., 1994, *The Failure of Presidential Democracy* (Johns Hopkins University Press).

MacCulloch, Robert 2001, What Makes a Revolution?, Working Paper, London School of Economics No. 2001/02, available at http://ssrn.com/abstract=265434.

Mahoney, Paul G., 2001, The Common Law and Economic Growth: Hayek Might Be Right, *Journal of Legal Studies* 30, 503-25.

Marshall, Monty G., and Ted Robert Gurr, *Peace and Conflict 2005: A Global Survey of Armed Conflicts, Self-Determination Movements, and Democracy* (University of Maryland, Center for International Development and Conflict Management).

Maurer, Noel, 2002, *The Power and the Money: The Mexican Financial System, 1876-1932* (Stanford University Press).

Mishkin, Frederic S., 2006, *The Next Great Globalization: How Disadvantaged Nations Can Harness Their Financial Systems to Get Rich* (Princeton University Press).

Miwa, Yoshiro, and Mark Ramseyer, 2002, The Value of Prominent Directors: Corporate Governance and Bank Access in Transitional Japan, *Journal of Legal Studies* 31, 273-301.

Murphy, Kevin M., Andrei Shleifer, and Robert W. Vishny, 1989, Income Distribution, Market Size, and Industrialization, *Quarterly Journal of Economics* 104, 537-545.

North, Douglass, 1990, *Institutions, Institutional Change, and Economic Performance* (Cambridge University Press).

Pagano, Marco, and Paolo F. Volpin, 2005, The Political Economy of Corporate Governance, *American Economic Review* 95, 1005-1030.

Perotti, Roberto, 1996, Growth, Income Distribution, and Democracy: What the Data Say, *Journal of Economic Growth* 1, 149-187.

Perotti, Enrico C., and Ernst-Ludwig von Thadden, 2006, The Political Economy of Corporate Control and Labor Rents, *Journal of Political Economy* 114, 145-174.

Posner, Richard A., 1997, Equality, Wealth, and Political Stability, *Journal of Law, Economics, & Organization* 13, 344-365.

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

Rake, Alan, 1984, Coups without End, *New African* April 24-25.

Richardson, J.M., and S.W. Samarasingle, 1991, Measuring the Economic Dimensions of Sri Lanka's Ethnic Conflict. In S.W. Samarasingle & Reed Coughlan, eds.: *Economic Dimensions of Ethnic Conflict* 194-223 (London, New York, St. Martin's Press).

Robinson, Joan, 1952, *The Rate of Interest and Other Essays* (Macmillan, London).

Rock, Edward B., 2001, Encountering the Scarlet Woman of Wall Street, *Theoretical Inquiries in Law* 2, 237-264.

Roe, Mark J., 2006, Legal Origins, Politics, and Modern Stock Markets, *Harvard Law Review* 120, 460-527.

_____, 2000, Political Preconditions to Separating Ownership from Corporate Control, *Stanford Law Review*, 53, 539-606.

Rousseau, Peter L., and Richard Sylla, 2006, Financial revolutions and economic growth, *Explorations in Economic*

History 43: 1-12.

Sanders, David, 1981, *Patterns of Political Instability* (St. Martin's Press).

Spamann, Holger, 2006, On the Insignificance and/or Endogeneity of La Porta et al.'s "Anti-Director Rights Index" under Consistent Coding, Harvard Law School John M. Olin Center Discussion Paper No. 7, available at http://ssrn.com/abstract=894301.

Stephenson, Matthew C., 2003, "When the Devil Turns … ": The Political Foundations of Independent Judicial Review, *Journal of Legal Studies* 32, 59-89.

Svensson, Jakob, 1998, Investment, Property Rights and Political Instability: Theory and Evidence, *European Economic Review* 42, 1317-1341.

Sylla, Richard, Richard Tilly, and Gabriella Tortella, 1999, *The State, the Financial Systems and Economic Modernization* (Cambridge University Press).

Taylor, Charles Lewis, and David A. Jodice, 1983, *World Handbook of Political and Social Indicators*, 3d ed. (Yale University Press).

Treisman, Daniel, 2000, The Causes of Corruption: A Cross National Study, *Journal of Public Economics* 76, 399-457.

Tribe, Laurence H., 2000, *American Constitutional Law,* Vol. 1, 3d ed. (Mineola, NY, Foundation Press).

Van de Vliert, Evert, Shalom H. Schwartz, Spike E. Huismans, Geert Hofstede, and Serge Daan, 1999, Temperature, Cultural Masculinity, and Domestic Political Violence, *Journal of Cross-Cultural Psychology* 30: 291-314.

Weber, Max, 1978, *Economy and Society* (University of California Press).

_____, 1950, *General Economic History* (Glencoe, IL, Free Press).

Whittington, Keith E., 2005, "Interpose Your Friendly Hand": Political Supports for the Exercise of Judicial Review by the United States Supreme Court, *American Political Science Review*, 99: 583-596.

World Bank, 2006, Institutional Foundations for Financial Markets, available at http://worldbank.org/wbsite/external/topics/extfinancialsector/html.

You, Jong-sung, and Sanjeev Khagram, 2005, A Comparative Study of Inequality and Corruption, *American Sociological Review* 70, 136-157.

Table 1. Political Instability and Debt Market Development (1965-2004)

Panel A. This table presents the results of cross-sectional OLS regressions in which Bank Credit/GDP is the dependent variable and the SPI Index and the log of GDP per capita are included as independent variables. The t-statistics appear to the right of each coefficient. Statistical significance is assessed based on robust standard errors.

DV: Bank Credit/GDP

Year of Data	SPI Index		Log of GDP per capita				
	Coefficient	t-statistic	Coefficient	t-statistic	Obs	p value	R-squared
1965	-0.472***	-3.41	9.171***	5.05	57	0.000	0.510
1970	-0.414***	-2.78	10.153***	5.35	60	0.000	0.487
1975	-0.594***	-3.90	9.437***	5.20	65	0.000	0.443
1980	-0.673***	-3.36	8.970***	4.24	66	0.000	0.383
1985	-0.823**	-2.28	10.207***	3.64	66	0.000	0.330
1990	-0.553*	-1.74	16.305***	6.05	67	0.000	0.484
1995	-0.571	-1.38	16.600***	5.59	67	0.000	0.445
2000	-0.374	-0.81	18.418***	6.93	67	0.000	0.455
2004	-0.595	-1.59	20.568***	7.66	67	0.000	0.555

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level.

Panel B. This table presents the results of cross-sectional OLS regressions in which Private Credit/GDP is the dependent variable and the SPI Index and the log of GDP per capita are included as independent variables. The t-statistics appear to the right of each coefficient. Statistical significance is assessed based on robust standard errors.

DV: Private Credit/GDP

Year of Data	SPI Index		Log of GDP per capita				
	Coefficient	t-statistic	Coefficient	t-statistic	Obs	p value	R-squared
1965	-0.428***	-3.57	8.223***	4.94	58	0.000	0.486
1970	-0.409***	-3.41	9.138***	5.37	60	0.000	0.487
1975	-0.449***	-2.76	9.460***	6.06	65	0.000	0.475
1980	-0.366**	-2.18	10.206***	6.11	65	0.000	0.492
1985	-0.356	-1.52	11.512***	5.82	65	0.000	0.471
1990	-0.556*	-1.96	16.046***	7.23	66	0.000	0.599
1995	-0.454	-1.13	16.537***	6.75	66	0.000	0.485
2000	-0.394	-0.90	19.367***	7.61	66	0.000	0.531
2004	-0.686	-1.56	20.146***	6.86	66	0.000	0.542

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level.

Table 2. Political Instability and Equity Market Development (1988-2004)

Panel A. This table presents the results of cross-sectional OLS regressions in which Stock Market Capitalization/GDP is the dependent variable and the SPI Index and the log of GDP per capita are included as independent variables. The t-statistics appear to the right of each coefficient. Statistical significance is assessed based on robust standard errors.

DV: Stock Market Capitalization/GDP

Year of Data	SPI Index		Log of GDP per capita				
	Coefficient	t-statistic	Coefficient	t-statistic	Obs	p value	R-squared
1988	-0.906***	-3.33	7.276***	2.92	42	0.000	0.301
1990	-0.867**	-2.25	4.709*	1.87	43	0.000	0.198
1995	-1.151**	-2.20	5.523	1.56	52	0.000	0.145
2000	-0.800*	-1.89	22.817***	5.08	55	0.000	0.397
2004	-1.133**	-2.23	13.423***	3.72	54	0.000	0.293

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level.

Panel B. This table presents the results of cross-sectional OLS regressions in which Stock Market Capitalization/GDP, using Beck, Demirgüç-Kunt, and Levine's measure of stock market capitalization/GDP, is the dependent variable and the SPI Index and the log of GDP per capita are included as the independent varialbes. T-statistics appear to the right of each coefficient. Statistical significance is assessed based on robust standard errors.

DV: Beck, Demirgüç-Kunt, and Levine's Stock Market Capitalization/GDP

Year of Data	SPI Index		Log of GDP per capita				
	Coefficient	t-statistic	Coefficient	t-statistic	Obs	p value	R-squared
1976	-0.005	-0.46	0.000	0.00	17	0.581	0.027
1980	-0.006**	-2.06	0.012	0.51	29	0.009	0.116
1985	-0.007***	-2.76	0.045**	2.32	40	0.000	0.272
1990	-0.010**	-2.53	0.059**	2.24	44	0.000	0.253
1995	-0.012**	-2.25	0.032	0.89	51	0.001	0.129
2000	-0.010**	-2.27	0.238***	4.96	54	0.000	0.385
2003	-0.005	-1.30	0.130***	3.48	51	0.000	0.274

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level.

Table 3. Political Instability, Bank Credit/GDP, Trade, and GDP/capita (1965-2004)

Panel A. This table presents the results of cross-sectional OLS regressions in which Bank Credit/GDP is the dependent variable and the SPI Index, legal origin dummies, constructed trade share, and log GDP per capita are independent variables. The German Civil Law dummy is the omitted dummy variable, and t-statistics appear to the right of each coefficient. Statistical significance is assessed based on robust standard errors.

DV: Bank Credit/GDP

Year of Data	SPI Index		French Civil Law		Common Law		Scandinavian Civil Law		Constructed Trade Share		Log of GDP per capita				
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Obs	p value	R-squared
1965	-0.426***	-2.93	-34.473**	-2.22	-36.762**	-2.32	-27.287*	-1.71	-0.356**	-2.43	7.471***	4.04	57	0.000	0.618
1970	-0.356**	-2.34	-45.695**	-2.63	-47.148***	-2.68	-38.647**	-2.16	-0.368**	-2.04	8.067***	4.44	60	0.000	0.624
1975	-0.580***	-3.66	-28.636	-1.47	-30.744	-1.55	-34.028*	-1.74	-0.075	-0.26	8.157***	4.20	65	0.000	0.505
1980	-0.645***	-3.48	-42.266**	-2.02	-44.521**	-2.01	-52.689**	-2.41	0.101	0.29	7.037***	3.25	66	0.000	0.501
1985	-0.680**	-2.02	-55.798**	-2.19	-52.708*	-1.93	-63.724**	-2.50	0.245	0.52	7.992***	2.91	66	0.000	0.445
1990	-0.335	-1.17	-69.062**	-2.57	-63.227**	-2.28	-62.886**	-2.14	-0.241	-0.68	13.747***	6.88	67	0.000	0.599
1995	-0.149	-0.38	-82.255***	-2.98	-64.536**	-2.25	-91.288***	-3.18	-0.132	-0.33	15.390***	6.78	67	0.000	0.610
2000	-0.072	-0.15	-40.810***	-3.06	-24.871	-1.44	-64.135***	-3.06	0.224	0.47	19.070***	6.76	67	0.000	0.524
2004	-0.330	-0.86	-29.783**	-2.15	-13.869	-0.91	-57.879*	-1.79	0.024	0.06	22.086***	8.14	67	0.000	0.611

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level.
Note: There were no Socialist Law countries with available SPI data.

Panel B. This table presents the results of cross-sectional OLS regressions in which Private Credit/GDP is the dependent variable and the SPI Index, legal origin dummies, constructed trade share, and log GDP per capita are independent variables. The German Civil Law dummy is the omitted dummy variable, and t-statistics appear to the right of each coefficient. Statistical significance is assessed based on robust standard errors.

DV: Private Credit/GDP

Year of Data	SPI Index		French Civil Law		Common Law		Scandinavian Civil Law		Constructed Trade Share		Log of GDP per capita				
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Obs	p value	R-squared
1965	-0.343***	-2.83	-35.501**	-2.56	-36.123**	-2.38	-24.439*	-1.77	-0.262	-1.65	6.393***	2.99	58	0.000	0.603
1970	-0.344***	-2.90	-40.847***	-2.74	-42.129***	-2.66	-29.550*	-2.00	-0.302*	-1.77	7.000***	3.42	60	0.000	0.615
1975	-0.425***	-2.86	-26.241*	-1.78	-28.388*	-1.79	-24.545*	-1.74	0.006	0.02	7.852***	3.80	65	0.000	0.532
1980	-0.362**	-2.20	-32.808***	-2.69	-35.675***	-2.71	-40.320***	-3.24	0.080	0.40	8.542***	4.03	65	0.000	0.592
1985	-0.229	-0.97	-49.273***	-3.34	-47.063***	-2.97	-46.817***	-3.00	-0.053	-0.25	9.375***	4.26	65	0.000	0.598
1990	-0.198	-0.68	-57.799***	-2.89	-44.133**	-2.11	-41.341*	-1.77	-0.171	-0.59	14.403***	6.25	66	0.000	0.703
1995	0.019	0.05	-56.519***	-2.89	-32.718	-1.55	-67.112***	-3.07	-0.185	-0.53	17.255***	6.39	66	0.000	0.617
2000	0.041	0.09	-24.111*	-1.69	1.122	0.06	-45.876**	-2.23	0.318	0.76	21.547***	6.38	66	0.000	0.612
2004	-0.277	-0.60	-12.661	-0.80	12.602	0.69	-33.962	-1.07	0.266	0.70	22.808***	6.36	66	0.000	0.605

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level.
Note: There were no Socialist Law countries with available SPI data.

Table 4. Political Instability, Equity Market Development, Trade, and GDP/capita

Panel A. This table presents the results of cross-sectional OLS regressions in which Stock Market Capitalization/GDP is the dependent variable and the SPI Index, legal origin dummies, constructed trade share, and log GDP per capita are independent variables. The German Civil Law dummy is the omitted dummy variable, and t-statistics appear to the right of each coefficient. Statistical significance is assessed based on robust standard errors.

DV: Stock Market Capitalization/GDP

Year of Data	SPI Index		French Civil Law		Common Law		Scandinavian Civil Law		Constructed Trade Share		Log of GDP per capita				
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Obs	p value	R-squared
1988	-0.718***	-3.05	-26.899	-1.12	-5.702	-0.23	-27.042	-1.16	-0.854**	-2.06	10.414***	4.37	42	0.000	0.508
1989	-0.736**	-2.20	-32.098	-1.20	-10.352	-0.37	-33.606	-1.32	-0.736	-1.53	11.453***	4.33	43	0.000	0.498
1990	-0.652*	-2.00	-16.977	-0.97	3.844	0.19	-19.976	-1.20	-0.665*	-1.69	8.262***	3.33	43	0.001	0.371
1995	-0.832*	-1.78	-6.179	-0.22	20.843	0.69	-18.207	-0.66	-0.849**	-2.35	11.419***	3.44	52	0.000	0.252
1996	-0.939*	-1.82	-0.463	-0.02	30.321	1.00	-5.412	-0.20	-1.050***	-2.95	13.511***	3.55	53	0.000	0.273
1997	-0.643**	-2.03	-14.781	-0.33	5.601	0.13	-13.631	-0.30	-0.736	-1.63	16.577***	5.35	55	0.000	0.408
1998	-0.704*	-1.73	-17.586	-0.35	2.222	0.04	-15.856	-0.29	-0.529	-0.97	19.213***	5.50	56	0.000	0.426
1999	-0.755*	-1.69	-9.056	-0.18	16.818	0.33	19.763	0.28	-0.717	-1.22	25.499***	6.21	56	0.000	0.421
2000	-0.379	-0.99	-23.684	-0.37	-2.657	-0.04	4.829	0.06	-0.450	-0.70	24.325***	7.10	55	0.000	0.425
2004	-0.660	-1.51	-14.296	-0.33	18.785	0.42	-14.337	-0.32	-0.857*	-1.76	19.344***	6.60	54	0.000	0.395

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level.
Note: There were no Socialist Law countries with available SPI data.

Panel B. This table presents the results of cross-sectional OLS regressions in which Beck, Demirgüç-Kunt, and Levine's Stock Market Capitalization/GDP is the dependent variable and the SPI Index, legal origin dummies, constructed trade share, and log GDP per capita are independent variables. The German Civil Law dummy is the omitted dummy variable, and t-statistics appear to the right of each coefficient. Statistical significance is assessed based on robust standard errors.

DV: Beck, Demirgüç-Kunt, and Levine's Stock Market Capitalization/GDP

Year of Data	SPI Index		French Civil Law		Common Law		Scandinavian Civil Law		Constructed Trade Share		Log of GDP per capita				
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Obs	p value	R-squared
1976	-0.007	-0.58	0.020	0.23	0.206	1.61	-0.115	-1.47	0.000	-0.14	0.029	0.51	17	0.056	0.431
1980	-0.005*	-1.77	0.003	0.04	0.239*	1.95	-0.111	-1.50	-0.002	-0.94	0.061***	2.88	29	0.008	0.418
1985	-0.005**	-2.45	-0.127	-1.00	0.090	0.65	-0.190	-1.45	-0.003	-1.39	0.078***	4.93	40	0.000	0.520
1990	-0.007**	-2.27	-0.244	-1.14	-0.026	-0.11	-0.269	-1.34	-0.008*	-1.88	0.094***	3.93	44	0.000	0.447
1995	-0.009*	-1.92	-0.073	-0.30	0.195	0.74	-0.165	-0.71	-0.009***	-2.68	0.088**	2.66	51	0.001	0.251
1996	-0.009*	-1.84	-0.072	-0.25	0.206	0.66	-0.158	-0.55	-0.009**	-2.46	0.123**	3.46	51	0.000	0.264
1997	-0.008**	-2.04	-0.129	-0.34	0.135	0.35	-0.131	-0.33	-0.009**	-2.16	0.150***	4.83	53	0.000	0.356
1998	-0.007*	-1.96	-0.180	-0.37	0.053	0.11	-0.167	-0.33	-0.007	-1.50	0.181***	6.10	54	0.000	0.427
1999	-0.006	-1.35	-0.126	-0.25	0.129	0.25	-0.002	0.00	-0.001	-0.19	0.224***	5.72	54	0.000	0.418
2000	-0.004	-0.89	-0.148	-0.25	0.125	0.21	0.106	0.14	0.002	0.23	0.254***	6.26	54	0.000	0.414
2003	-0.002	-0.58	-0.177	-0.43	0.077	0.18	-0.158	-0.37	-0.007*	-1.69	0.166***	6.16	51	0.000	0.379

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level.
Note: There were no Socialist Law countries with available SPI data.

Table 5. Political Instability and Beck, Demirgüç-Kunt, and Levine's Debt Market Measures (1990-2003)

Panel A. This table presents the results of cross-sectional OLS regressions in which Beck, Demirgüç-Kunt, and Levine's Private Bond Market Capitalization/GDP is the dependent variable and the SPI Index, legal origin dummies, constructed trade share, and log GDP per capita are independent variables. The German Civil Law dummy is the omitted dummy variable, and t-statistics appear to the right of each coefficient. Statistical significance is assessed based on robust standard errors.

DV: Beck, Demirgüç-Kunt, and Levine's Private Bond Market Capitalization/GDP

Year of Data	SPI Index		French Civil Law		Common Law		Scandinavian Civil Law		Constructed Trade Share		Log of GDP per capita				
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Obs	p value	R-squared
1990	-0.004**	-2.13	-0.129	-1.72	-0.110	-1.03	0.131	0.79	-0.002	-0.47	0.079*	2.07	27	0.000	0.535
1991	-0.005**	-2.21	-0.123	-1.32	-0.120	-1.01	0.153	0.85	-0.002	-0.37	0.085**	2.10	27	0.000	0.539
1992	-0.005**	-2.51	-0.120	-1.35	-0.118	-1.02	0.123	0.73	-0.002	-0.58	0.084*	2.02	28	0.000	0.529
1993	-0.005**	-2.42	-0.119	-1.29	-0.119	-1.03	0.163	0.86	-0.002	-0.45	0.087**	2.11	29	0.000	0.548
1994	-0.005**	-2.52	-0.131	-1.54	-0.130	-1.12	0.122	0.66	-0.002	-0.49	0.086*	2.06	29	0.000	0.530
1995	-0.005**	-2.63	-0.134	-1.63	-0.121	-1.00	0.070	0.40	-0.003	-0.57	0.087*	1.99	29	0.000	0.496
1996	-0.005**	-2.60	-0.161*	-1.93	-0.136	-1.07	0.042	0.22	-0.003	-0.57	0.089*	1.95	29	0.000	0.480
1997	-0.005**	-2.50	-0.166*	-1.90	-0.131	-1.00	0.039	0.20	-0.002	-0.49	0.089*	1.97	29	0.000	0.468
1998	-0.005**	-2.44	-0.175**	-2.10	-0.097	-0.71	0.033	0.17	-0.003	-0.52	0.090*	1.86	29	0.000	0.447
1999	-0.005**	-2.49	-0.159*	-1.80	-0.074	-0.53	0.028	0.14	-0.003	-0.58	0.099*	2.02	29	0.000	0.449
2000	-0.006**	-2.51	-0.128	-1.29	-0.042	-0.29	0.005	0.03	-0.002	-0.42	0.107**	2.44	30	0.000	0.466
2001	-0.006**	-2.39	-0.088	-0.95	0.006	0.04	0.017	0.08	-0.002	-0.36	0.109**	2.35	30	0.000	0.428
2002	-0.004	-1.51	-0.048	-0.53	0.039	0.27	0.065	0.29	0.002	-0.25	0.117**	2.38	29	0.000	0.385
2003	-0.005*	-1.86	-0.002	-0.02	0.087	0.62	0.103	0.45	-0.001	-0.12	0.123**	2.49	29	0.000	0.406

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level.
Note: There were no Socialist Law countries with available SPI data.

Panel B. This table presents the results of cross-sectional OLS regressions in which Beck, Demirgüç-Kunt, and Levine's Public Bond Market Capitalization/GDP is the dependent variable and the SPI Index, legal origin dummies, constructed trade share, and log GDP per capita are independent variables. The German Civil Law dummy is the omitted dummy variable, and t-statistics appear to the right of each coefficient. Statistical significance is assessed based on robust standard errors.

DV: Beck, Demirgüç-Kunt, and Levine's Public Bond Market Capitalization/GDP

Year of Data	SPI Index		French Civil Law		Common Law		Scandinavian Civil Law		Constructed Trade Share		Log of GDP per capita				
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Obs	p value	R-squared
1990	-0.007*	-1.98	0.182	1.45	0.276**	2.32	0.021	0.18	0.001	0.29	0.054	1.71	29	0.023	0.306
1991	-0.008**	-2.45	0.230*	1.76	0.294**	2.52	0.055	0.44	0.002	0.55	0.062*	1.92	29	0.005	0.318
1992	-0.008**	-2.58	0.218*	1.85	0.282**	2.60	0.069	0.59	0.001	0.31	0.067*	2.03	30	0.004	0.342
1993	-0.009**	-2.61	0.264**	2.17	0.289***	2.88	0.102	0.94	0.001	0.34	0.076**	2.18	31	0.003	0.373
1994	-0.010**	-2.68	0.278**	2.19	0.268**	2.69	0.104	1.00	0.001	0.19	0.087**	2.56	31	0.002	0.385
1995	-0.010**	-2.68	0.292**	2.21	0.253**	2.62	0.120	1.16	-7.41e-07	0.00	0.098***	2.81	31	0.003	0.398
1996	-0.010***	-2.81	0.289**	2.17	0.220**	2.10	0.117	1.06	0.000	0.11	0.102***	2.98	31	0.001	0.401
1997	-0.010**	-2.77	0.286**	2.08	0.165	1.56	0.101	0.89	0.000	0.10	0.103***	2.99	31	0.002	0.394
1998	-0.009**	-2.76	0.224	1.59	0.104	0.86	0.051	0.43	-0.001	-0.20	0.093***	3.02	31	0.005	0.351
1999	-0.009**	-2.47	0.174	1.19	0.033	0.25	0.006	0.04	-0.002	-0.35	0.083***	2.81	31	0.025	0.305
2000	-0.008**	-2.38	0.133	0.88	-0.010	-0.07	-0.038	-0.28	-0.001	-0.30	0.077**	2.58	31	0.034	0.295
2001	-0.008**	-2.24	0.086	0.54	-0.090	-0.58	-0.094	-0.65	-0.003	-0.65	0.061**	2.10	31	0.105	0.259
2002	-0.007*	-1.92	0.024	0.13	-0.153	-0.82	-0.157	-0.94	-0.004	-0.71	0.064*	2.01	31	0.141	0.258
2003	-0.009**	-2.15	-0.018	-0.08	-0.209	-0.94	-0.206	-1.07	-0.005	-0.75	0.064*	1.89	31	0.110	0.291

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level.
Note: There were no Socialist Law countries with available SPI data.

Table 6. Political Instability as a Decaying Factor and Equity Market Development

Panel A. This table presents the results of cross-sectional OLS regressions in which Stock Market Capitalization/GDP is the dependent variable and the One-Percent Thirty-Year Political Instability Decay Index, legal origin dummies, constructed trade share, and log GDP per capita are independent variables. The German Civil Law dummy is the omitted dummy variable, and t-statistics appear to the right of each coefficient. Statistical significance is assessed based on robust standard errors.

DV: Stock Market Capitalization/GDP

Year of Data	One-Percent Thirty-Year Political Instability Decay Index		French Civil Law		Common Law		Scandinavian Civil Law		Socialist Law		Constructed Trade Share		Log of GDP per capita		Obs	p value	R-squared
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic			
1988	-1.280	-1.47	-54.647	-1.26	-28.989	-0.64	-72.988	-1.66			1.718***	8.08	7.978**	2.49	36	0.000	0.867
1989	-1.091**	-2.47	-54.447***	-2.80	-36.191*	-1.71	-66.504***	-3.27			0.230***	4.69	11.653***	4.97	38	0.000	0.687
1990	-1.068**	-2.34	-14.775	-0.84	7.411	0.36	-26.731	-1.52			0.172***	3.13	8.671***	3.65	43	0.000	0.417
1991	-1.208***	-2.95	-3.446	-0.20	16.371	0.82	-23.132	-1.34	-21.593	-1.16	0.104	1.43	9.628***	4.41	50	0.000	0.377
1992	-0.847***	-3.13	-8.239	-0.59	17.567	1.08	-27.170**	-2.05	-21.503	-1.40	0.141**	2.62	8.115***	3.64	52	0.000	0.403
1993	-1.073*	-1.82	-9.638	-0.49	35.068	1.26	-25.420	-1.34	-28.104	-1.29	0.276***	3.32	9.200**	2.31	54	0.000	0.281
1994	-1.118*	-2.00	-8.030	-0.39	26.458	1.01	-29.172	-1.43	-32.486	-1.59	0.389***	3.44	8.766***	2.75	58	0.000	0.321
1995	-1.438**	-2.44	-7.135	-0.29	25.223	0.87	-31.009	-1.21	-31.014	-1.26	0.300***	2.77	10.709***	3.51	62	0.000	0.347
1996	-1.559**	-2.26	3.495	0.15	39.002	1.28	-15.780	-0.61	-16.783	-0.68	0.296**	2.33	13.167***	3.97	63	0.000	0.333
1997	-0.859*	-1.88	-7.327	-0.18	15.208	0.36	-18.881	-0.43	-13.780	-0.33	0.305**	2.05	17.181***	6.12	73	0.000	0.455
1998	-0.792	-1.59	-16.407	-0.35	3.867	0.08	-25.819	-0.50	-23.571	-0.50	0.242*	1.70	20.277***	6.36	76	0.000	0.468
1999	-0.757	-1.10	-20.506	-0.45	11.504	0.24	-6.713	-0.11	-29.216	-0.63	0.135	0.99	26.496***	6.29	76	0.000	0.441
2000	-0.472	-0.80	-21.052	-0.34	0.766	0.01	-6.228	-0.09	-26.784	-0.43	0.158	1.30	23.987***	7.17	75	0.000	0.440
2001	-0.933*	-1.75	-12.534	-0.27	5.696	0.12	-11.622	-0.22	-25.163	-0.53	0.054	0.67	19.256***	6.61	77	0.000	0.440
2002	-0.552	-0.97	-14.402	-0.40	3.490	0.10	-15.603	-0.41	-23.662	-0.65	0.074	0.83	15.719***	7.27	77	0.000	0.423
2003	-1.042*	-1.84	-18.753	-0.48	5.937	0.15	-20.451	-0.50	-29.899	-0.75	0.094	0.84	18.115***	6.57	78	0.000	0.441

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level.
Note: For years 1988-1990, there were no Socialist Law countries with data on all variables.
Note: The political instability data ends in 2003.

Panel B. This table presents the results of cross-sectional OLS regressions in which Beck, Demirgüç-Kunt, and Levine's Stock Market Capitalization/GDP is the dependent variable and the Thirty-Year Political Instability Decay Index, legal origin dummies, constructed trade share, and log GDP per capita are independent variables. The German Civil Law dummy is the omitted dummy variable, and t-statistics appear to the right of each coefficient. Statistical significance is assessed based on robust standard errors.

DV: Beck, Demirgüç-Kunt, and Levine's Stock Market Capitalization/GDP

Year of Data	One-Percent Thirty-Year Political Instability Decay Index		French Civil Law		Common Law		Scandinavian Civil Law		Socialist Law		Constructed Trade Share		Log of GDP per capita		Obs	p value	R-squared
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic			
1983	-0.007***	-2.73	-0.078	-0.96	0.168	1.52	-0.177**	-2.18			0.004***	14.12	0.052***	2.89	37	0.000	0.743
1984	-0.007**	-2.35	-0.099	-1.05	0.139	1.12	-0.197**	-2.10			0.005***	10.41	0.058***	3.42	37	0.000	0.773
1985	-0.008*	-2.02	-0.183	-1.46	0.073	0.51	-0.306**	-2.60			0.008***	11.40	0.066***	3.73	37	0.000	0.847
1986	-0.011*	-1.89	-0.213	-1.54	0.086	0.52	-0.390***	-2.78			0.010***	9.72	0.088***	4.38	39	0.000	0.849
1987	-0.013*	-1.81	-0.259	-1.31	0.049	0.22	-0.494**	-2.33			0.014***	9.04	0.088***	3.38	39	0.000	0.861
1988	-0.013	-1.62	-0.362	-1.53	-0.074	-0.27	-0.569**	-2.19			0.016***	8.60	0.081**	2.70	38	0.000	0.858
1989	-0.013*	-1.97	-0.508**	-2.27	-0.269	-1.05	-0.672***	-2.77			0.009***	8.65	0.101***	4.27	38	0.000	0.803
1990	-0.011**	-2.48	-0.239	-1.16	-0.003	-0.01	-0.358	-1.68			0.002***	2.83	0.100***	4.37	44	0.000	0.476
1991	-0.013***	-2.73	-0.081	-0.48	0.162	0.82	-0.235	-1.45			0.001**	2.67	0.092***	4.02	44	0.000	0.432
1992	-0.009***	-3.01	-0.088	-0.59	0.149	0.86	-0.258*	-1.75	-0.226	-1.39	0.001*	1.97	0.085***	4.08	51	0.000	0.412
1993	-0.011**	-2.24	-0.085	-0.50	0.292	1.29	-0.245	-1.49	-0.244	-1.30	0.002***	2.91	0.091***	2.83	53	0.000	0.332
1994	-0.012**	-2.03	-0.086	-0.44	0.309	1.17	-0.230	-1.23	-0.321	-1.57	0.003***	3.52	0.082**	2.32	54	0.000	0.314
1995	-0.012**	-2.26	-0.067	-0.32	0.233	0.89	-0.295	-1.35	-0.321	-1.51	0.003***	2.79	0.092***	3.08	59	0.000	0.325
1996	-0.016**	-2.40	-0.029	-0.11	0.277	0.90	-0.267	-0.99	-0.263	-1.01	0.003***	2.77	0.119***	3.76	60	0.000	0.353
1997	-0.012**	-2.35	-0.061	-0.18	0.218	0.60	-0.216	-0.58	-0.177	-0.51	0.003*	1.78	0.162***	6.21	71	0.000	0.413
1998	-0.009**	-2.03	-0.117	-0.26	0.108	0.24	-0.252	-0.53	-0.192	-0.43	0.002	1.43	0.195***	7.02	74	0.000	0.461
1999	-0.008	-1.33	-0.176	-0.37	0.105	0.21	-0.165	-0.29	-0.253	-0.52	0.002*	1.68	0.236***	6.89	74	0.000	0.469
2000	-0.007	-1.02	-0.200	-0.35	0.081	0.14	-0.059	-0.08	-0.286	-0.49	0.002	1.61	0.260***	7.07	74	0.000	0.440
2001	-0.007	-1.22	-0.128	-0.25	0.110	0.21	-0.045	-0.08	-0.210	-0.41	0.001	0.86	0.226***	7.26	72	0.000	0.443
2002	-0.008	-1.47	-0.093	-0.25	0.106	0.28	-0.114	-0.28	-0.224	-0.60	0.000	0.35	0.163***	5.56	73	0.000	0.377
2003	-0.011**	-2.02	-0.150	-0.41	0.043	0.12	-0.217	-0.56	-0.277	-0.74	0.001	0.86	0.159***	6.31	68	0.000	0.417

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level.
Note: There was an insufficient number of observations to estimate the model before 1983.
Note: There was not complete data on Socialist Law countries until 1992.
Note: The political instability data ends in 2003.

Table 7. Inequality and Recent Financial Development

This table presents the results of cross-sectional OLS regressions in which Beck, Demirgüç-Kunt, and Levine's 2003 measure of Stock Market Capitalization/GDP divided by Beck, Demirgüç-Kunt, and Levine's 1995 measure of Stock Market Capitalization/GDP is the dependent variable. Robust standard errors appear below each coefficient in brackets.

	DV: (Levine Stock Market Capitalization/GDP 2003) / (Levine Stock Market Capitalization/GDP 1995)			
Independent Variable	Model 1	Model 2	Model 3	Model 4
Gini 2000/Gini 1990	-0.254 **	-0.185 *	-0.232 *	-0.292 **
	[0.110]	[0.110]	[0.134]	[0.119]
Gini 1990	-0.116	-0.139	-0.166	0.036
	[0.104]	[0.112]	[0.142]	[0.116]
Log of GDP per capita 1995		-0.762	-0.794	-2.126 *
		[0.648]	[0.727]	[1.090]
Constructed trade share			-0.007	17.548 **
			[0.007]	[6.662]
Latitude				0.003
				[0.009]
Obs	58	58	52	52
p value	0.075	0.159	0.309	0.091
R-squared	0.098	0.112	0.130	0.195

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level.

Table 8. Political Instability, Equity Market Development, and Judicial Branch Variables

Panel A. This table presents the results of cross-sectional OLS regressions in which Beck, Demirgüç-Kunt, and Levine's Stock Market Capitalization/GDP is the dependent variable and the SPI Index, the judicial independence index, constructed trade share, and log GDP per capita are independent variables. The German Civil Law dummy is the omitted dummy variable, and t-statistics appear to the right of each coefficient. Statistical significance is assessed based on robust standard errors.

DV: Beck, Demirgüç-Kunt, and Levine's Stock Market Capitalization/GDP

Year of Data	SPI Index		Judicial Independence Index		Constructed Trade Share		Log of GDP per capita				
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Obs	p value	R-squared
1976	0.001	0.10	0.182	1.13	-0.005*	-1.78	0.043	0.65	17	0.272	0.198
1980	-0.007**	-2.61	0.260**	2.15	-0.006**	-2.25	0.034	1.61	29	0.000	0.268
1985	-0.009***	-3.15	0.277**	2.27	-0.004	-1.44	0.050**	2.42	35	0.000	0.353
1990	-0.012**	-2.65	0.218	1.44	-0.008*	-1.95	0.070**	2.10	38	0.002	0.310
1995	-0.019**	-2.27	0.323	1.66	-0.007*	-1.91	0.011	0.21	42	0.001	0.193
2000	-0.016***	-3.22	0.441	1.40	-0.001	-0.07	0.216***	4.98	42	0.000	0.388
2003	-0.008	-1.38	0.320	1.59	-0.004	-0.68	0.125***	3.32	40	0.000	0.296

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level.

Panel B. This table presents the results of cross-sectional OLS regressions in which Beck, Demirgüç-Kunt, and Levine's Stock Market Capitalization/GDP is the dependent variable and the SPI Index, the case law variable, constructed trade share, and log GDP per capita are independent variables. The t-statistics appear to the right of each coefficient. Statistical significance is assessed based on robust standard errors.

DV: Beck, Demirgüç-Kunt, and Levine's Stock Market Capitalization/GDP

Year of Data	SPI Index		Case Law		Constructed Trade Share		Log of GDP per capita				
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Obs	p value	R-squared
1976	0.005	0.54	0.124	1.55	-0.004	-1.18	0.043	0.63	17	0.210	0.242
1980	-0.006**	-2.48	0.133**	2.14	-0.005*	-1.99	0.029	1.27	29	0.001	0.275
1985	-0.008***	-2.96	0.167***	3.14	-0.003	-1.38	0.047**	2.30	35	0.000	0.402
1990	-0.011**	-2.54	0.164**	2.21	-0.007*	-1.91	0.070**	2.10	38	0.001	0.346
1995	-0.019**	-2.25	0.162	1.32	-0.008*	-2.02	0.013	0.27	42	0.002	0.191
2000	-0.015***	-3.01	0.265	1.51	0.000	0.00	0.215***	4.60	42	0.000	0.398
2003	-0.007	-1.30	0.193*	1.74	-0.003	-0.59	0.124***	3.18	40	0.000	0.311

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level.

Panel C. This table presents the results of cross-sectional OLS regressions in which Beck, Demirgüç-Kunt, and Levine's Stock Market Capitalization/GDP is the dependent variable and the SPI Index, the judicial review dummy variable, constructed trade share, and log GDP per capita are independent variables. The t-statistics appear to the right of each coefficient. Statistical significance is assessed based on robust standard errors.

DV: Beck, Demirgüç-Kunt, and Levine's Stock Market Capitalization/GDP

Year of Data	SPI Index		Judicial Review		Constructed Trade Share		Log of GDP per capita				
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Obs	p value	R-squared
1976	-0.005	-0.43	-0.043	-1.18	-0.007**	-2.74	0.018	0.25	17	0.110	0.196
1980	-0.007**	-2.16	-0.054	-1.23	-0.007***	-4.16	0.028	1.26	29	0.000	0.210
1985	-0.008**	-2.48	-0.075	-1.55	-0.005**	-2.43	0.043**	2.05	35	0.000	0.337
1990	-0.012**	-2.34	-0.080	-1.21	-0.009**	-2.57	0.058	1.67	38	0.001	0.315
1995	-0.018*	-1.95	-0.204**	-2.26	-0.011***	-3.26	-0.004	-0.07	42	0.002	0.248
2000	-0.012*	-1.79	-0.415**	-2.49	-0.007	-0.70	0.193***	4.45	42	0.000	0.521
2003	-0.007	-0.95	-0.245**	-2.40	-0.008	-1.47	0.099**	2.41	40	0.000	0.411

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level.

Table 9. Political Instability, Equity Market Development, and Corporate Law Indices

Panel A. This table presents the results of cross-sectional OLS regressions in which Beck, Demirgüç-Kunt, and Levine's Stock Market Capitalization/GDP is the dependent variable and the SPI Index, the Anti-Self-Dealing Index, legal origin dummies, constructed trade share, and log GDP per capita are independent variables. The German Civil Law dummy is the omitted dummy variable, and t-statistics appear to the right of each coefficient. Statistical significance is assessed based on robust standard errors.

DV: Beck, Demirgüç-Kunt, and Levine's Stock Market Capitalization/GDP

Year of Data	SPI Index		Anti-Self-Dealing Index		French Civil Law		Common Law		Scandinavian Civil Law		Constructed Trade Share		Log of GDP per capita				
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Obs	p value	R-squared
1976	-0.007	-0.53	0.023	0.30	0.021	0.22	0.197	1.20	-0.117	-1.41	0.000	-0.11	0.029	0.44	17	0.078	0.431
1977	-0.003	-0.63	0.135	0.66	-0.021	-0.27	0.116	1.44	-0.136	-1.62	0.001	0.26	0.053**	2.24	22	0.019	0.531
1978	-0.003*	-1.90	0.122	1.30	-0.034	-0.48	0.099	1.42	-0.122	-1.64	0.000	-0.05	0.047***	3.14	26	0.009	0.544
1979	-0.004*	-1.87	0.253*	1.80	-0.044	-0.58	0.051	0.55	-0.148*	-1.79	-0.001	-0.37	0.035*	2.04	27	0.011	0.446
1980	-0.004*	-1.83	0.348*	1.95	-0.013	-0.19	0.094	1.01	-0.146*	-1.93	-0.001	-0.45	0.052**	2.72	29	0.007	0.474
1981	-0.004*	-1.91	0.456**	2.65	-0.043	-0.57	0.029	0.33	-0.162**	-2.16	-0.002	-1.32	0.053***	3.11	34	0.002	0.516
1982	-0.004*	-1.84	0.478***	2.93	-0.043	-0.56	0.036	0.41	-0.160*	-1.88	0.000	0.06	0.050***	2.97	35	0.000	0.558
1983	-0.004*	-1.98	0.461***	2.96	-0.057	-0.70	0.035	0.40	-0.154	-1.69	-0.001	-0.53	0.057***	3.64	38	0.000	0.590
1984	-0.005**	-2.08	0.470***	2.76	-0.098	-1.06	-0.008	-0.08	-0.161	-1.66	-0.003	-1.18	0.060***	3.60	37	0.000	0.596
1985	-0.005**	-2.20	0.382**	2.45	-0.165	-1.28	-0.061	-0.49	-0.235*	-1.77	-0.002	-0.71	0.066***	4.25	37	0.000	0.567
1990	-0.007**	-2.28	0.541**	2.17	-0.304	-1.45	-0.244	-1.09	-0.336	-1.67	-0.005	-1.21	0.064**	2.26	42	0.001	0.513
1995	-0.007	-1.37	1.041*	1.99	-0.204	-0.83	-0.228	-0.81	-0.295	-1.17	-0.002	-0.40	0.008	0.12	46	0.014	0.365
2000	-0.007	-1.22	0.374	0.98	-0.198	-0.32	-0.101	-0.17	0.063	0.08	-0.001	-0.17	0.220***	4.18	47	0.000	0.386
2003	-0.001	-0.19	0.437	1.52	-0.208	-0.51	-0.040	-0.10	-0.211	-0.49	-0.002	-0.35	0.134***	3.87	46	0.000	0.401

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level.
Note: There were no Socialist Law countries with available SPI data.

Panel B. This table presents the results of cross-sectional OLS regressions in which Beck, Demirgüç-Kunt, and Levine's Stock Market Capitalization/GDP is the dependent variable and the One-Percent Thirty-Year Political Instability Decay Index, the Djankov et al. (2006) Revised ADRI Index, legal origin dummies, constructed trade share, and log GDP per capita are independent variables. The German Civil Law dummy is the omitted dummy variable, and t-statistics appear to the right of each coefficient. Statistical significance is assessed based on robust standard errors.

DV: Beck, Demirgüç-Kunt, and Levine's Stock Market Capitalization/GDP

Year of Data	One-Percent Thirty-Year Political Instability Decay Index		Djankov et al. (2006) Revised ADRI Index		French Civil Law		Common Law		Scandinavian Civil Law		Socialist Law		Constructed Trade Shar		Log of GDP per capita				
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Obs	p value	R-squared
1985	-0.010*	-2.02	0.076**	2.31	-0.121	-0.95	0.025	0.18	-0.329**	-2.73			0.008*	13.16	0.073***	4.24	36	0.000	0.871
1990	-0.012**	-2.36	0.080**	2.03	-0.193	-0.96	-0.075	-0.36	-0.399*	-1.95			0.002	4.39	0.104***	4.45	43	0.000	0.516
1995	-0.016**	-2.46	0.090*	1.94	0.014	0.06	0.229	0.93	-0.358	-1.60	-0.305	-1.29	0.004***	5.05	0.084**	2.34	53	0.000	0.414
2000	-0.013*	-1.71	0.069	1.30	-0.065	-0.11	0.098	0.17	-0.110	-0.15	-0.287	-0.48	0.002**	2.52	0.266***	6.75	59	0.000	0.448
2003	-0.015**	-2.44	0.055	1.46	-0.098	-0.27	0.092	0.25	-0.264	-0.68	-0.288	-0.75	0.002***	2.72	0.153***	5.51	58	0.000	0.494

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level.
Note: There were no Socialist Law countries with data on all variables until 1995. There was an insufficient number of observations to run the model until 1985.

Panel C. This table presents the results of cross-sectional OLS regressions in which Beck, Demirgüç-Kunt, and Levine's Stock Market Capitalization/GDP is the dependent variable and the One-Percent Thirty-Year Political Instability Decay Index, the Spamann ADRI_Def Index, legal origin dummies, constructed trade share, and log GDP per capita are independent variables. The German Civil Law dummy is the omitted dummy variable, and t-statistics appear to the right of each coefficient. Statistical significance is assessed based on robust standard errors.

DV: Beck, Demirgüç-Kunt, and Levine's Stock Market Capitalization/GDP

Year of Data	One-Percent Thirty-Year		Spamann ADRI_Def		French Civil Law		Common Law		Scandinavian Civil Law		Constructed Trade Share		Log of GDP per capita				
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Obs	p value	R-squared
1985	-0.008**	-2.16	0.046	1.45	-0.143	-1.17	0.073	0.52	-0.291**	-2.66	0.004	1.64	0.088***	4.34	34	0.000	0.593
1990	-0.010**	-2.05	0.066	1.62	-0.205	-1.02	0.009	0.04	-0.359*	-1.73	0.001	0.37	0.101***	3.17	39	0.004	0.438
1995	-0.020*	-1.93	0.068	1.17	0.003	0.01	0.349	1.18	-0.216	-0.94	0.002	0.48	0.066	1.19	40	0.190	0.273
2000	-0.018*	-1.71	0.059	0.68	-0.015	-0.02	0.248	0.40	0.099	0.12	0.004	0.91	0.260***	5.77	43	0.000	0.378
2003	-0.017**	-2.20	0.039	0.64	-0.091	-0.23	0.173	0.43	-0.244	-0.59	0.004	1.06	0.135***	4.00	43	0.001	0.401

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level.
Note: There were no Socialist Law countries with data on all variables. There was an insufficient number of observations to run the model until 1985.

Table 10. Political Instability, Debt Market Development, and a Creditor Rights Index

This table presents the results of cross-sectional OLS regressions in which Bank Credit/GDP is the dependent variable and the SPI Index, the Creditor Rights Index, legal origin dummies, constructed trade share, and log GDP per capita are independent variables. The German Civil Law dummy is the omitted dummy variable, and t-statistics appear to the right of each coefficient. Statistical significance is assessed based on robust standard errors.

DV: Bank Credit/GDP

Year of Data	SPI Index		Creditor Rights		French Civil Law		Common Law		Scandinavian Civil Law		Constructed Trade Share		Log of GDP per capita				
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Obs	p value	R-squared
1978	-0.588***	-3.10	-1.413	-0.54	-34.616*	-1.68	-37.910	-1.67	-46.629**	-2.18	0.034	0.09	9.150***	3.99	62	0.000	0.537
1979	-0.632***	-3.36	-0.058	-0.02	-35.686*	-1.67	-38.762	-1.64	-48.627**	-2.18	0.161	0.36	8.523***	3.61	63	0.000	0.522
1980	-0.669***	-3.55	0.337	0.13	-39.330*	-1.83	-44.289*	-1.85	-52.597**	-2.38	0.134	0.31	7.380***	3.19	63	0.000	0.516
1981	-0.637***	-3.57	1.173	0.45	-38.842*	-1.80	-45.208*	-1.88	-53.078**	-2.30	0.106	0.24	7.368***	3.13	63	0.000	0.483
1982	-0.352	-1.46	1.048	0.38	-41.356*	-1.74	-45.633*	-1.74	-59.605**	-2.41	0.164	0.32	9.219***	3.59	63	0.000	0.455
1983	-0.433**	-2.10	0.947	0.33	-41.057	-1.56	-43.722	-1.48	-60.989**	-2.32	0.310	0.52	9.254***	3.37	63	0.000	0.442
1984	-0.410*	-1.78	1.559	0.47	-41.810	-1.43	-41.237	-1.24	-62.958**	-2.24	0.607	0.77	10.675***	3.41	63	0.000	0.430
1985	-0.658*	-1.87	2.104	0.72	-50.800*	-1.90	-51.174*	-1.72	-63.752**	-2.39	0.372	0.66	8.276***	2.85	63	0.000	0.453
1986	-0.880**	-2.31	1.279	0.45	-54.644**	-2.10	-60.195**	-2.08	-59.988**	-2.23	-0.069	-0.15	7.221**	2.64	62	0.000	0.462
1987	-0.703	-1.74	2.196	0.78	-60.469**	-2.22	-65.904**	-2.18	-67.462**	-2.46	-0.158	-0.36	9.167***	3.28	63	0.000	0.506
1988	-0.732	-1.68	1.956	0.71	-57.391**	-2.08	-62.691**	-2.08	-65.930**	-2.37	-0.298	-0.64	11.228***	4.15	64	0.000	0.519
1989	-0.720	-1.61	0.321	0.11	-60.911**	-2.17	-66.474**	-2.21	-66.395**	-2.37	-0.448	-0.93	12.397***	4.53	63	0.000	0.552
1990	-0.343	-1.13	0.414	0.15	-69.711**	-2.60	-67.512**	-2.36	-62.875**	-2.16	-0.409	-1.04	13.279***	6.27	64	0.000	0.608
1995	-0.129	-0.32	0.241	0.09	-85.329***	-3.19	-71.105**	-2.50	-91.151***	-3.32	-0.415	-1.20	14.528***	6.40	64	0.000	0.624
2000	-0.060	-0.13	1.433	0.38	-43.395***	-3.10	-33.416*	-1.97	-63.694***	-2.92	-0.098	-0.27	17.937***	6.01	64	0.000	0.529
2002	0.005	0.01	2.977	0.86	-33.212**	-2.57	-25.500	-1.66	-39.142**	-2.03	-0.185	-0.57	20.357***	8.08	64	0.000	0.628

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level.
Note: There were no Socialist Law countries with available SPI data.
Note: Creditor Rights data was available only for 1978-2002.

Table 11. Legal Origin and Debt and Equity Market Development

Panel A. This table presents the results of cross-sectional OLS regressions in which Bank Credit/GDP is the dependent variable and legal origin dummies and log GDP per capita are included as independent variables. The German Civil Law dummy is the omitted dummy variable, and t-statistics appear to the right of each coefficient. Statistical significance is assessed based on robust standard errors.

DV: Bank Credit/GDP

Year of Data	French Civil Law		Common Law		Scandinavian Civil Law		Socialist Law		Log of GDP per capita				
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Obs	p value	R-squared
1965	-28.619*	-1.80	-26.597	-1.65	-20.011	-1.24			7.938***	4.06	81	0.000	0.465
1970	-41.248**	-2.38	-41.160**	-2.36	-32.115*	-1.79			7.224***	3.87	87	0.000	0.435
1973	-38.907**	-2.34	-40.495**	-2.37	-32.781*	-1.78			6.670***	3.37	91	0.000	0.370
1974	-35.328**	-2.28	-38.807**	-2.40	-28.362*	-1.66			6.405***	3.05	95	0.000	0.342
1975	-37.671**	-2.23	-41.629**	-2.33	-31.825*	-1.79			6.272***	2.72	99	0.000	0.286
1976	-39.847**	-2.26	-42.475**	-2.29	-36.467*	-1.95			6.538***	2.98	101	0.000	0.310
1977	-39.671**	-2.26	-40.746**	-2.22	-38.591**	-2.01			7.375***	3.73	105	0.000	0.336
1978	-37.708**	-2.13	-40.405**	-2.20	-43.532**	-2.18			8.540***	4.36	104	0.000	0.361
1979	-41.119**	-2.29	-41.370**	-2.22	-45.885**	-2.25			8.433***	4.11	106	0.000	0.342
1980	-46.847**	-2.59	-48.183**	-2.57	-49.980**	-2.48			7.113***	3.48	109	0.000	0.308
1981	-45.612**	-2.47	-47.129**	-2.43	-50.779**	-2.40	-20.861	-1.11	7.296***	3.46	112	0.000	0.284
1982	-45.753**	-2.34	-47.618**	-2.30	-55.951**	-2.57	-18.254	-0.88	8.397***	3.87	113	0.000	0.278
1983	-43.814**	-2.10	-44.416**	-2.00	-55.983**	-2.48	-19.066	-0.88	9.022***	4.03	114	0.000	0.245
1984	-46.392**	-2.12	-46.480*	-1.97	-56.707**	-2.45	-22.183	-1.00	9.152***	3.63	115	0.000	0.216
1985	-52.811**	-2.42	-49.386**	-2.16	-57.642**	-2.51	-21.889	-1.01	8.410***	3.92	117	0.000	0.213
1990	-55.640**	-2.12	-56.569**	-2.12	-55.951*	-1.92	-37.709	-1.18	11.440***	5.21	120	0.000	0.260
1995	-96.974**	-2.06	-59.651*	-1.90	-75.613**	-2.42	-115.779**	-2.36	1.584	0.12	148	0.000	0.061
2000	-41.613***	-3.34	-34.702**	-2.57	-52.568***	-2.84	-61.706***	-4.83	15.267***	6.65	151	0.000	0.391
2004	-39.806***	-2.98	-29.230**	-2.26	-33.730	-1.12	-55.770***	-4.22	16.363***	5.68	144	0.000	0.377

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level
Note: In 1977-1980, there was just one country with data from the Socialist Law family, and so that country was dropped for those years.

Panel B. This table presents the results of cross-sectional OLS regressions in which Stock Market Capitalization/GDP is the dependent variable and legal origin dummies and log GDP per capita are included as independent variables. The German Civil Law dummy is the omitted dummy variable, and t-statistics appear to the right of each coefficient. Statistical significance is assessed based on robust standard errors.

DV: Stock Market Capitalization/GDP

Year of Data	French Civil Law		Common Law		Scandinavian Civil Law		Socialist Law		Log of GDP per capita				
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Obs	p value	R-squared
1988	24.606	0.52	35.649	1.01	-26.821	-1.09			24.867**	2.21	50	0.001	0.170
1989	-21.458	-1.00	5.670	0.25	-35.894	-1.62			15.872***	5.70	52	0.000	0.456
1990	-7.738	-0.52	16.707	0.95	-21.880	-1.49			12.196***	4.61	53	0.000	0.351
1991	1.155	0.08	24.630	1.41	-19.925	-1.36	-11.842	-0.77	13.063***	4.99	62	0.000	0.356
1992	1.292	0.10	31.315*	1.97	-22.545*	-1.95	-7.005	-0.51	13.032***	4.58	66	0.000	0.369
1993	11.400	0.61	62.280**	2.11	-20.227	-1.24	1.432	0.06	20.398***	3.38	68	0.002	0.280
1994	6.388	0.34	41.756*	1.80	-20.943	-1.25	-15.410	-0.89	15.892***	3.62	77	0.000	0.265
1995	2.813	0.13	37.032	1.47	-22.445	-1.04	-12.847	-0.61	16.705***	4.44	86	0.000	0.304
1996	12.813	0.63	50.570*	1.90	-9.533	-0.44	3.635	0.17	19.359***	4.39	90	0.000	0.309
1997	3.358	0.10	28.023	0.78	-11.451	-0.31	-1.067	-0.03	20.465***	5.72	96	0.000	0.403
1998	-9.480	-0.24	11.491	0.29	-16.497	-0.39	-20.375	-0.53	20.954***	6.41	99	0.000	0.431
1999	-13.211	-0.35	22.292	0.53	3.625	0.06	-21.617	-0.56	27.379***	5.56	100	0.000	0.409
2000	-13.813	-0.28	14.454	0.27	2.484	0.04	-20.259	-0.40	25.283***	5.37	97	0.000	0.390
2001	-10.213	-0.27	14.792	0.37	-4.464	-0.10	-20.142	-0.53	19.650***	5.13	100	0.000	0.395
2002	-4.288	-0.14	22.475	0.69	-6.177	-0.19	-9.097	-0.30	18.035***	5.38	97	0.000	0.395
2003	-5.106	-0.15	34.801	0.88	-9.412	-0.27	-8.559	-0.25	22.616***	4.13	98	0.000	0.353
2004	9.997	0.29	53.341	1.27	-0.810	-0.02	2.383	0.07	28.550***	4.33	97	0.000	0.364

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level

Table 12. Political Instability, Income Inequality, and Agricultural Conditions

This table presents the results of an OLS regressions in which the SPI Index is the dependent variable and the size of the middle class, ethnic fractionalization, Frankema's measure of land inequality, geographic attractiveness for different cash crops, extreme mean temperature, and legal origin serve as independent variables. For the size of the middle class, we use Perotti's (1996) measure of the size of the middle class (third and fourth quintiles) as a percentage of national income. Robust standard errors appear below the coefficients.

	DV: Political Instability					
Independent Variable	(1)	(2)	(3)	(4)	(5)	(6)
Size of the Middle Class	-108.061 ***	-80.645 ***	-102.295 ***	-107.074 ***	-90.800 ***	-126.322 ***
	[24.891]	[26.863]	[31.007]	[34.481]	[23.386]	[28.466]
Ethnic fractionalization		12.608 **	-0.123	2.238	-2.873	-3.878
		[5.900]	[4.110]	[5.305]	[4.273]	[4.007]
Frankema land inequality (theil)			13.831 *	11.452	10.174	14.751 **
			[8.019]	[7.198]	[6.234]	[6.996]
Rice export/total agricultural exports in 1975			26.667 **	22.011 **	25.108 **	25.316 **
			[12.541]	[8.802]	[11.411]	[11.617]
Sugar export/total agricultural exports in 1975			-9.945	-11.607	-8.826	-12.105
			[7.164]	[8.328]	[7.661]	[8.218]
Cocoa bean plus power export/total agriculural exports in 1975			31.541 ***		24.859 ***	36.494 ***
			[9.157]		[6.594]	[7.548]
Coffee export/total agricultural exports in 1975			-30.397 **	-18.093		-30.762 **
			[13.242]	[13.176]		[13.334]
Tobacco export/total agricultural exports in 1975			-4.290	-10.773	0.223	-6.913
			[11.215]	[14.051]	[12.278]	[13.601]
Mean temperature above 32 degrees Celsius			12.911 ***	10.322 ***	10.360 ***	12.561 ***
			[3.137]	[2.929]	[3.281]	[2.818]
French Civil Law			3.923			
			[2.584]			
Common Law			-1.490			
			[2.263]			
Scandinavian Civil Law			1.702			
			[1.308]			
Obs	64	64	53	53	53	53
p value	0.000	0.000	0.000	0.000	0.000	0.000
R-squared	0.221	0.276	0.618	0.465	0.490	0.575

Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level.
Note: land inequlaity comes from Frankema (2006); mean temperature above 32 degrees Celsius comes from Van de Viliert (1999, and crop data comes from FAO Trade Yearbook (1977).

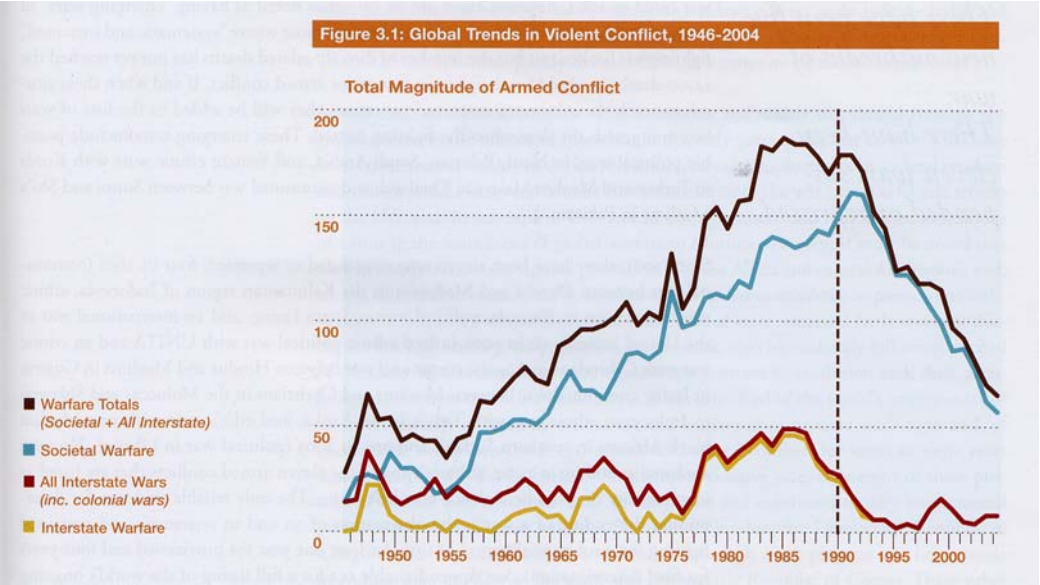
Table 13. Instrumented Political Instability

This table presents the results of an OLS regressions in which the financial development outcomes are the dependent variables and the instrumented SPI Index (using Model 6 of Table 12), legal origin dummies, constructed trade share, and log GDP per capita serve as the independent variables. Robust standard errors appear below the coefficients.

	DV: Average of Bank Loans/GDP for Years 1965-1982	DV: Bank Loans/GDP for Year 1965	DV: Bank Loans/GDP for Year 1970	DV: Bank Loans/GDP for Year 1975	DV: Stock Market Capitalization/GDP for Year 1988	DV: Beck, Demirgüç-Kunt, and Levine's Stock Market Capitalization/GDP for Year 1988
Independent Variable						
Instrumented SPI Index	-0.773 *	-0.971 **	-0.902 *	-0.983 *	-1.435 **	-0.015 **
	[0.434]	[0.408]	[0.506]	[0.507]	[0.657]	[0.007]
French Civil Law	-40.135 **	-29.776 *	-40.184 **	-22.915	-22.272	-0.169
	[18.965]	[17.139]	[18.584]	[19.695]	[23.730]	[0.207]
Common Law	-44.714 **	-35.317 **	-45.540 **	-28.180	-7.285	0.004
	[19.794]	[16.433]	[17.958]	[20.289]	[25.436]	[0.228]
Scandinavian Civil Law	-43.932 **	-27.440	-38.796 **	-34.065 *	-27.084	-0.260
	[19.146]	[16.479]	[18.183]	[19.806]	[23.136]	[0.199]
Constructed Trade Share	-0.243	-0.433 **	-0.399 *	-0.091	-1.045 **	-0.009 **
	[0.300]	[0.168]	[0.212]	[0.323]	[0.443]	[0.004]
Log GDP Per Capita	7.271 ***	6.191 ***	7.450 ***	8.066 ***	9.460 ***	0.089 ***
	[2.455]	[2.241]	[2.247]	[2.345]	[3.007]	[0.031]
Obs	44	44	47	51	35	36
p value	0.000	0.000	0.000	0.000	0.002	0.001
R-squared	0.597	0.590	0.608	0.495	0.461	0.406

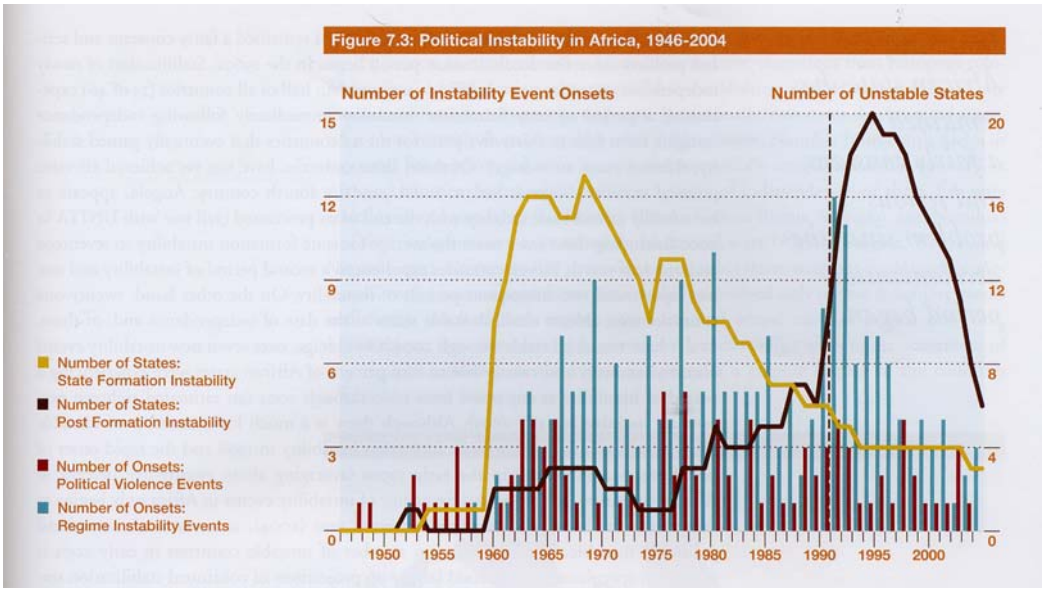
Note: *** means significance at the .01 level, ** means significance at the .05 level, and * means significance at the .10 level

Figure 1: Global Trends in Violent Conflict, 1946-2004



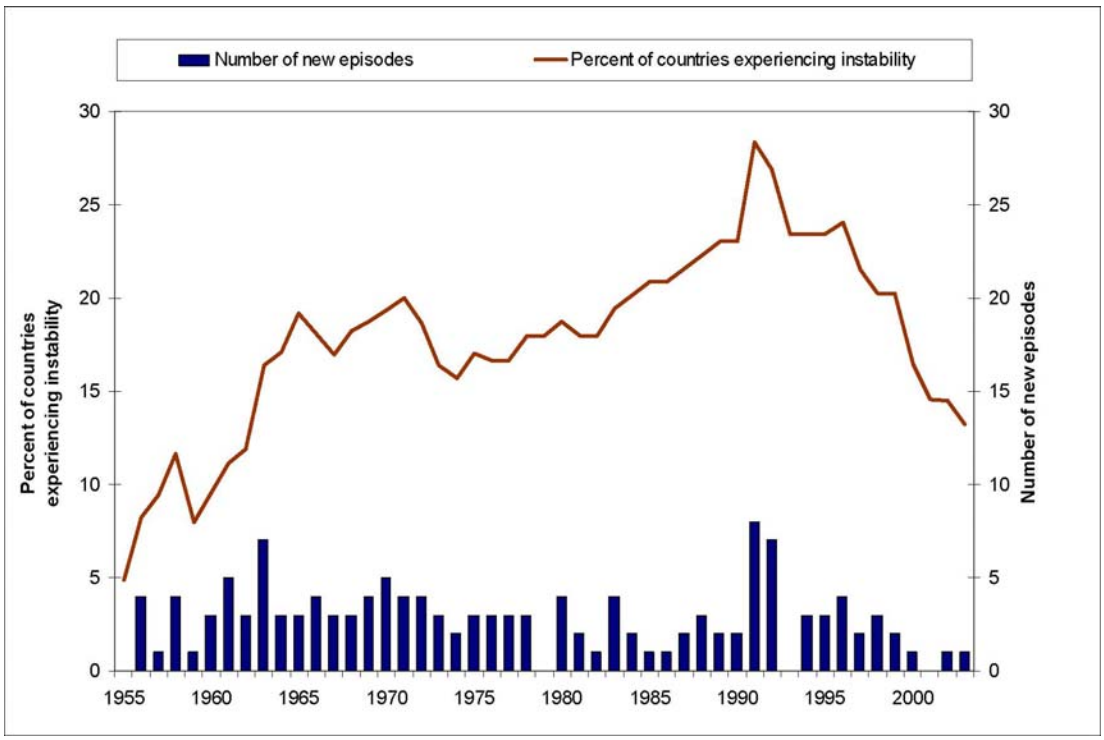
Marshall, Monty G., and Ted Robert Gurr. *Peace and Conflict 2005: A Global Survey of Armed Conflicts, Self-Determination Movements, and Democracy*. College Park: University of Maryland, Center for International Development and Conflict Management, 2005.

Figure 2: Political Instability in Africa



Marshall, Monty G., and Ted Robert Gurr. *Peace and Conflict 2005: A Global Survey of Armed Conflicts, Self-Determination Movements, and Democracy*. College Park: University of Maryland, Center for International Development and Conflict Management, 2005.

Figure 3. Incidence and Prevalence of Political Instability Worldwide, 1955-2003



Goldstone, Jack A., Robert H. Bates, Gurr, Ted Robert, Lustik, Michael, Marshall, Monty G., Ulfelder, Jay and Mark Wooward, *A Global Forecasting Model of Political Instability*, paper prepared for the Annual Meeting of American Political Science Association, Washington, DC, September 1-4, 2005.