

# Political Instability and Financial Development

Mark J. Roe and Jordan I. Siegel\*

First Draft: February 25, 2007

This Version: October 4, 2007

## Abstract

*Political instability impedes financial development and is a primary determinant of differences in financial development around the world. Conventional measures of national political instability — such as Alesina and Perotti's (1996) well-known index of instability, a subsequent index derived from Banks' (2005) work, and prevailing indices of managerial perceptions of nation-by-nation political instability — all persistently predict a wide range of national financial development outcomes for recent decades. These results are quite robust to measures of factors in financial development that have obtained substantial prominence in the past decade, such as legal origin, trade openness, and latitude. 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. Political instability's significance is time consistent back to the 1960's, the period when the key data becomes available, robust in both country fixed-effects and instrumental variable regressions, and consistent across multiple measures of instability and of financial development. Overall, the results indicate the existence of a strong channel running from political instability to financial backwardness. Moreover, the robust significance of that channel opens up new ways to understand what policies will work for financial development, because political instability has causes, cures, and effects quite distinct from those of many of the key institutions most studied in the past decade as explaining financial backwardness.*

---

\* Harvard University, [mroe@law.harvard.edu](mailto:mroe@law.harvard.edu) and [jsiegel@hbs.edu](mailto: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

## 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 view has become conventional wisdom and has induced international agencies and development officials to seek to build financial markets by strengthening their supporting institutions, particularly via protecting investors, 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 since emerged 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 the most prominent explanations for its variation tied to a nation's legal origin, its trade openness, and its legacy of colonial endowments. But other strong explanations could be in play. The significance of one causal factor does not preclude the importance of another in determining financial development. Findings in adjacent disciplines suggest that factors such as political instability strongly affect overall economic development. Perhaps they affect financial development as well and do so independently of their effect on overall economic development. Moreover, if political instability holds back financial development in ways independent of currently existing propellants of financial development, then key new policy and research vistas open up, vistas that we describe below.

Hence, there is reason to search for other important determinants of, and impediments to, financial development. We do so here, finding that a nation's political stability is a powerful and heretofore missing explanation in the law and finance literature for modern financial development. The political instability indicators used here are not derived from the advanced nations' shifting coalitions, Arrow-type

policy cycling, or other democratic swings in elections, governments, or policy. They instead derive from 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 a nation from building institutions, such as investor protection, that support finance or undermines such institutions' effectiveness even if built. Cross-country variation in the depth of 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, some of which persist as significant and some of which do not.

Today, there is an emerging consensus in the law and finance literature that investor protection institutions are critical to financial development — a relationship we do not challenge. But what induces one nation to build adequate investor protection institutions and another not to? Current thinking — although by no means via a strong consensus — looks to a combination of legal origin, trade openness, colonial conditions, and the related and resultant institutions, as the important channels to investor protection. More abstractly, many see nations as having differing capacities for good institutions and, while not all have signed onto the following, a central argument has been that legal origin can largely determine a nation's capacity to build good investor protection institutions. As a result of these influential views, the policy advice the World Bank and others give to developing countries focuses foremost on the institutions among these causal factors that can be altered quickly, typically investor protection rules and corporate codes of conduct. These views lead to technical institutional strength being seen as primarily determining financial development. Investor protection is seen as being a technical, institutional choice — difficult to implement perhaps, but technical.

We offer an additional, or alternative, hypothesis: a country's relative capacity and willingness to build and maintain investor protection institutions depends largely on its relative political stability. Unstable polities cannot, or will not, reliably protect investors. The technical investor protection institutions, even if built, will work poorly and tend to degrade. Moreover, an unstable polity will typically not invest in building them in the first place. While this explanation could also be rooted in technical, administrative incapacity of courts, regulators, and governments facing political instability, the

explanation offered here leads to something more. When we observe that the dominant root of political instability uncovered in the political economy literature is the severity of economic inequality, as Alesina and Perotti's (1996) well-known inquiry finds, we unearth a deeper explanation for a polity's incapacity and unwillingness to protect investors, one that becomes obvious as the pieces are placed next to one another: when inequality is severe, investor protection protects the most favored elements in those unstable nations and this is something an unstable polity mired in severe inequality cannot do easily — or at all. We present significant evidence for this being a major channel explaining financial backwardness.

If separate channels run through or from political instability and exercise a first-order impact on financial development, then differently prioritized policy considerations could well come into play. If *other* sources of political instability are *not* associated with the currently-prominent channels, such as the currently-prominent investor protection channels emanating from legal origin (or the effects of trade policy), then further protecting investors (or further opening up trade) could fail to foster finance. They may be policies worth pursuing in general in order to improve economic conditions, but in an unstable polity they could fail to have their intended effect. Such efforts could fail because the *independently* unstable polity could undo whatever benefits better investor protection provided in developing finance. We seek in this article to understand whether this independence is plausible, conclude that it is, and suggest that its plausibility helps to explain why finance has progressed unevenly around the world.

Indeed, the conventional policy advice could backfire, if independent channels run from political instability to financial backwardness. Most obviously, if differently prioritized policy considerations are in order, then a primarily investor-protection-oriented policy could fail, if other foundations need to be built simultaneously. That result could sour policy-makers on protection tools, when they are in fact necessary, just not sufficient. Indeed, in some national settings in the developing world, further protecting investors could more severely destabilize an already unstable polity. Given Alesina and Perotti's (1996) well-known finding that severe economic inequality is the key determinant of political instability and the likelihood that investor protection would protect the most favored elements in such Alesina and Perotti-style unstable polities, this risk is not trivial. Since political instability is quite robust

to the prevailing institutional explanations for financial development, this risk of backfire, although speculative, is plausible. More specifically, investor protection may fail to function well in polities that fail to first develop sufficient equality, such as that reflected in a broad, property-owning middle-class. Not only is political stability robust to major competing explanations, but one conventional explanation — the superiority of Common Law origin and the inferiority of French Civil Law for financial outcomes — emerges surprisingly weaker than we would have anticipated from its prominence in the last decade's law and finance work. For many years in the past four decades, key indicators and specifications neither show Common Law to be consistently superior nor show French Civil Law to be consistently inferior to other legal families in generating strong financial development outcomes. In some other key specifications, the effect of legal origin for developing countries is a function of outliers. We discuss these anomalies, how they fit with prior work casting doubt on the primacy of origin, such as Rajan and Zingales' (2003) showing of its time inconsistency over the past century, and why they deserve further study, after we present our main results, which use origin as one of several primary controls.

Causality and the possibility of collinearity are addressed after we present our main results. Not only is instability not strongly collinear with prior explanatory variables, but variance inflation factor analysis shows that no significant multicollinearity influences the models. Then, to anchor causality as running from instability to financial outcomes, a two-stage instrumental variable model is deployed. We use it 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 needed for financial development would function poorly in a polity 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.

Simply showing that political instability diminished financial development would not be important, *if* instability's effect on finance were largely mediated via its effect on economic development. But it is not: when we control for economic development, political instability is quite significant, statistically and

economically. Both the four decades of year-by-year regressions and country fixed-effects regressions, 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.

Our work here relates to La Porta et al. (1997, 1998, 2007) in searching for the bases for financial development. It relates to Rajan and Zingales (2003) in that the relative financial outcomes vary sharply over time in the modern period we examine (as they vary in the nearly century-old data they examine), making a fixed institutional explanation incomplete. It relates to Alesina and Perotti (1996) in that it finds political instability to be a primary determinant of an economic outcome. It relates to Rajan and Zingales (2003) and Acemoglu and Robinson (2006), in that it focuses on political roadblocks to financial development, although not those they emphasize. Finally, it relates to Acemoglu, Johnson, and Robinson (2001) and especially Engerman and Sokoloff (2002) in that it finds inequality, political instability, and institutional quality interacting to produce economic outcomes, in our case financial backwardness.

We thereby link two major literatures: an economics literature that sees political instability as strongly impeding economic development (e.g., Alesina and Perotti (1996); Rodrik (1999)) and a finance literature that sees financial development as strongly propelling economic development. A primary channel from political stability to economic development could well run through financial development. If so, much is at stake both intellectually and in policy terms in knowing whether political instability, which has often been seen as primarily depending on rough economic equality (Alesina and Perotti (1996)) and the breadth of a property-owning middle class, is a primary determinant of financial backwardness. Although building such a foundation is a task far more difficult than building the formal institutions of investor protection and is beyond the remit of the typical development agency, we outline below how further work can integrate the finding into policy for developing finance.

## **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

has been seen as explaining much but not all of the world's variation in financial development. 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), 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 them. In any case, the  $R^2$  for the legal origin regressions leave room for further explanations for financial development. Rajan and Zingales' (2003) data is consistent with something more being in play, as they 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 incumbents prefer financial development when they themselves need new financing to better compete with international entrants into the domestic product market. Their concept is that incumbents often seek to stifle upstart domestic product market competitors by denying the upstarts access to new finance, which the incumbents already have. But, if the nation is open to trade, 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 want access to stronger financial channels, Rajan and Zingales (2003: 21) show.

### **C. Colonial Endowments**

Colonial legacy could have determined historical property rights and, eventually, financial and economic development. Acemoglu, Johnson, and Robinson (2001) and Engerman and Sokoloff (2002: 88) provide powerful, parallel 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, those colonies that 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 settled by immigrants from the mother country developed stronger property rights, stronger educational traditions, and persistently stronger financial and economic development.

Differing colonial legacies induced differing institutional structures and the differing structures either facilitated or impeded economic and financial development 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 produce 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. 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 concede 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.



Although our results are consistent with the existing colonial legacy literature, the focus here is on recent political instability, whatever might be the institutions, endowments, and legacies producing that instability. 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 as central as colonial legacy or historical inequality. South Korea and Taiwan are examples from the post-World War II era. Hence, even if endowments and colonial legacy are important parts of the story, they may not end it, as modern conditions also influence financial development.

#### **D. Political Economy Explanations for Developed Democracies**

Promising political economy explanations have emerged. Rajan and Zingales (2003) focus on the power of incumbent interests, who prefer to stifle the financial development that could finance upstarts who could undermine the incumbents' positions. Perotti and von Thadden (2006) focus on the median voter in richer democracies. If the median voter lost his financial assets in Europe's interwar inflation, but has strong human capital, that 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 and differing legislative structures can interact to 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 explain key financial outcomes there in the post-World War II decades. When labor power made strong claims on firms' cash flows in a democratic polity, he argues, concentrated owners had 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 capital markets institutions, such as well-funded regulators or business courts, that would protect outside stockholders and bondholders.

Although such political economy theories are promising, their relevance for the developing world is limited. They can explain coalitions and institutions in the wealthier, already-developed, generally stable 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 are ill-suited for explaining the varying degree of financial development in developing and transition nations.

## **II. A POLITICAL INSTABILITY EXPLANATION FOR FINANCIAL MARKET DEVELOPMENT**

Figure 1 shows political instability to be associated with four basic financial outcomes. Before we rigorously examine the relationship, we consider the channels, obvious or subtle, by which political instability could impede financial development.

### **A. Instability's Incidence and Effects**

Consider extreme instability, such as that from insurrection, severe domestic violence, assassination, or a 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 have such armed conflicts not been rare (Banks 2005), they have not been cheap, costing many affected nations more than half of their total GNP, as Fitzgerald (1987) shows for Nicaragua and Richardson and Samarasinghe (1991) show for Sri Lanka. Lindgren (2005: 10-12) tabulates results on economic losses due to civil wars. On average, such conflicts — many of which last for more than a decade — brought about losses of more than 50% of the nation’s pre-conflict GDP. Such armed conflicts have been numerous in the past half-century, although in recent years their incidence has diminished, after what Huntington (1991) called the third wave of democratization.

The sources of the economic losses identified are several. Capital flight — of both domestic and foreign financial interests — weakens 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 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’ building reputations for reliability, less valuable (Collier (1999: 169-170)). Entrepreneurs see little point in investing in their reputational and social capital if they expect to be unable to draw on it, due to the nation’s extreme instability. Political instability makes formal rules more unstable (Maurer (2002)), legal reform projects fail (Dye (2006: 190)), and enforcement tools for protecting property deteriorate (id.: 195). Civil wars “undermine the state,” as Collier (1999: 168-169) says, 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 credibly commit to broad, long-term property rights protections in the midst 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 ... .

One might dismiss such violent civil insurrection as an anomaly, unlikely to explain variance in financial development. But there are two reasons not to. First, the incidence of serious, violent political instability has simply not been small. Fifty-seven countries had three or more instances of severe political instability, even short of civil war, since the 1980s, Banks (2005) reports. And political violence has a 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 suffering from violent conflict and the rest enjoying placid development. Some nations approach internal conflict and proximity can have the same but weaker detrimental effects 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, saving, and financial activity. Unstable governments often turn predatory in order to survive and seize visible financial assets rather than less easily severed physical assets; instability 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. Outreville (1999), in an unpublished paper, presents cross-sectional results linking Alesina and Perotti’s (1996) instability index to the size of the money supply (M2). Although the result was limited to the late 1980s and did not control for legal institutions, trade openness, or colonial conditions, his result is encouraging for our study. Similarly encouraging is Bekaert et al.’s (2005) sub-finding that more politically unstable countries are unable to benefit from equity market liberalization as much as politically stable countries.

### **B. Stability and Financial Opportunities**

A politically stable nation provides stronger foundations for financial development. 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.

*1. Stability, reputational markets, and regulation.* 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)). Stock markets arose in Britain before it had good securities law (Franks, Mayer, and Rossi (2006), Cheffins (2001)). In each, reputational markets came first. Legal academics document that the United States in the nineteenth century had poor corporate law and no securities law, as Coffee (2001: 10, 25-29) and Rock (2001: 251-254) discuss. Yet it developed a stock market. Reputational characteristics of boards, founders, and financiers, characteristics that need stability to flourish, are seen as central in DeLong's (1991) study of J.P. Morgan's investment bank as a key 19<sup>th</sup> century reputational intermediary.

An evolutionary pattern can be induced from these national experiences: A nation becomes politically stable. 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.

Where political and social stability prevail, the firm that suffers a poor reputation in dealing with its stockholders loses its contracting partners' confidence, 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 take advantage of distant shareholders. These reputational markets then regularize, using private ordering such as stock market rules or informal institutions. This private ordering eventually leads to 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 and functioning state enforcement. Severe political instability anywhere in this chain would easily disrupt this process, deterring reputational markets and private ordering from taking hold.

*2. 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 for private 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 one that does not. And government securities placement has been a precursor to private finance, as private players historically piggy-backed on the government-influenced institutions. Severe political instability would undermine government credibility, 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.

3. *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, particularly one in a poor institutional environment as Acemoglu et al. (2003) indicate, may be unable to formulate or implement good macroeconomic policies and that failure could cause finance to atrophy. Dutt and Mitra (2007) show that political instability also induces erratic trade and fiscal policies.

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 in principle sharply impede financial development independently of prevailing explanations.

### **C. 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. The results here indicate that instability is neither determined by these factors nor collinear with them. Instability predicts financial outcomes and is robust to controls for the prominent explanations for variation in financial development.

That is, we aim to see something deeper than simply whether political instability hurts finance. Surely, it does. But the deeper question is whether strong channels run to financial development that are

(a) rooted in political instability, but (b) *not* determined by today's primary explanations for financial development, explanations that tie to legal origin, technical investor protection, trade policy, and overall economic wealth. .

Conceptually, political instability could well be independent of these other determinants of financial development. For example, adjacent inquiries have shown economic inequality to be a foundational source of instability and the breadth of a middle class as foundational for stability. See especially Alesina and Perotti (1996), as well as Benabou (1996), Boix (2003), Easterly (2001), and Fearon and Laitin (2003). 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 financial development affected political instability. Unequal societies also tend to be ethnically heterogeneous, Glaeser (2006) reports, and distributional fights in unequal societies impede economic growth, Alesina and Rodrik (1994) indicate. Putnam (2007) says that ethnic fractionalization can readily undermine trust. If trust and reputational markets buttress the initial development of financial markets, see Franks, Mayer, and Rossi (2006) and our discussion above, 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 that illustrate the results in the more rigorous examination below. 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) widely-used measure of instability, the Ivory Coast two.) Indeed, as measured by the number of military coups since

independence, common law Nigeria is the *most* unstable African nation, Amadife (1999: 620) narrates. Dye (2006: 173-175) and Coatsworth (1993) describe how at independence and crucial later junctures, 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, if it does, determine whether the results are robust to alternative explanations for variation in financial development.

### **III. DATA DESCRIPTION**

Thus, to understand better how financial markets develop, political instability's effects on those markets is measured across time and across nations. To do so, we need measures of political stability and measures of financial market outcomes. Four major indices of political stability are available. One is from Alesina and Perotti (1996), another from Banks (2005). For more recent years a third is from the Lausanne-based IMD (International Institute of Managerial Development) World Competitiveness Yearbook (1999-2004) and a fourth from the World Economic Forum. Four instability indices are used not just to see if the results are robust to differing measures of instability, but because the different indices cover differing time periods and we want to see if our results persist over time. Because there are multiple ways to measure financial development, multiple indicators of the development of both debt and equity markets are used. Similar results prevail across the multiple indicators.

#### **A. Measures of Political Stability**

The primary measure of political instability here is 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. 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. So as not to rely on just one measure on political crises and to test for the effect of more recent disorder — the data from which Alesina and Perotti derive their index was only collected through 1982 (Taylor and Jodice (1983))<sup>1</sup> — we build our own subsequent index with the Cross-National Time Series (CNTS) database that Banks (2005) compiled of later political instability. This database, an earlier version of which served as the basis of Barro-Lee's (1994) political instability measures, has instability data running through 2003. We focus on its “government crisis” variable and, to better see whether past instability has continuing effect, we generate a moving index of political instability.<sup>2</sup> We take data on government crises by year for each country and use a 1 percent decay rate for assessing the impact of past government crises over the prior 30-year period. To check robustness of the decay rate, we ran the same tests with a 5 percent and a 10 percent decay rate with varying time periods. Results were substantially similar to those with the 1 percent rate.

A third measure of political instability comes from IMD's World Competitiveness Yearbook (WCY). Since 1999, the WCY reported how several thousand executives around the world ranked

---

<sup>1</sup> 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 Alesina-Perotti index from its components; the reconstruction, with the slightly varying index for democracy available to us, had a correlation approaching 1.00.

<sup>2</sup> Because the most serious forms of political violence (as shown both in Banks' data and illustrated in Figure 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, the incidence of coups and civil wars declined, resulting in low 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.

political instability country-by-country, with the surveyed executives asked to rate on a scale of 0-10 the extent to which they agree with the statement that, for their home country, “the risk of political instability is very low.” The IMD’s annual results were averaged over the 1999-2003 and 1999-2004 periods that overlap with our financial development indicators. The IMD index has the advantages of measuring business world actors’ perceptions of political instability and of focusing on recent years. We also used a similar executive survey from the World Economic Forum’s Global Competitiveness Report, which asks executives the likelihood of legal and political stability over the subsequent five years.

### **B. Measures of Financial Outcomes**

For outcomes, the principal ones used are stock market depth and banking breadth, as measured by stock market capitalization/GDP and bank loans/GDP, two core indicators of a nation’s financial depth. Perhaps because they are core indicators, better data is available for more countries and more years, than is available for other indicators.

For debt markets, the World Bank’s World Development Indicators (WDI) data on the amount of bank credit to the private sector divided by GDP is the starting measure. We also use a closely related WDI measure 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 their separate variable for the size of the public bond market divided by GDP.<sup>3</sup> 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.<sup>4</sup> Independent variables and controls for trade openness, latitude, governmental structure, and per capita income are then added.

### **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. The relative proportion of national income going to the middle class (defined as the third and fourth quintiles) comes from Perotti (1996) for 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.<sup>5</sup> Following the WIDER database compilers' recommendation, we focus on the Gini measures they rated as highest quality and chose those observations closest to each decade point (1970, 1980, 1990, and 2000). For most countries, this yields observations at 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 is the most prominent further explanation for political instability, although even its explanatory power often comes from how it facilitates economic inequality (by exacerbating a dominant group's propensity to deny wealth to poorer citizens from another ethnic group). We use Alesina, Devleeschauwer, Easterly, Kurlat, and Wacziarg's (2003) measures of ethnic fractionalization.

We follow Rajan and Zingales (2003) in using 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 also use other measures of trade openness — [imports plus exports]/GDP and [imports plus exports]/GDP instrumented by constructed trade share. (Our political instability results below are robust to either measure of trade openness.)

---

<sup>3</sup> This Year 2006 data came from [http://www.econ.brown.edu/fac/Ross\\_Levine/Publications.html](http://www.econ.brown.edu/fac/Ross_Levine/Publications.html).

<sup>4</sup> We used the CIA Factbook 2006 at <https://www.cia.gov/cia/publications/factbook/index.html>.

Because some authors believe that close-to-the-equator latitude drove most negative economic development outcomes, we add a control for latitude, from You and Khagram (2005) as also used previously in Treisman (2000). To control for simple wealth effects, we use the annual log of GDP per capita in constant U.S. dollars from the World Bank's World 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 add GDP per capita, but stays economically substantial. (Panel A of Table 1 displays this simple regression.) This strong initial result suggested a basis to further investigate political instability as impeding financial development.

To assess the potential impact of political instability on financial development, we go through several steps, ranging from tests for time-consistency of instability to models with country fixed effects and then to instrumental variable regressions. As a first step, it is critical to test for the time-consistency of the variables that might explain financial development. Prior law and finance work has tended to work in the cross-section with a large proportion of documented results taking place for cross sections in the mid to late 1990s. Rajan and Zingales (2003) show that it is imperative to test whether the variables of interest have a consistently positive or negative association with the dependent variable over time and inquired whether legal origin predicted financial outcomes in 1913 and not just in 1995. Hence, the first method used here parallels that of Rajan and Zingales (2003) when we check for the consistency of political instability indicators for every year with data availability in the past four decades. (Our variable of interest meets the first standard of evidence, that of time-consistency.)

---

<sup>5</sup> The WIDER database can be accessed at <http://www.wider.unu.edu/wiid/wiid.html>.

We next test for endogeneity and unobserved heterogeneity as alternative explanations for the persistent association between political instability and financial development. To deal with the possibility of unobserved heterogeneity, one can use country fixed effects to partial out time-invariant factors. But for the early part of our sample time period political instability is highly time-invariant, making country fixed effects regressions invalid. However, starting in the late 1970s there is a dramatic divergence in political instability both around the world and inside nations year-by-year. This increase in variation allows us to test for the impact of changes in political instability on financial development, nation-by-nation, via fixed country-effects regressions. The results, which are dramatic, are presented in Panel A of Table 11. Lastly, to further deal with endogeneity concerns, we use a set of instrumental variables for political instability in Table 13, primarily based on considerations (and instruments) advanced in Alesina and Perotti (1996) and Engerman and Sokoloff (2002).. Table 14, our last, shows political stability to robustly predict financial outcomes using these instruments.

So, to first see simply whether political instability was an omitted variable in past studies of what determines financial development, Alesina and Perotti's (1996) political instability index became the primary independent variable. We start with a simple model, controlling first just for the log of GDP per capita, and then add a rich set of control variables to see if any end political instability's persistent significance. While several significantly predict financial development themselves, none consistently undermines political instability's significance. Our first look at the effect of political instability on debt market development is the simple one mentioned in the first paragraph in this Section above, with just a control for log of GDP per capita. Panel A of Table 1 shows that the SPI index is a strong determinant of bank credit divided by GDP throughout the four decades from 1965 to 2004. Panel B shows a similar result 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 Table 2 shows, 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. Depending on the year, the World

Bank's WDI data on stock market capitalization is available for between 41 and 54 countries, a large number of nations, one comparable to that used in prior studies. The 2006 update of Beck, Demirgüç-Kunt, and Levine's (2000) stock market capitalization database is also used, yielding yet stronger results for SPI. Political instability also (negatively and significantly) predicts the number of listed firms divided by population for the 1988-2004 in panel C of Table 2.

The results for partial models controlling for legal origin, trade openness, and then latitude, are reported in the Appendix in Tables 1A et seq. and 2A et seq. Political instability is 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 Table 3 displays) 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 to use it as the reference case. (The SPI index lacks observations for Russia, China, or the other former communist countries, making the sample smaller than otherwise. But it has a comprehensive set of civil law and common law countries.) Political instability is quite robust to legal origin.

Figure 2 abstracts the results thus far. We test whether political instability severely weakens financial development, as seen in channel A. It does, and it does so independently of its tendency to weaken the economy overall (which it may also do), mapped out via channel B. It also does so independently of the legal origins channel — channel C — that has been proposed in the past decade. (Below we examine whether legal origin significantly induces instability, as a channel running from Legal Origin from the lower left corner up to Political Stability in the upper left; it does not. We also discuss the range of possible of institutional strength and weakness as a cause of, or effect of, political instability. We also examine the strength of the channel running from instability to weak finance for reverse causation, via a country fixed effects model and an instrumental variables model in Tables 11, 13, and 14. Instability does well in the fixed effects and instrumental variables models.)-

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, natural geographic openness (which Rajan and Zingales call “Constructed Trade Share”) was the variable used. 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: Alesina and Perotti’s (1996) SPI index negatively and typically significantly determines stock market capitalization divided by GDP even when controlling for constructed trade share, whose effects are strong in some years but not in others, as Tables 2E-G in the Appendix and Table 4 show. Trade in some years is insignificant and in others has a negative coefficient. The intermittently negative association indicates 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 when controlling for trade openness; indeed, the results for instability 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 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 also persists for most of the 1988–2004 period that WDI covers. Latitude is only statistically significant during a small time-window (1997–2001).

Tables 3 and 4 display the full models, including each key control. The SPI index continues in Table 3 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. The source data for the SPI Index ends in 1982, and the measure thus ends in 1982. Nevertheless, its impact endures until 1987. Below, we use political instability measures that include events after 1982 and see that they have enduring impact until the present. SPI is quite robust in the full model in Table 4, as are the alternative measures of political instability.

To further assess the impact of political instability 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 was weaker in predicting financial differences for the OECD nations. But, since most OECD nations have been stable in recent years, that result suggests that a nation needs to reach a threshold of stability and deep-crisis-avoidance, that many developing nations do not meet it, and that, once met, other factors also play an important role in determining financial differences.<sup>6</sup>

Similar tests were run with Beck, Demirgüç-Kunt, and Levine's (2000) stock market capitalization data, which covers more years more completely. There the SPI index had somewhat greater statistical robustness: As panel B of Table 4 shows, the 1960–1982 SPI index significantly and negatively affects their stock market capitalization measure into the 1990s. And, as Table 5 shows, the SPI index significantly and negatively affects both private and public bond market capitalization measures.

As we have noted, the SPI index measures overall instability for 1960–1982. Many financial outcomes we report are for the subsequent quarter-century. But where we have outcome data going back before 1982, we use the SPI index to look at those earlier outcomes. We do so for two reasons, beyond

---

<sup>6</sup> Because OECD-member countries have been politically stable in recent decades 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. Still, the strong political instability results 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, some OECD countries suffered periods of intense and violent instability, such as Italy in the 1960s, 1970s and 1980s with its severe labor unrest and political violence, such as that from Italy's Red Brigades. Third, and most importantly, we show that the results for political instability are significantly robust to the use of instruments, as seen in Table 14. Lastly, while the instability effect in OECD nations was not as prevalent as it was in non-OECD nations, it nevertheless was present in our contemporary data and was fundamental in earlier eras, such as the Great Depression, as Voth (2002) demonstrates, and the 19<sup>th</sup> century, as Brown (2006) demonstrates, when instability varied more sharply in the wealthy West than it has in recent decades.



the fact that their index is the most respected measure of political instability, cited or used well over 100 times. One, the underlying year-by-year measures of political instability were highly time-invariant in the first several decades after World War II, giving reason to use the highest quality measure for the variable. As a robustness check, we confirm that political instability from years 1948–1964 (using the primary source data used for Alesina-Perotti’s political instability index) significantly explains financial development in 1965. Secondly, as the outcome years approach 1982, the issue becomes trivial anyway.<sup>7</sup>

Does variation in political instability after 1982 (when the SPI index ends) continue to affect financial market development? To find out, we use additional measures of political instability: a moving index of government crises from Banks (2005) and the IMD instability surveys (1999–2004). 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 moving index has explanatory power even during the 1990s and early 2000s.<sup>8</sup> After the secular decline in political instability in the 1980s, neither the 1960–1982 SPI nor Banks predicts debt market development, but variation in lower-grade instability predicts equity market development. (Perhaps debt markets, for reasons requiring future research, are less affected by ongoing lower-grade political instability than they were by earlier high instability in some nations.<sup>9</sup>) Banks’ instability measure is also negatively and often statistically significantly related to stock market capitalization. We find that result using both the World Bank’s WDI data (in panel A of Table 6) and Beck, Demirgüç-Kunt, and Levine’s (2000) data (in panel B). (These results are also robust to using an alternative stock market measure: external market capitalization/GDP for 1996-2000, which is the dependent variable La Porta et al. (2006) study. We report this in panel B of Table 11.)

Our other measure of recent political instability predicts the strength of the primary financial outcomes. Annually since 1999, the IMD Survey has had several thousand senior business executives

---

<sup>7</sup> After we present our primary results and robustness tests, we present a two-stage model in Tables 13 and 14 that indicates that reverse causality is not a significant concern.

<sup>8</sup> The underlying source data for Alesina-Perotti (1996) index was not collected after 1982, barring us from constructing a continuation of the Alesina-Perotti measure. 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.

<sup>9</sup> The IMD measure of recent managerial perceptions predicts differences in debt outcomes, perhaps because a perceptions survey picks up finely-grained differences when the aggregate level of violence and instability declined in many nations in the 1990s.

around the world rate nations' political instability. We averaged their reported perceptions. The averages predict stock market capitalization, bank credit, and private credit quite strongly and do so with the standard controls in place, as shown in Appendix Table 6C. We run similar tests on the World Economic Forum's similar 1997-2000 perception measure. It also robustly and consistently predicts financial outcomes. The results are consistent and robust both when we use the survey measure directly and when instrumented. Appendix Table 6D shows these results.

Each measure of political instability significantly predicts weakness in financial development and is quite robust to explanations for financial development that have become prominent in the past decade.

Do SPI's components separately predict financial outcomes? The index has two major components, one of 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. We decompose the index but find no persistent privileging of crises over democracy or vice versa. Both seem important. The regularity of elections is important, but alone does not dominate the results. Possibly a stable democratic polity with a broad middle class insists on property protection (including outside investor protection), with stability giving the government the means to provide it.

Income inequality declined in a small number of countries in the late-1990s. Did they see further significant increases in recent stock market capitalization? Table 7 shows that even when controlling for wealth effects and starting-period inequality effects, stock market capitalization increased significantly in those countries. The reduction in income inequality is measured by dividing the Year 2000 Gini coefficient by the Year 1990 Gini coefficient. Equity market development is measured by the ratio of a nation's 2003 stock market capitalization (divided by its 2003 GDP) to its 1995 stock market capitalization (divided by its 1995 GDP).<sup>10</sup> Those years are used because they come before and after the global equity market bubble. The results are suggestive and we do not conclude that equality alone primarily drives financial development. But it is a partial explanation now missing in the finance

---

<sup>10</sup> We did the same using Banks' instability indicators for the time period (i.e., Banks2000/Banks1990). The result was also statistically significant (at the .10 level) when substituted for Gini in the full model of Table 7.

literature and seems to have important explanatory power. These results linking political instability and the absence of a broad middle class to financial backwardness, if confirmed, could change how to understand failures of financial development.

We sought to explore whether institutions whose importance has been brought forward before could be the primary ones inducing, or at least correlating with political instability, perhaps indicating an underlying common cause or simultaneous determination. Hence, we examined whether our political instability results were associated with judicial branch characteristics that have been advanced as important, such as judicial independence, judicial review, and the importance of case law. These judicial variables could play one or the other of two roles. First, these institutional channels have been seen as important to property rights, investor protection, and financial development; political instability could simply be an aggregation of these institutional channels of property rights protection. Second, at least in theory, judicial review could confine the destabilizing tendencies of a grasping legislature or executive.

We were skeptical that any of these judicial characteristics would be strongly causative of political stability or instability. Our reading of the political science literature was that judicial review and independence were more likely to *reflect* underlying political 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 much to lose from violent political disorder, which well-to-do disagreeing players have (Stephenson (2003)). Still, perhaps these commentators are incorrect and the judiciary constrains the other branches of government in ways that systematically stabilize polities around the world. Hence, we control for judicial review.

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 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. Nevertheless, we control for judicial independence.

Case law is a related variable, although one that has less to do directly or indirectly with political stability than with a capacity for an institution seen as vital to investor protection. But for case law as well, 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. For code-based law the legislature writes rules and instructs judges to apply them. It is not case law. 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. Case law, its proponents asserted, was transparent, as judges clearly stated the facts of their case, their reasoning, and their conclusions. But critics saw the judges’ opinions as often inconsistent with those of other judges and too often opaque standing alone. Code-based systems (including much modern American commercial and corporate law) get converse accolades and criticisms: proponents saw codes, when done well, as sufficiently clear to be predictable, with businesspeople often able to access the codes directly. Critics saw judicial opinions in code-based systems to be opaque. 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.” North (1990: 35) asserted the contrary. We do not try here to resolve this debate (but repeat 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).

Despite our skepticism, we tested the judicial variables and found them generally not robust to the political stability index. Although the judicial independence index when run alone usually significantly predicts stock market capitalization divided by GDP, it typically loses significance after we include the SPI index in the model, as panel A of Table 8 shows. 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 run next to political stability. In panel C, we examine the impact of La Porta et al.'s (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. Perhaps judicial review, even when present, does not extend to most economic regulation. If the judiciary primarily reviews issues of individual rights for constitutionality, and not economic regulation, then the variable may not pick up enough that is directly vital to economic development. 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), an authority on constitutional law, indicates. In Britain, judicial review of 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)). Regardless, the critical result is that SPI's significance persists robustly when run against judicial review.

We also examine whether presidentialist political systems affected financial development, because many in the political science literature, notably Linz and Valenzuela (1994), argue that presidentialist systems can destabilize their polities. It is an indicator of constraints on the executive. We code each country's political system for the period from 1990 to the present using the CIA Factbook. As we report

in the Appendix, there is no significant relationship between presidentialist systems and financial development. The SPI index retains its significance in face of the presidentialist system variable.

Overall, looking at the judicial and presidential results suggests that there is a channel running from instability and its causes to financial backwardness that does not simply reflect the institutions typically seen to help stabilize a polity. There seems to be a factor — political instability, presumably due to severe economic inequality — that degrades financial systems (or prevents them from developing) and that is independent of the standard measures of the quality of political institutions.

Finally, we note secondary results consistent with the importance of political stability. In Table 9, we examine 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. Surprisingly though, the index measured the actual strength of self-dealing rules for 1995, yet that is where it explains the results least well. The SPI measure though is moderately robust to including the anti-self-dealing Index. Panel B shows 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. Spamann's (2006) revised anti-director rights index, in which he recodes LLSV's (1998) measure of outsider shareholders' legal rights against insiders does not significantly explain 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. Lastly, the revised creditor rights index (available for years 1978–2002, see Djankov et al. (2007)), is never statistically significant in Table 10 in explaining banking sector development. The SPI index is again quite robust. These results suggest that investor protection is insufficient in unstable political environments, where they cannot function well.

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

## V. DISCUSSION OF PRIMARY RESULTS, AND FURTHER TESTS

### 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. If political instability — rooted in important part in the persistence of a property-owning middle-class as Alesina and Perotti's (1996) and our results, among many, suggest — significantly and independently affects financial markets, then (a) current research agendas need to broaden and (b) policy advice based on the currently prominent explanations is incomplete and for some nations perhaps even incorrect. Investor protection may not be enough, or might even be undone by an unstable polity.

Even if the currently prominent explanations did largely determine political instability, 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. 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 had a contrary tendency to violent disorder. Proponents could compare the French Revolution to the relatively peaceful English Glorious Revolution or the American Constitutional Convention for iconic contrasts. Yet, although we sympathize with this Anglophile perspective, other contrasts make that iconic comparison less compelling. One could instead compare the French Revolution to the English Civil War that preceded the Glorious Revolution. The English Civil War was not a tame affair; like the French Revolution, it resulted in the beheading of the King. On the American side, one could compare the French Revolution's incapacity to solve sharp

societal problems without widespread violence to the American Civil War. Despite repeated American efforts to resolve the underlying disagreement during the prior half-century, when slavery or its consequences was generally at the top of the American political agenda, peaceful adjustment failed.

Whether such historical examples are telling, for many of our 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 has not 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. 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, early on we wondered if political instability was the mechanism through which legal origin exercised its effect on financial development. If it did (presumably by supporting or impeding the institutions that stabilize a polity), instability would then constitute a vital but previously-ignored channel running from origins to finance.

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 a key part of the legal origins theory. Economic historians focusing on political instability have not reported legal origin as a key 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 for 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 and country fixed effect 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 again suggested no serious collinearity problem. 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 concerns about multicollinearity generally arise only if the factor approaches 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 occasional correlations between French legal origin and political instability typically disappear when we control for usual explanations for instability such as a nation's dependence on crops using unskilled labor, its land inequality, and its ethnic fractionalization, as we show in Table 12.

We also run country fixed effects panels, whose results are in panel A of Table 11, and find the in-country variation of instability strongly predicting financial outcomes, with  $p < .001$ . Since these fixed effects regressions take out unobserved as well as observed country-specific characteristics that are stable over time — like legal origin — they strongly point to instability being associated with financial underdevelopment quite apart from both legal origin and unobserved heterogeneity concerns.

### **B. Weakness of Legal Origin**

Although our primary purpose 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, starting with those we report in Table 3. These results are consistent

with those who find weaknesses in legal origins explanations, such as Rajan and Zingales (2003) and Ayyagari, Demirgüç-Kunt, and Maksimovic (2007), to mention two. The standard legal origin view is that Common Law is superior to other legal families in inducing strong financial development and French Civil Law inferior. The surprisingly weak results we find may be due to our using a wider set of indicators over a longer time span than have typically been investigated previously. Even before controlling for political stability, the significance and sometimes the sign of the legal origins results are unstable over time, as one sees by examining Table 12. First of all, German Civil Law countries consistently outperform Common Law countries in debt market development and Common Law countries did not have robustly better stock market development than German Civil Law countries. Yet strong German Civil Law results are not central to the legal origin theory and their 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 12, 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, as Appendix Tables 12I and 12J show.) La Porta et al. (1997: 1145-1146) reported regressions in which German origin nations did well in debt-based outcomes in 1995-1996. But their brief mention of that finding though disappeared in the subsequent literature and its implications were not developed. Our multi-decade run indicates that the result was neither anomalous nor confined to the mainly 1990s years they examined.

Second, for most years during 1965-2004, there was no statistically significant difference between French Civil Law and Common Law nations in generating debt market development. This result also does not confirm legal origins theory, which has Common Law superior and French Civil Law as inferior in generating strong financial results. French Civil Law is significantly inferior to Common Law in only one of the debt specifications and then just for the 1990s, the period of much prior legal origins testing. French Civil Law is not significantly inferior to Common Law before that period, from the mid-1960s to

1990. Previously this full range of results for all available years does not seem to have been tested and reported. Since the political instability measures are significant through that period but the origins results are not consistent, our results suggest that stability is the more important factor.

Third, while examining the instability effect on stock market development, we saw several nations with very high ratios of stock market capitalization to GDP, which induced us to check the robustness of political instability to removing them. Instability was robust, but the legal origins results were not. Although we reproduced the literature's prior results showing that Common Law countries stock market development was higher than French Civil Law countries', Common Law's association with stock market development superior to that of French Civil Law was fragile in about half the years with data to removing a small percentage of countries with the highest values of stock market capitalization/GDP.

The stock capitalization results for the subsample of non-OECD members have a deeper outlier issue. We confirmed the robustness of the political instability results in the sub-sample of non-OECD nations, but saw that for many years there was no significant difference between French Civil Law and Common Law in predicting stock market development in the non-OECD subsample. Because the legal origin theory is based on the transmission of legal systems from core countries outward, often to former colonies that are now developing, non-OECD nations, legal origin *should* do especially well in predicting stock market development in this subsample, but it does not. Even in the years when origin is significant as expected, it was often fragile to the removal of just a few outliers (most commonly Hong Kong and/or Malaysia). We report this primary robustness check in Appendix Table 12K.<sup>11</sup>

Overall, given the importance of banks and stock markets for financial development, our evidence does not confirm Glaeser and Shleifer's (2002: 1194) conclusion that "[o]n just about any measure,

---

<sup>11</sup> The combination of insignificance in many years for debt outcomes and dependence on outliers for stock market capitalization outcomes indicates a softness in the legal origins theory's capacity to explain financial development well. There are plausible hypotheses for the outliers (for example, Hong Kong and Singapore with their political stability over four decades, their free trade, and their open rules of cross-border finance). If outliers help to drive some of the legal origins regressions, the appropriate investigative methodology might well be the case study, not regression analysis. The instability regressions, however, are not susceptible to the same degradation when these outliers are removed.

Because we were surprised by the fragility of the origins results, we also gave it a weaker hurdle to surmount, by just using Common Law one of our basic specifications, that in Table 4, without the other origins. While significant at first, origin again is fragile to the removal of outliers — this time often just the United States and the United Kingdom. Again, stability was robust, origin was not.

common law countries are more financially developed than civil law countries.” Our results, however, are broadly consistent with findings that surprised several economists that “ethnic fractionalization is the dominant institutional predictor of property rights protection across the world ... [with] the impact of legal origin on protection of property rights appear[ing] fragile and dependent on the inclusion of transition economies in the sample” (Ayyagari, Demirgüç-Kunt and Maksimovic (2007)). Again, ethnic fractionalization and inequality have been key, often inter-related, explanations for political instability.

The results here for origin are noteworthy and deserve further study. Regardless, we repeat our main finding here: political stability is quite robust to origin, robust in the obvious non-OECD sample, and robust to excluding high stock market capitalization outliers. Even before 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 is relevant, although unlikely: could financial development primarily determine political stability? Did weak financial development in, say, the 19<sup>th</sup> century primarily determine 20<sup>th</sup> century instability (as opposed to just being a supporting factor)? And then did that financially-induced instability in turn weaken 20<sup>th</sup> century financial development?

While possible — some institutions and outcomes are determined simultaneously, not sequentially — neither a two-stage regression nor modern law and finance theory favor a first-order channel running from weak finance to high 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, which we follow in this dimension. Acemoglu, Johnson, and Robinson’s (2001) work on how relative settler mortality in the colonies induced institutional choices that persisted and the related modeling in Acemoglu and Robinson (2006) are also quite suggestive. It is not easy to see how

financial backwardness would induce 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 is plausible that fractionalization induced weak financial development both directly and by increasing instability. Because unequal societies tend to be ethnically heterogeneous, as Glaeser (2006) 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 primarily caused 20<sup>th</sup> century political instability, but, again, the data does not fully rule out that possibility.<sup>12</sup>

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 model (1) of Table 13 shows, the size of the middle class in 1960 alone explains much variation in the SPI index. We expand upon the simple middle-class model in the other columns of Table 13, focusing on national geographic propensity to rely on cash crops best grown via large landholdings and large pools of unskilled labor — a traditional explanation 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 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 column (3) in Table 13 shows.

In Table 14, we instrument the SPI index from the column (6) results of Table 13 to predict financial development. Despite the serious data constraints, and despite that the labor intensity of

---

<sup>12</sup> The earliest years covered by the World Handbook were used, showing statistical support for the fact that political disorder in years dating back to 1948 predicted weakness in subsequent debt market development in 1965.

agriculture is surely not the sole basis for political instability, the instrumented SPI index significantly explains averaged bank loans to GDP for the years 1965-1975. The instrumented SPI index also significantly predicts bank loans to GDP for the years for which the SPI index overlaps with available financial development data. (And instrumented instability is robust in a non-OECD subsample.) The instrumented SPI index significantly explains 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). As we report in Table 14, Beck Demirgüç-Kunt, and Levine’s (2000) alternative financial data, which starts several years earlier, yield similar results for the importance of political stability. Although not robust for every year, the evidence using instrumented SPI is sufficiently consistent across time periods and development indicators to support causality as running from stability to finance, with satisfactory results even in the face of the reduced sample size, the lack of deeper data, and the likelihood of other strong bases for instability. The instruments appear to validly explain financial development via political instability.<sup>13</sup> As such, the data reveal a significant exogenous component of political instability that strongly determines poor financial development.

Second, one would have to abandon basic theory underlying modern law and finance to see causation as strongly running from financial development to political stability. A main thrust of the last decade’s law and finance inquiries is that government institutions of some sort — usually via the judiciary and the right of disgruntled investors to sue wrongdoers — are central to protecting investors. But a nation with an *unstable* political environment could not easily produce good government and strong investor protection while remaining unstable (Svensson (1998: 1318-1319)), with that investor protection then inducing financial development (in the midst of instability), and with that good financial development then *later* stabilizing that nation’s previously-unstable polity. The government institutions that investors need for protection are inconsistent with an unstable, unreliable polity. Hence, a significant

---

<sup>13</sup> 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 the second stage. 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. We confirmed that each model in Table 14 passes the test of overidentifying restrictions. Hence, the null assumption of valid instruments cannot be rejected by this test.

direction of causation — to fit with 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**

The data suggests political stability propels financial development and instability retards it, independently of instability's effects on the economy overall. This key channel to financial backwardness runs independently of origins-based investor protection, trade openness, and related explanations. Hence, more determines financial development than has thus far recently been thought important in finance, and it does so significantly.

But this result does not mean that the other theories lack relevance. The colonial endowments explanation may work its way through political instability to financial markets, because extractive settlement strategies bred colonial inequality and supporting institutions, with that inequality and those institutions continuing up through the modern era. But even so, it remains plausible that it is modern instability, and not poor endowments directly, that mainly impedes later financial markets. The investor protection arm of modern law and finance also may still be relevant, but it may depend more on relative political stability than on previously-advanced considerations, emanating from legal origin. In any case, as Appendix Table 3G shows, the political stability results are robust to colonial endowments.

How political instability interacts with the strength of stabilizing institutions remains to be sorted out and, while important, is secondary to first seeing that relative political instability needs to be put into the causal chain. First, a nation's current instability could result from its current political institutions being unable to stabilize the polity, while a nation with stronger institutions could contain that instability. Second, weakened stabilizing institutions could interact with strong political instability to undermine finance, either directly or by degrading investor protection institutions. Figure 3 illustrates these channels to financial backwardness. Moreover, the current weakness of a polity's stabilizing institutions could be due to severe historical inequality having prevented politically stable institutions, in a way similar to how

Engerman, Haber, and Sokoloff (2000) show that poor institutions developed in New World economies that were based on exploitive, plantation-style labor. (This could be illustrated by adding an input to the left of the (contemporary) Political Instability/Weak Stabilizing Institutions box in Figure 3, one for historically destabilizing institutions.) Institutions and contemporary instability could also interact such that the current instability could be so severe that what would otherwise be satisfactory stabilizing institutions cannot contain the explosive instability.<sup>14</sup> The degree to which each of these channels is in play is well worth exploring. The key point here though is the evidence here points to relative political stability as a major factor somewhere in the causal chain that explains financial development and financial backwardness.

### **E. Refining**

We were surprised at how well the basic political stability index predicts 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 the rise of a middle class society may yield stronger not weaker financial development over the long-run. Olson (1984) 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." Equality-enhancing movements that fail may yield years of instability as citizens fight over resources, income, and property. Equality, via a broad property-owning middle-class, may induce political stability but may not be easy to generate in societies that do not already have it. And, because the reigning political instability 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,

---

<sup>14</sup> We do not seek here to uncover how institutions and instability interact. Our aim is to show that instability significantly affects financial development and does so independently of the channels that run from or through legal, investor protection, and overall economic development. We do note that political instability's effect on financial development is robust to the indicators of stabilizing institutions prominent in the related literature (the strength of judicial review and the weakness of presidentialism, the latter as an indicator of the strength of controls on the executive). Current instability and severe inequality, whatever might be their underlying causes, could either stymie stabilizing institutions from emerging or stymie otherwise acceptable ones from functioning well.



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 not yet fully understood, political stability around the world increased noticeably during the past decade or two, as Figures 4 and 5 show. Given the strong relationship we have shown here between stability and financial development, the secular decline in political instability in the past decade or two gives 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. In such politically stable settings, their technical finance-enhancing efforts seem, from the data in this paper, most likely to succeed. Moreover, the investor protection efforts may work better in tandem with new World Bank (2007) initiatives to focus on inequality as well, although those initiatives do not yet link to the possibility of enhancing financial development. 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.

Political instability's impact on finance is investigated here not just to confirm the intuitively appealing proposition that instability harms financial markets and does so after controlling for the level of

a nation's economic development, but to show that it harms finance independently of each prevailing explanations for financial backwardness. 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. Financial backwardness is significantly rooted in severe political instability.

That basic finding, which holds up year-by-year over several decades, holds up over multiple measures of instability and of financial development, and holds up in country fixed effects and instrumental variable regressions, opens new policy avenues for financial development and weakens old ones. Moreover, instability's effects are persistently robust to legal origin and quite consistent over time, while origins' effects are not similarly consistent over time. The results here suggest that legal origin has not had a time-consistent association with several key indicators of financial development over the past four decades.

In finding a robust channel running from political instability to financial backwardness, we thereby link two major literatures: an economics literature that sees political instability as strongly impeding economic development and a finance literature that sees financial development as strongly propelling economic development. A primary channel from political stability to economic development could well run through financial development. If so, we may be ready to uncover new bases for understanding what works and what does not for financial and economic development. Such findings could affect development policy. It may well be that sufficient equality, such as that of a sufficiently broad property-owning middle class, in democratic settings more often than not, induces the political stability that is foundational for financial development. True, it may not be possible for development agencies to deeply change the nations they mean to help in this dimension, but knowing that the foundation is important may give them better means to choose how to help and which ones will most benefit from their help. This

property-owning middle-class foundation for finance could well be as important as the currently examined characteristics but has not been a major component of recent thinking in academic finance.

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

## References

- 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, Simon Johnson, James Robinson, and Yunyong Thaicharoen, 2003, Institutional Causes, Macroeconomic Symptoms, Volatility, Crises and Growth, *Journal of Monetary Economics* 50, 49-123.
- 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 Vojislav Maksimovic, 2007, What Determines Protection of Property Rights? — An Analysis of Direct and Indirect Effects. Working Paper.
- 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/readme.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.
- \_\_\_\_\_, 2001, Law, Politics and Finance, World Bank Policy Research Working Paper No. 2585, available at <http://ssrn.com/abstract=269118>.
- Beck, Thorsten, and Ross Levine, 2005, Legal Institutions and Financial Development, in Claude Ménard and Mary M. Shirley, eds.: *Handbook of the New Institutional Economics*. (Springer, Dordrecht, The Netherlands).
- Bekaert, Geert, Campbell R. Harvey, and Christian Lundblad, 2005, Does financial liberalization spur growth?, *Journal of Financial Economics* 77, 3-55.
- 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* (J. Polhemus, New York).

- \_\_\_\_\_, 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).
- Brown, William O., Jr., Richard C.K. Burdekin, and Marc D. Weidenmier, 2006, Volatility in an Era of Reduced Uncertainty: Lessons from Pax Britannica, *Journal of Financial Economics* 79, 693-707.
- 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).
- 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, 2007, Private Credit in 129 Countries, *Journal of Financial Economics*, 84, 299-329.
- Dutt, Pushan, and Devashish Mitra, 2007, Inequality and the Instability of Polity and Policy, Working Paper, available at <http://ssrn.com/abstract=748704>.
- 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.
- Economist, 2007, The World Bank, founded to fight poverty, is searching for the right role in places that need its help less and less, Sept. 8, p. 70.
- Engerman, Stanley L., and Kenneth L. Sokoloff, 2002, Factor Endowments, Inequality, and Paths of Development Among New World Economies, *Economia* 3, 44-71.
- \_\_\_\_\_, 2005, Institutional and Non-Institutional Explanations of Economic Differences, in Claude Ménard and Mary M. Shirley, eds.: *Handbook of New Institutional Economics* 639-665 (Springer).
- Engerman, Stanley L., Stephen H. Haber, and Kenneth L. Sokoloff, 2000, Inequality, Institutions and Differential Paths of Growth Among New World Economies, in Claude Ménard, ed.: *Institutions, Contracts and Organizations: Perspectives from New Institutional Economics* 108-134 (Edward Elgar).
- FAO, 1977, Trade Yearbook 1976 (Food and Agriculture Organization of the United Nations, Rome).
- Fearon, James D. and David D. Laitin, 2003, Ethnicity, Insurgency, and Civil War, *American Political Science Review* 97, 75-90.
- 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 Groningen).
- Franks, Julian, Colin Mayer, and Stefano Rossi, 2006, Ownership: Evolution and Regulation, Working Paper, available at <http://ssrn.com/abstract=354381>.
- Glaeser, Edward L., 2006, Inequality, in Barry Weingast and Donald Wittman, eds.: *Oxford Handbook of Political Economy* 624-641.
- 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).
- Gourevitch, Peter A. and James Shinn, 2005, *Political Power and Corporate Control: The New Global Politics of Corporate Governance* (Princeton 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).
- Huntington, Samuel P., 1991, *The Third Wave: Democratization in the Late Twentieth Century* (University of Oklahoma).
- IMD, 1999-2004, World Competitiveness Yearbook, (International Institute for Management Development, Lausanne, Switzerland), available at <http://www.imd.ch/wcc/yearbook>.
- King, Robert G., and Ross Levine, 1993, Finance and Growth: Schumpeter Might Be Right, *Quarterly Journal of Economics* 108, 717-37.
- La Porta, Rafael, Florencio Lopez-de-Silanes, and Andrei Shleifer, 2006, What Works in Securities Laws? *Journal of Finance* 61, 1-32.
- \_\_\_\_\_, 2007, The Economic Consequences of Legal Origin, Working paper.
- La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny, 1997, The Legal Determinants of External Finance, *Journal of Finance* 52, 1131-1150.
- \_\_\_\_\_, 1998, Law and Finance, *Journal of Political Economy* 106, 1113-1155.
- La Porta, Rafael, Florencio Lopez-de-Silanes, Christian 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).
- 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.
- North, Douglass, 1990, *Institutions, Institutional Change, and Economic Performance* (Cambridge University Press).
- Olson, Mancur, 1984, *The Rise and Decline of Nations: Economic Growth, Stagflation, and Social Rigidities* (Yale University Press).
- Outreville, J. François, 1999, Financial Development, Human Capital and Political Stability, United Nations Conference on Trade and Development Discussion Paper No. 142.
- 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.
- Persson, Torsten and Guido Tabellini, 2004, Is inequality harmful for growth?, *American Economic Review* 84, 600-621.
- Putnam, Robert D., 2007, *E Pluribus Unum: Diversity and Community in the Twenty-first Century*, *Scandinavian Political Studies* 30, 137-174.
- 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. Samarasinghe, 1991, Measuring the Economic Dimensions of Sri Lanka's Ethnic Conflict, in S.W. Samarasinghe & Reed Coughlan, eds.: *Economic Dimensions of Ethnic Conflict* 194-223 (St. Martin's Press, London, New York).
- 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.
- Rodrik, Dani, 1999, Where Did All the Growth Go? — External Shocks, Social Conflict, and Growth Collapses, *Journal of Economic Growth* 4, 385-412.
- 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, London, New York).
- 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. (Foundation Press, Mineola, NY).
- Van de Vliert, Evert, Shalom H. Schwartz, Spike E. Huisman, Geert Hofstede, and Serge Daan, 1999, Temperature, Cultural Masculinity, and Domestic Political Violence, *Journal of Cross-Cultural Psychology* 30, 291-314.
- Voth, Hans-Joachim, 2002, Why Was Stock Market Volatility so High During the Great Depression? Evidence from 10 Countries during the Interwar Period, Centre for Economic Policy Research Working Paper No. 3254, available at [http://ssrn.com/abstract\\_id=306770](http://ssrn.com/abstract_id=306770).
- Weber, Max, 1978, *Economy and Society* (University of California Press).
- \_\_\_\_\_, 1950, *General Economic History* (Free Press, Glencoe, IL).
- 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, 2007, World Bank Independent Evaluation Group, Development Results in Middle-Income Countries: An Evaluation of the World Bank's Support, available at <http://worldbank.org/ieg>.
- \_\_\_\_\_, 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. The full 1965-2004 Annual results, which are similar, appear in the Appendix.

DV: Bank Credit/GDP

Year of Data	SPI Index		Log of GDP per capita		Obs	p value	R-squared
	Coefficient	t-statistic	Coefficient	t-statistic			
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 the 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		Obs	p value	R-squared
	Coefficient	t-statistic	Coefficient	t-statistic			
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.

Note: The SPI index measures overall instability for the 1960-1982 period.

**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		Obs	p value	R-squared
	Coefficient	t-statistic	Coefficient	t-statistic			
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 the independent variables. 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		Obs	p value	R-squared
	Coefficient	t-statistic	Coefficient	t-statistic			
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.

Note: The SPI index measures overall instability for the 1960-1982 period.



**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		Obs	p value	R-squared
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic			
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		Obs	p value	R-squared
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic			
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.

Note: The SPI index measures overall instability for the 1960-1982 period.

**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		Obs	p value	R-squared
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic			
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		Obs	p value	R-squared
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic			
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.

Note: The SPI index measures overall instability for the 1960-1982 period.

**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		Obs	p value	R-squared
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic			
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.

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		Obs	p value	R-squared
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic			
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	0.000	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 using Banks' political instability data, 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: Banks' 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: Banks' 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 ** [0.110]	-0.185 * [0.110]	-0.232 * [0.134]	-0.292 ** [0.119]
Gini 1990	-0.116 [0.104]	-0.139 [0.112]	-0.166 [0.142]	0.036 [0.116]
Log of GDP per capita 1995		-0.762 [0.648]	-0.794 [0.727]	-2.126 * [1.090]
Constructed trade share			-0.007 [0.007]	17.548 ** [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		Obs	p value	R-squared
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic			
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		Obs	p value	R-squared
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic			
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		Obs	p value	R-squared
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic			
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		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			
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 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	Coefficient	t-statistic			
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 Political Instability Decay Index		Spamann ADRI_Def		French Civil Law		Common Law		Scandinavian Civil 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			
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		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			
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. Country Fixed Effects and Use of An Alternative Indicator for External Market Capitalization**

Panel A. This table presents the results of panel regressions with country-level fixed effects and year dummies. Robust standard errors appear below each coefficient in brackets.

Independent Variable	DV: Stock Market Capitalization/GDP (1988-2003)	DV: Beck, Demirgüç-Kunt, and Levine's Stock Market Capitalization/ GDP (1976- 2003)
	Model 1	Model 2
One Percent Political Instability Decay Index	-2.725 *** [0.562]	-0.007 ** [0.003]
Log GDP per capita	11.906 [10.683]	0.124 * [0.068]
Obs	996	1311
Number of countries	85	81
p value	0.000	0.000
R-squared (within)	0.191	0.323

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

Note: The data from Banks goes until Year 2003.

Panel B. This table presents the results of cross-sectional OLS regressions using La Porta et al.'s measures of external market capitalization. Robust standard errors appear below each coefficient in brackets.

Independent Variable	DV: (External Market Capitalization/GDP) average for Years 1996- 2000 from La Porta et al. (2006)	DV: (External Market Capitalization/GDP) average for Years 1996- 2000 from La Porta et al. (2006)
	Model 1	Model 2
SPI Index	-0.007 ** [0.003]	
One Percent Political Instability Decay Index		-0.015 ** [0.006]
French Civil Law	-0.084 [0.289]	-0.047 [0.256]
German Civil Law	0.127 [0.296]	0.162 [0.268]
Scandinavian Civil Law	0.017 [0.337]	-0.019 [0.321]
Constructed Trade Share	-0.005 [0.005]	-0.001 [0.003]
Log GDP per capita	0.143 *** [0.035]	0.156 *** [0.032]
Number of countries	41	43
p value	0.000	0.001
R-squared (within)	0.442	0.463

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

Note: The data from Banks goes until Year 2003.

**Table 12. 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 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		Obs	p value	R-squared
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic			
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 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		Obs	p value	R-squared
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic			
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 13. 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.

Independent Variable	DV: Political Instability					
	(1)	(2)	(3)	(4)	(5)	(6)
Size of the Middle Class	-108.061 *** [24.891]	-80.645 *** [26.863]	-102.295 *** [31.007]	-107.074 *** [34.481]	-90.800 *** [23.386]	-126.322 *** [28.466]
Ethnic fractionalization		12.608 ** [5.900]	-0.123 [4.110]	2.238 [5.305]	-2.873 [4.273]	-3.878 [4.007]
Frankema land inequality (theil)			13.831 * [8.019]	11.452 [7.198]	10.174 [6.234]	14.751 ** [6.996]
Rice export/total agricultural exports in 1975			26.667 ** [12.541]	22.011 ** [8.802]	25.108 ** [11.411]	25.316 ** [11.617]
Sugar export/total agricultural exports in 1975			-9.945 [7.164]	-11.607 [8.328]	-8.826 [7.661]	-12.105 [8.218]
Cocoa bean plus cocoa powder export/total agricultural exports in 1975			31.541 *** [9.157]		24.859 *** [6.594]	36.494 *** [7.548]
Coffee export/total agricultural exports in 1975			-30.397 ** [13.242]	-18.093 [13.176]		-30.762 ** [13.334]
Tobacco export/total agricultural exports in 1975			-4.290 [11.215]	-10.773 [14.051]	0.223 [12.278]	-6.913 [13.601]
Mean temperature above 32 degrees Celsius			12.911 *** [3.137]	10.322 *** [2.929]	10.360 *** [3.281]	12.561 *** [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 inequality comes from Frankema (2006); mean temperature above 32 degrees Celsius comes from Van de Vliert (1999), and crop data comes from FAO Trade Yearbook (1977).

**Table 14. Instrumented Political Instability**

Panel A. 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 13), legal origin dummies, constructed trade share, and log GDP per capita are the independent variables. For the first model, where we look at multiple years of financial development, we control for the start-of-period (Year 1965) Log of GDP per capita. Robust standard errors appear below the coefficients.

Independent Variable	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
	Instrumented SPI Index	-0.773 * [0.434]	-0.971 ** [0.408]	-0.902 * [0.506]	-0.983 * [0.507]	-1.435 ** [0.657]
French Civil Law	-40.135 ** [18.965]	-29.776 * [17.139]	-40.184 ** [18.584]	-22.915 [19.695]	-22.272 [23.730]	-0.169 [0.207]
Common Law	-44.714 ** [19.794]	-35.317 ** [16.433]	-45.540 ** [17.958]	-28.180 [20.289]	-7.285 [25.436]	0.004 [0.228]
Scandinavian Civil Law	-43.932 ** [19.146]	-27.440 [16.479]	-38.796 ** [18.183]	-34.065 * [19.806]	-27.084 [23.136]	-0.260 [0.199]
Constructed Trade Share	-0.243 [0.300]	-0.433 ** [0.168]	-0.399 * [0.212]	-0.091 [0.323]	-1.045 ** [0.443]	-0.009 ** [0.004]
Log GDP Per Capita	7.271 *** [2.455]	6.191 *** [2.241]	7.450 *** [2.247]	8.066 *** [2.345]	9.460 *** [3.007]	0.089 *** [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  
 Note: We use start-of-period Log GDP Per Capita in the first model.

Panel B. This table presents the results of OLS regression in which the financial development outcomes are the dependent variables and the instrumented IMD Perceived Political Stability Index (using instruments from Model 6 of Table 13), legal origin dummies, constructed trade share, and start-of-period log GDP per capita serve as the independent variables. Robust standard errors appear below the coefficients.

Year of Data	Dependent Variable Used	Using Instrumental Variables from Column (6) of Table 13 to Predict Perceived Political Stability		Other Control Variables (legal origin dummies, constructed trade share, and log GDP per capita) included	Obs	p value	R-squared
		Coefficient	t-statistic				
Average of 1999-2003	Stock Market Capitalization/GDP from Beck et al.	0.147***	2.84	Yes	30	0.001	0.335
Average of 1999-2004	Bank Credit/GDP	12.072***	3.44	Yes	30	0.000	0.645

Note: \*\*\* means significance at the .01 level, \*\* means significance at the .05 level, and \* means significance at the .10 level.  
 Note: In this table, higher values on the IMD Index connote higher perceived political stability; hence higher perceived stability is positively associated with stronger financial development.



Figure 2. Possible Channels to Financial Backwardness.

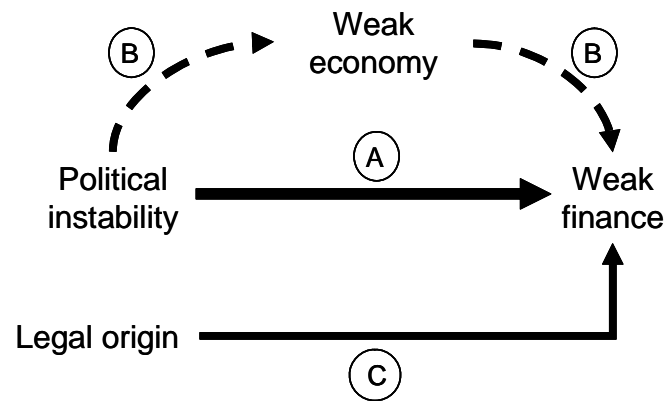
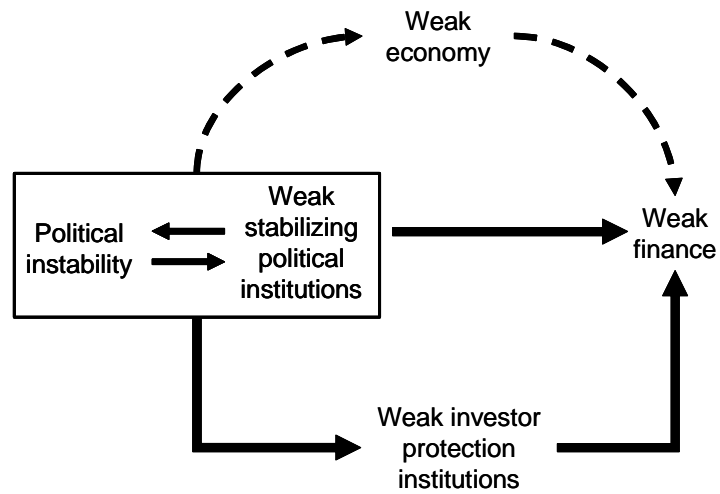
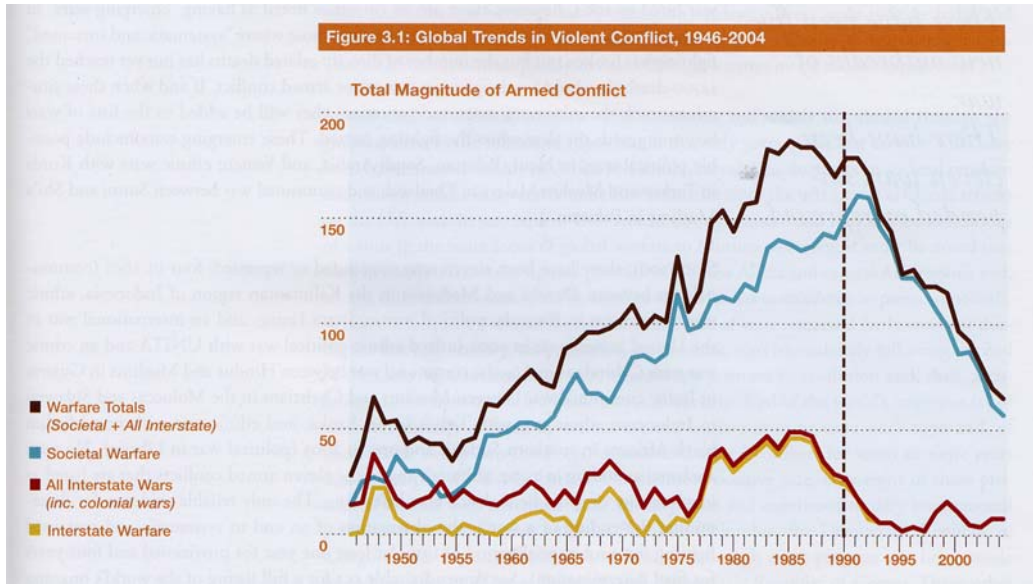


Figure 3. Interactions Between Political Instability and Institutional Quality.

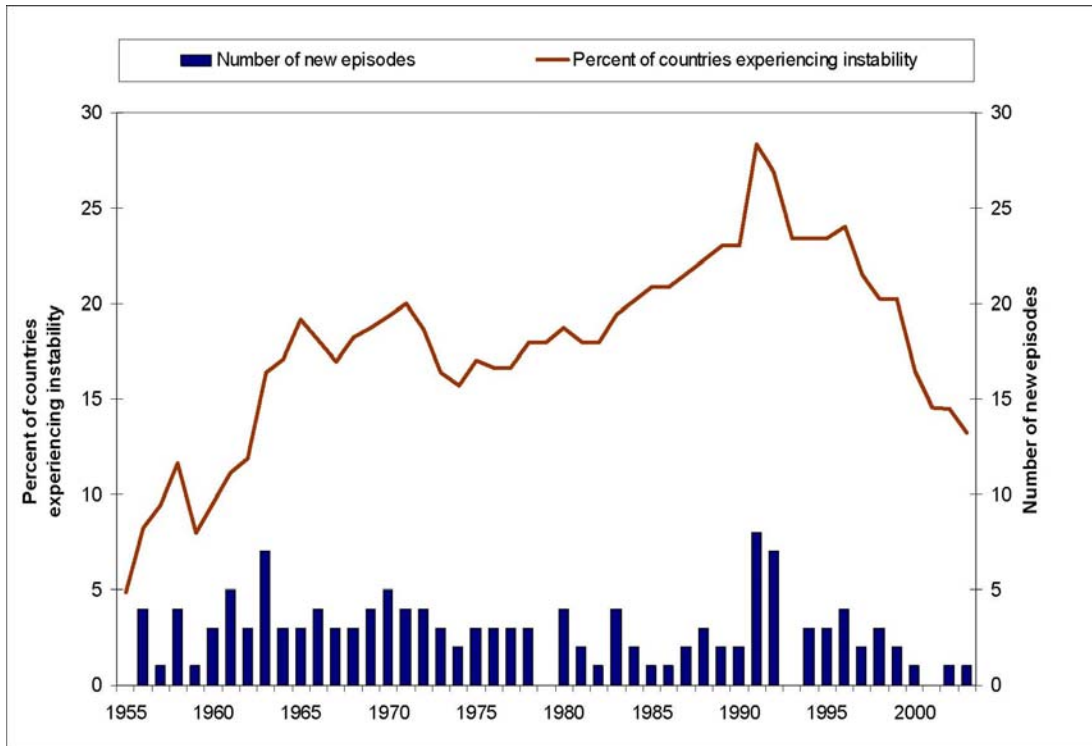


**Figure 4: Global Trends in Violent Conflict, 1946-2004.**



Monty G. Marshall 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. Reproduced with permission.

**Figure 5: Incidence and Prevalence of Political Instability Worldwide, 1955-2003.**



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