Partisan Financial Cycles

J. Lawrence Broz
Department of Political Science, University of California, San Diego
9500 Gilman Dr. M/C 0521, La Jolla, CA 92093-0521
tel. (858) 822-5750 email: jlbroz@ucsd.edu

This version: April 20, 2010

Abstract: Financial cycles of boom and bust are as old as finance itself—a fact that has led some observers to infer that human nature may be a fundamental cause of financial cycles. But "politics" also influences financial cycles by way of government policies and regulations. I argue that policies and regulations vary predictably with the partisan character of the government, creating a *partisan-policy financial cycle* in which conservative, pro-market governments preside over financial booms while left-wing governments are elected to office after crashes. My sample consists of all bank-centered financial crises to hit advanced countries since World War II, including the current "Subprime" crises—a total of 27 cases. I find that governments in power prior to major financial crises are more likely than the average OECD country to be right-of-center in political orientation. I also find that these governments are more likely than the OECD average to be associated with policies that predict crises: large fiscal and current account deficits, heavy borrowing from abroad, and lax bank regulation. However, once a major financial crisis occurs, the causal arrow flips and government partisanship becomes a *consequence* of crises. I find that the electorate moves to the left after a major financial crisis, and this leftward shift is associated with changes in government partisanship in that direction.

Prepared for *Politics in Hard Times: The Great Recession and Contemporary Politics. A Conference in Honor of Peter A. Gourevitch.* University of California, San Diego, April 23-24, 2010. I am deeply grateful to Dan Maliniak for research assistance and excellent substantive comments.

1. Introduction

Despite the vast amount of research on bank-centered financial crises, surprisingly little attention has been given to the partisan character of government policies as causes (or consequences) of financial crises. While the Subprime crisis has been attributed to lax regulation in the context of a surge in capital inflows from abroad, neither the level of regulatory oversight nor the policies that fueled the capital inflow have been linked to government partisanship in the run-up to the crisis. And when this crisis finally ends, there will likely be major reforms in the financial regulatory framework, just as reforms followed every major financial crisis in U.S. history (Bordo 2008). Here again, scholarship has ignored the link between financial crisis, regulatory reform, and government partisanship.

In this paper, I explore the relationship between government partisanship, public policies, and banking crises in comparative and historical perspective. My working hypothesis is that a *partisan-policy financial cycle* exists in which conservative governments preside over financial booms, funding budget deficits with foreign borrowing and deregulating financial activities in line with their pro-market ideology. When the crash ultimately occurs, voters reassess their support for right-leaning governments, making it more likely that left-wing governments will be in office after financial crashes. Once in power, left-wing governments pursue policies to unwind the financial excesses of their predecessors and oversee the broad re-regulation of financial activities. In short, the political orientation of the government is both a "cause" of pre-crisis policies and a "consequence" of financial crises.

I evaluate this argument on data from all bank-centered financial crises to hit developed countries since 1970, including the recent Subprime crises—a total of 27 cases.

The primary source is Reinhart and Rogoff (2008, 2009). Like Reinhart and Rogoff, I give particular attention to the most severe banking crises, the "Big Five" (onset of crisis in parenthesis): Spain (1977), Norway (1987), Finland (1991), Sweden (1991), and Japan (1992). Since the Subprime crises of the late 2000s must be considered as severe as a Big Five crisis by any metric, I add these nine cases to the sample: United Kingdom (August 2007), United States (August 2007), Germany (August 2007), Switzerland (October 2007), Iceland (September 2008), Ireland (September 2008), Japan (September 2008), Netherlands (September 2008), and Spain (September 2008).[1]

My expectation is that partisan cycles are most likely to be associated with major "systemic" banking crisis. To see if partisan cycles are also evident in lesser banking crisis, I also consider Reinhart and Rogoff's 13 "milder" crises: United Kingdom (1974), Germany (1977), Canada (1983), United States (1984), Iceland (1985), Denmark (1987), New Zealand (1987), Australia (1989), Italy (1990), Greece (1991), United Kingdom (1991), France (1994), and United Kingdom (1995). I limit my attention to banking crises in advanced economies because political partisanship tends to hew most closely to the left-right dimension in advanced countries; that is to say, data on the political orientation of governments for developing countries is limited. **Table 1** contains the crisis episodes employed in my comparisons.

In terms of research design, this paper is more exploratory than explanatory. By focusing on cases where banking crises occurred, I am selecting on the dependent variable which precludes drawing causal inferences about the relationship between partisanship and crises. Whenever possible, however, I include an "OECD baseline" to assess whether political trends observed in the crises cases are distinct from general trends among advanced countries. Even

[1] Subprime crisis observations are from Cecchetti, Kohler, and Upper (2009).

still, this research design is not suited to causal inference. But it can help *rule out* partisanship as a cause of whether a country experiences a financial crisis. It can also help *rule out* whether government partisanship is a consequence of financial crises. This is because partisanship cannot "explain" financial crises (or post-crisis partisanship) if it varies widely over the crises cases.

With this research design, it is crucial to select observations without regard to values of the explanatory variables. That is, the sample should be as representative of the population as possible and should never be chosen to "fit" a particular hypothesis (King, Keohane, and Verba 1994, p. 141). As mentioned above, I use the entire population of advanced country banking crises as identified by Reinhart and Rogoff (2009) and Cecchetti, Kohler, and Upper (2009). These authors, and the sources they reference, never mention "government partisanship" as a criterion for selecting crises observations.

If the evidence presented in this paper is encouraging, further research may be able to help establish causality. In such a design, observations would be chosen on the basis of variation in the explanatory variable (partisanship) without regard for whether a crisis was observed, and controls would be included for potentially correlated causal variables. I will discuss the viability of research along these lines in the conclusion of the paper.

The plan of the paper is as follows: In the next section, I present comparisons of the partisanship orientation of government across cases of financial crises in advanced countries. In Section 3, I overlay these partisan patterns to government policies that have been associated with financial crises: fiscal deficits, current account deficits, and financial deregulation. In Section 4, I spotlight the U.S. Subprime crisis and the Savings and Loan crisis cases with an eye for

evidence that would disprove the partisan-policy cycle hypothesis. In Section 5, I conclude this paper and consider future research.

2. Government Partisanship and Financial Crises

I begin in **Figure 1** by comparing the political orientation of government across the "Big Five" cases of financial crisis. Following the convention in Reinhart and Rogoff (2009), period *T* represents the year when the banking crisis began, period *t - 5* is five years prior to the onset of the crisis, and the graph continues to *t + 5*, the period five years after the crisis began. Political orientation data is from the World Bank's *Database of Political Institutions* (DPI), which records the left-right orientation of the party heading the executive branch.[2] Governments headed by right-wing parties are coded 0, governments headed by center parties are coded 1, and governments of the left are coded 2. As a baseline for these comparisons, the figure also includes the "OECD mean," which is the average political orientation of the chief executive for all OECD countries--minus the country in crisis--during equivalent time periods. I include the OECD baseline to assess whether partisan political patterns are specific to crisis countries, as I am suggesting, or whether they reflect more general trends in advanced countries during equivalent time periods.

The figure shows that, in the "Big Five" crisis countries, governments moved sharply to the right in the run-up to the crisis, dropping from center to right-of-center orientations by the *t-4* period. A reversal in political orientation begins with the onset of the crisis and this leftward shift continues, after a partial three-year retrenchment, with another large movement to the left. The change in government partisanship is most extreme between the *t-4* and *t+4* periods, during which governments moved from right to left by 0.9 points on average. As the political

[2] **Appendix B** contains the World Bank's classification and coding rules for the DPI partisan orientation variable.

orientation variables (DPI) ranges from 0-2, this represents a 33 percent shift from right to left. Since the plot of the "OECD mean" indicates that no similar movements in political partisanship were occurring across the OECD during these time periods, we can be fairly certain that these observed political changes in crisis countries were not part of larger trends in industrial countries.

In **Figure 2**, I look at the partisan orientation of government in the nine countries hit by the Subprime crisis that began in August 2007. Here, the data extend only to *t + 2* since, as of this writing, partisan electoral outcomes have yet to be determined beyond that point. However, the emerging political pattern is similar to the pattern evident in the "Big Five" crises: in the periods before the Subprime crisis, government political orientation was trending to the right. Indeed, in two pre-crisis periods (*t-4* and *t-1*), subprime countries had governments headed by parties that were sharply more right-of-center than the OECD average. More generally, the figure reveals that the rest of the OECD experienced little change, on average, in government partisanship over this eleven-year period. Hence, the sharp swing to the left in subprime countries after the crisis is starkly evident.

Figure 3 continues comparisons of the orientation of the political party in power using all 18 crisis countries in the Reinhart and Rogoff (2009) sample. The sample includes the "Big Five" cases plus the 13 milder banking crisis cases listed above. The patterns evident in **Figures 1** and **2** are weaker here, as might be expected. Unlike the "Big Five" and Subprime crises, minor banking crises affect isolated banks and are not systemic in nature. For example, the minor crisis in Australia in 1989 involved two large banks that received capital from the government to cover loses (Reinhart and Rogoff 2009, p. 350). Minor crises are less likely to have been "caused" by government policies because policies that make a crisis more likely—

capital inflow bonanzas, financial deregulation—affect all or many financial firms and activities. Furthermore, minor bank crises do not generate the political-partisan "consequences" of a systemic crisis either, since they do not spawn deep recessions, high unemployment, and asset price crashes that can push the electorate to the left. Nevertheless, the figure reveals a slight tendency for right governments to give way to left governments even when we "dilute" the sample with crises of lesser magnitudes.

Returning to systemic crises, we can break out the averages into individual cases and look at the *change* in government partisanship that occurred after each major banking crisis (the "Big Five" plus the nine Subprime cases). **Figure 4** plots the "Change in DPI" as the difference in the mean value of government political orientation between the post-crisis (*T* to *t+5*) and the pre-crisis (*t-5* to *t-1*) periods for each crisis country. "OECD change" is the average change in political orientation (DPI) in all other industrial countries over the same interval. Given that much larger partisanship changes occurred in crisis countries than in the OECD as a whole, it is fair to conclude that governments of *all* political orientations were punished at the polls for presiding over a systemic financial crisis. This is true of all cases but Great Britain, where the Subprime crisis has not yet produced a change in government. But that may change with the upcoming general election on May 6, 2010, as many analysts expect a change in government.

Beyond punishing incumbents, **Figure 4** also provides support for the existence of a partisan financial cycle. Note that governments moved to the left in 9 of 13 cases (69%) after the onset of a major financial crisis. By contrast, governments moved to the right in three cases (23%), and there was no change in partisanship in one case (8%). That a strong majority of countries moved from right to left after a systemic crisis tends to supports the contention that right-wing governments are more likely to preside over pre-crisis booms than left-wing

governments. Hence, we cannot rule out partisanship as a *cause* of major banking crises. That a strong majority of countries had governments that were more left-of-center after a crisis than before a crisis also suggests that we cannot reject the hypothesis that government partisanship is a *consequence* of financial crises.

We can explore this possibility further. If elected governments have a tendency to move to the left after a financial crisis, then presumably the electorate in crisis countries is moving to the left as well. While electoral results are one measure of this shift, **Figure 5** provides some information on the change in mass political attitudes that follows a financial crisis. The data are from the World Values Survey (WVS), which has carried out representative national surveys of political and social attitudes in five "waves" from 1981 to 2007. The series allows me to measure the change in individual political attitudes that followed a financial crisis in some—but not all—crisis countries. No observations from the Subprime cases are possible since the most recent WVS wave was in 2007. And because the WVS was not executed at uniform intervals for the rest of the sample, we can only calculate the change in mass political attitudes for 10 of 18 cases (56%) in the Rogoff and Reinhart (2009) full sample of major and minor crises. In these cases, a financial crisis occurred between two waves of the WVS.

I measure the change in "mass political orientation" as the change in the country average of individual responses to the WVS query: "In political matters, people talk of "the left" and "the right." How would you place your views on this scale, generally speaking?" Responses range from 1 = Far Left to 10 = Far Right. In **Figure 5**, crisis countries are indicated on the left axis, with the onset year of the banking crisis in parenthesis. An asterisk indicates a "Big Five" crisis. Next to the bars are the years of the two WVS surveys used to calculate the change (delta), in national attitudes. Negative changes indicate a shift to the left. The largest change in political

attitudes occurred in the "Big Five" case of Finland, where average political orientation shifted to the left by over half a point (0.54) between 1990 and 1996 (the crisis occurred in 1991 but took several years to unwind). In England, two milder banking crises took place in the interval between WVS surveys, and national political attitudes moved leftward by a third of a point. In Norway, another "Big Five" case, attitudes shifted by almost a quarter of a point to the left (0.24). By contrast, the "Big Five" crisis is Japan is associated with a shift to the right, albeit it small one (0.05).

These are small changes in public opinion, to be sure, and factors other than financial crisis may have contributed to them. But the figures do suggest that it is not just swing voters choosing left parties over right parties after a crisis. They show fewer people identifying as right-wing and *more* identifying as left-wing. Hence, we cannot rule out the possibility that mass political attitudes are affected by financial crises—especially serious financial crises—and that a post-crises shift to the left in the electorate may be the source of leftward shifts in government orientation.

3. Partisan Policies and Banking Crisis

In a study completed over 30 years ago, Edward R. Tufte found that the "single most important determinant of variations in macroeconomic performance from one industrialized democracy to another is the location on the left-right spectrum of the governing political party" (Tufte 1978, p. 104). While Tufte's path breaking analysis generated mountains of research on the links between government partisanship and various macroeconomic outcomes—unemployment rates, inflation rates, income equalization, and the size and rate of expansion of the government

budget—no one to my knowledge has looked at whether the orientation of the governing political party is also related to financial cycles of boom and bust.

I began that analysis in Section 2 of this paper with evidence that right parties tend to be in office before financial crises but give way to left parties after crashes. I also showed that crises are associated for leftward movements in mass public opinion, and suggested that this may be the mechanism that explains why governments move to the left after financial crises. That is, financial crises may have *consequences* for government partisanship by way of their impact on attitudes within the electorate.

In this section, I develop the argument that government partisanship might also be a *cause* of financial crises. Like Tufte, I assume that political parties represent different constituencies and make policy choices that reflect the interests of their core constituents when in government. Since the analysis in the previous section suggested that right-of-center governments tend to preside over financial booms, I focus on government policies prior to crashes. My claim is that right-of-center governments pursued the following policies during financial booms: "twin deficits" (rapidly expanding current account deficits and rapidly deteriorating fiscal balances), and financial deregulation.

3a. Current Account Deficits

In *This Time is Different: Eight Centuries of Financial Folly*, Reinhart and Rogoff (2009) establish similarities between the U.S. Subprime crisis and prior banking crisis episodes.[3] They pay particular attention to the massive U.S. current account deficit that preceded the crisis—and the foreign borrowing binge that it precipitated—and they show that such "capital flow

[3] See, in particular, "Chapter 13: The U.S. Subprime Crisis: An International and Historical Comparison."

bonanzas" are a common precursor of financial crises in both advanced and emerging economies.[4] Likewise, Chinn and Frieden (2009: 2) argue that the subprime crisis is "…merely the most recent example of a "capital flow cycle," in which foreign capital floods a country, stimulates an economic boom, encourages financial leveraging and risk taking, and eventually culminates in a crash."

Figure 6 provides dramatic evidence of the association between the current account balance and financial cycles. In each sample average, the figure shows that countries amassed seriously large current account deficits in advance of a crisis, reaching 4 percent of GDP on average for the Subprime sample. Several Subprime cases are particularly noteworthy in this respect. For example, the current account deficit of the United States reached an all-time record high of 6 percent of GDP in 2006.[5] But this was nothing in comparison to Iceland's deficit, which hit a whopping 41 percent of GDP in 2008. The current account to GDP ratio was also very large for Spain (- 10 percent), Ireland (- 5.3 percent) and the U.K (- 3.3 percent) prior to their respective crises. More generally, the pattern is one of increasing deterioration in the current account balance before crises followed by sharp improvements afterwards. In fact, the current account balance average goes into surplus for the "Big Five" and the Subprime samples by the *t+2* period.

What causes current account deficits? At the most fundamental level, the current account balance is the difference between a country's savings and its investment. If the current account balance is positive, it measures the portion of a country's saving invested abroad; if negative, it is the portion of domestic investment financed by foreign savings. Since any excess of national

[4] The term, "capital flow bonanza" is from Reinhart and Reinhart (2009) and signifies a period of abnormally large capital inflows (i.e., above-average foreign borrowing).

[5] On the "unsustainability" of the U.S. current account deficit, see Obstfled and Rogoff (2007).

spending over income must be financed by foreigners, the current account deficit is equivalent to the net inflow of capital from abroad.

To see this, begin with the national income identity on the expenditure side:

$$Y = C + I + G + X – M.$$

Then add the national income identity on the *disposal* side (how income is allocated to different uses):

$$Y = C + S + T$$

This illustrates that national income is made up of consumption (C), saving (S) and taxes (T). Simplifying these two identities, Y and C cancel out, leaving:

$$X - M = (S - I) + (T - G)$$

Since this is an identity, the current account (X - M) is identical to net private saving (S - I) plus net government saving (T - G). The current account is simply the net saving of the two sectors combined. So a current account deficit means that either the private sector or the government (or both) has negative saving. In many cases, it is the government that overspends its budget.

There are two options to reduce the current account deficit: increase net private saving or increase net government saving. To increase net private saving (S - I), discouraging investment is generally undesirable. The better solution is to strengthen incentives to save and reduce incentives to consume via changes in the tax code, the pension system, etc. To increase net

government saving (T - G), policymakers must either increase taxes or cut spending. The International Monetary Fund (IMF), which helps countries unwind unsustainable current account deficits, usually recommends both.

In cases where governments have negative saving, there can be a link between the current account deficit and the budget deficit. This is known as the "twin deficits" relationship. When a government increases its fiscal deficit by cutting taxes, increasing expenditures, or both, domestic residents may use the additional income to boost consumption, causing total national saving (private and public) to decline. Unless domestic investment decreases to offset the saving shortfall, the country must borrow from abroad, i.e., it must run a current account deficit.

Chinn and Ito (2007) show that the budget balance is an important determinant of the current account balance for industrial countries. In the next section, I examine the fiscal accounts of industrial country governments that presided over financial crises and find evidence that suggests a twin deficits policy.

3b. Fiscal Balances

With respect to industrial countries that experienced financial crises, the relationship between the twin deficits appears very strong. **Figure 7** plots the average structural budget balance for all my crises samples. The structural budget balance is the fiscal deficit that would be incurred if the economy was at full employment. Since the structural balance is cyclically adjusted, it captures the central government's fiscal policy stance. In every crisis sample, the structural budget balance turned sharply negative in the period before a crisis hit. This suggests that governments were on average running a policy of heavy deficit spending in the run-up to their crises.

As Reinhart and Rogoff (2009, p. 220) note, "increasing public debt has been a nearly universal precursor" of postwar financial crises. As in **Figure 7**, they find that the budget balance typically worsens after a banking crisis. They attribute this deterioration to large stimulus programs in the context of post-crisis recessions.

But are budget deficits preferred by the right? Connecting the fiscal component of the "twin deficits" relationship to conservative governments may run counter to conventional wisdom since right-of-center governments are supposed to favor a low level of public consumption (Hibbs 1977, Alesina, Cohen, and Roubini 1993). However, the conventional view finds little empirical support (see Cusack 1999 for a review). In fact, a number of studies conclude that the partisan impact on fiscal policy is just the opposite of the conventional wisdom. Cameron (1985), for example, finds that leftist governments in the OECD are usually *less* likely to incur large budget deficits than governments controlled by centrist, Christian Democratic or conservative parties. Similarly, Garrett and Lange (1991) found that OECD countries with left governments and strong labor parties tend to run smaller budget deficits than do right leaning parties.

These findings suggest a partisan fiscal pattern in which the left is more likely to adopt a conservative stance than the right. While unconventional, this is consistent with Persson and Svensson (1989), who argue that right-wing governments prefer to run fiscal deficits in order to force their left-wing successors to curtail public spending. This also echoes a similar argument by Alesina and Tabellini (1990) in the context of Reagan administration deficits. The right's deficit strategy can be effective since it saddles left-of-center successor governments with politically unattractive options. A left-wing successor must increase taxes to maintain current programs, reduce spending and thereby disappoint its constituents, both raise taxes and cut

spending, or fund the fiscal imbalance by increasing public debt (which will squeeze spending programs by the need to cover larger interest charges). All of these options have potentially negative political consequences.

In addition to strategically influencing the fiscal choices of successors, deficit spending has another attraction for the right: conservative parties can favor their high-income constituents by cutting taxes more than spending. For example, Ohlsson and Vedrin (1996) examined Swedish fiscal policy between 1968 and 1993 and found that right-wing governments cut taxes more than spending, thereby generating greater deficits than social democratic governments.

In the context of my analysis, these arguments suggest a policy mechanism for the "partisan financial cycle" in which right-of-center governments preside over twin (fiscal and current account) deficits and thereby generate risky capital inflows in the run-up to a crisis. But is this all they do? The next section considers the impact of partisanship on financial regulation.

3c. Financial Regulation

In party manifestos, right-of-center parties generally champion free enterprise capitalism and the superiority of markets over government regulation and allocation (Budge et al. 2001). They tend to support personal initiative and markets free of all but the most essential government involvement. In general, right-or-center parties are less concerned with market failure than with "government failure" and moral hazard problems created by government intervention. Is there evidence to suggest that right-of-center governments acted on these prior beliefs and deregulated financial markets in the run-up to financial crises?

Measuring the extent and the effectiveness of financial supervision involves more than the sum of the formal rules and regulations established by law. This is because governments

may use their executive powers over regulatory agencies to interpret and implement the law, creating a gap between *de jure* bank regulation and *de facto* bank regulation. Since I am interested in the effect of government partisanship on the actual level and quality of bank regulation, I need a measure that captures the legal rules as well as the actual implementation and enforcement of those rules.

My data on banking regulation come from Abiad et al. (2008) who rely on a mix of *de jure* and *de facto* criteria to code this dimension of government financial policy.[6] On the *de jure* side, they consider whether (1) a country has adopted the Basle Accord risk-based capital adequacy ratios, and (2) whether the chief banking supervisory agency independent is formally independent of the executive's influence. On the *de facto* side they consider whether (3) the main banking supervisory agency conducts "effective" supervisions through on-site and off-site examinations and (4) whether the country's banking supervisory agency covers all financial institutions without exception. Conducting on-site and off-site examinations is how regulators monitor banks' balance sheets, but gauging the "effectiveness" of examinations is a judgment call that the authors' relied on experts to make. Similarly, banking regulations are compromised if some financial institutions are exempt from supervisory oversight, but knowing when some banks are exempt from supervision usually cannot be deduced from the formal rules.

From these criteria, Abiad et al. (2008) create an index of bank regulation and supervision that ranges from 0 to 3, with higher values representing more (or better) regulation.[7] I use this index to explore the argument that right-wing governments tend to deregulate the financial sector prior to crashes and their left-wing successors tend to re-regulate after the crash

[6] Banking regulation is but one of seven dimensions of financial policy coded in the Abiad et al. (2008) dataset.

[7] **Appendix C** reproduces the coding rules Abiad et al. (2008) used to construct this index.

occurs. I am aware that the subjective aspects of the data may bias results in the direction of my argument: upon observing a crisis, for example, coders may have inferred that regulation was lax or ineffectual.

Figure 8 plots the average value of the Abiad et al. (2008) measure of bank regulation for the "Big Five" crises. It also includes the OECD baseline, which is the average level of bank regulation across the OECD during equivalent time periods. The figure suggests that bank regulation is much weaker (in extent or quality) on average in "Big Five" crisis countries prior to a crisis. Bank regulation then increases sharply once a crisis has occurred. But note that bank regulation is improving across the OECD during the same time periods. This suggests the "Big Five" crisis countries are part of a more general trend among industrial country governments to increase their regulation over time. Part of the reason for this general upward trend lies in the coding of the Basle capital adequacy criteria: Abiad et al. (2008) assigned a value of 0 to all cases on criteria prior to 1993—that is, before Basle regulations were in place internationally (see **Appendix C).** This ensures that bank regulation is increasing over time in all samples of the data. Nevertheless, **Figure 8** indicates that the "Big Five" crisis countries had less (weaker) bank regulation and supervision on average than the average OECD country in the run-up to their crisis. This is consistent with my argument that the governments of these countries—which, as shown in **Figure 1**, tended to be more right-wing than the average OECD—made a partisan policy choice to have less regulation.

Figure 9 reproduces the same analysis for the full Reinhart and Rogoff (2009) sample of 18 major and minor crisis countries. In this sample, there is a smaller distinction between regulation in crisis countries and average OECD regulation—crisis countries have only slightly less rigorous bank regulation than the OECD average prior to a crisis. This is to be expected

since this sample includes a number of minor crises episodes, where banking problems are isolated to a small number of banks. These crises are thus less likely to be related to the overall level of regulatory laxity.

Overall, the evidence in this section is not sufficient to rule out the possibility that partisan financial cycles have origins in partisan policy choices. The evidence is stronger with respect to macroeconomic policy. Prior to the onset of a major financial crisis, governments presided over rapidly deteriorating current account deficits (a.k.a., capital inflow bonanzas), and these external deficits appear related to a policy of government dissaving (a.k.a., budget deficits). The data also suggest that regulation of the financial sector was weaker than average before crises in the countries that experienced a major financial crisis. However, this may reflect measurement error since retrospective coding of bank regulation is highly subjective and may reflect the coder's inference that a major crisis is evidence of less regulation.

In order to provide more empirical leverage on the politics of financial cycles, the next section briefly reviews the only two American banking crises in the post-war period: the Savings and Loan (S&L) crisis of the 1980s and the Subprime crisis that began in 2007.

4. Partisanship and Banking Crises in the United States

The United States has experienced two financial crises since World War II: the S&L crisis and the Subprime crisis. Although Reinhart and Rogoff (2009) classify the S&L crisis as a "milder" crisis, over 1,400 savings and loan institutions and 1,300 banks failed as a result of the crisis, and the clean-up cost was $180 billion, or to 3.2 percent of GDP (Reinhart and Rogoff 2008).[8] In

[8] The S&L cleanup cost were substantially less than the fiscal costs of cleaning up the "Big Five" crises: Sweden 1991 crisis cost 6 percent of GDP to clean up, and Norway's 1987 crisis bill amounted to 8 percent of GDP. Spain's post-1977 cleanup cost over 16 percent of GDP and,

2007, the meltdown of the subprime mortgage market triggered the second U.S. crisis. The meltdown first affected banking system liquidity by way of a sharp decline in demand for asset-backed securities, and credit losses and asset write-downs worsened with accelerating mortgage foreclosures. In August 2007, liquidity problems at Countrywide Financial—the largest mortgage lender in the country—triggered a run on the bank's deposits. To provide systemic liquidity, the Federal Reserve lowered the discount rate from 5.75% to 2.25% in six steps between 2007 and 2008. During this period, the five largest U.S. investment banks either went bankrupt (Lehman Brothers), were taken over by other companies with government guarantees of liabilities (Bear Stearns and Merrill Lynch), or were bailed-out directly by the government (Goldman Sachs and Morgan Stanley). In March 2008, with subprime-related losses or write-downs approaching $400 billion, the Federal Reserve introduced the Term Securities Lending Facility to swap mortgage backed securities for Treasury notes. On September 7, 2008, mortgage giants Fannie Mae and Freddie Mac were placed under conservatorship.

I have argued that there is a partisan pattern to financial cycles: right-of-center political parties enact policies that help fuel the boom while left-of-center parties are elected as a consequence of the crash. The U.S. experience provides partial support for this hypothesis. Right-wing Republican administrations were in office in the years immediately ahead of each crisis, pursuing "twin deficit" policies and reducing the level of regulatory oversight of financial markets in each instance. However, a left-of-center president displaced a right-wing president only after the Subprime crisis, as Republicans retained control of the executive branch for two presidential terms after the onset of the S&L crisis. Furthermore, the deregulation of the saving

---

while estimates for Japan's bill vary widely, many are in excess of 20 percent of GDP. See Reinhart and Rogoff (2008, p. 340).

and loan industry began prior to the election of Ronald Reagan, under a Democratic administration.

4a. "Twin Deficits" under George Bush and Ronald Reagan

Prior to the Subprime crisis, the U.S. current account deficit ballooned to over 6 percent of GDP, an all-time record for the United States. Chinn and Frieden (2009) and Chinn (2005) attribute the burgeoning U.S. current account deficit prior to the Subprime crisis to Bush administration fiscal policies; the emphasis after 2001 on cutting taxes while increasing spending (on national security) produced a gaping federal budget deficit that had to be financed. The huge pool of foreign savings available from oil exporters and surplus countries like China, Japan, and Germany provided the Bush administration with a cheap way to finance its fiscal deficits. In this interpretation, the cause of the "capital flow cycle" is rooted in Bush administration policies, not in the willingness of foreigners to lend to the United States. Whereas Bush-era policymakers like Treasury Secretary Paul O'Neill and Federal Reserve chairman Alan Greenspan downplayed the risks of the current account deficit, Greenspan's successor, Ben Bernanke, attempted to shift the responsibility to foreign lenders. Bernanke (2005) argued that the U.S. current account deficit was the result of a "global savings glut," and therefore beyond the control of U.S. policymakers. This has causality reversed since the reason other nations had such large surpluses was that the United States had overstimulated its economy by way of tax cuts, increases in expenditures, and lax monetary policy (Frankel 2006, Chinn 2005). This drove up the demand for imported goods and oil and resulted in burgeoning surpluses for manufacturing countries like China and oil exporters alike.

While not particularly plausible in an economic sense, the administration's narrative does make *political* sense. To be sure, not all academic economists saw the ballooning U.S. current account deficit as a problem, but there is a strong political temptation to blame others for our trade deficits (Frankel 2006, p. 657).[9] The Bush administration had promised its constituents on the right that it would reduce taxes while increasing spending on national defense, and the globalization of financial markets made it possible to finance the resulting fiscal imbalances with foreign savings.

The Bush administration's policies and rhetoric recalls an earlier episode of twin deficits in the United States. Indeed, the term "twin deficits" originated during the Reagan administration, when taxes were reduced and the budget deficit increased markedly. During the early 1980s, the current account also moved into sizable deficit as the U.S. economy grew faster than that of its major trade partners in Europe and Asia. As with the Subprime crisis, the S&L crisis also occurred in the context of Republican cut taxes, increased military spending, ballooning current account deficits and borrowing from abroad to make ends meet (Destler and Henning 1989; Frankel 1990). Japan, in particular, became a major lender to the United States in the 1980s. More generally, U.S. deficits were easier to finance after the Latin American debt crisis of 1982 led to a reversal of capital flows to developing countries, freeing up funds to pursue the high interest rate environment in the United States.

As described above, economic theory suggests a relationship between the fiscal and the trade deficits. But it is not a strict link in the sense that the deficits move in lockstep with one another; rather, they are related by virtue of causal forces that may at times be obscured by other factors. Since budget deficits, net private savings, and current account deficits are jointly

[9] For a review of the debate, see Frankel (2006) and Reinhart and Rogoff (2009, pp. 208-15).

determined, an increase in the budget deficit might be offset, for example, by an increase in private saving. With no fall in aggregate national saving, there need be no deterioration of the current account or investment. In the United States, the two deficits moved apart during the late 1990s, as a boom in investment—lead by investment in the information and communications sectors—resulted in larger current account deficits even while the budget deficit was declining. But the twin deficit relationship reemerged with the onset of Bush administration fiscal profligacy (Frankel 2006, Chinn 2005) in 2001.

It may seem unconventional to argue that it is the right-of-center party that lacks fiscal restraint. But this is easy to confirm in the U.S. case. **Figure 10** displays the size of the federal budget deficit as a share of gross domestic product (GDP) by presidential administration. Over the past 35 years, Republican presidents have run substantially larger budget deficits than Democratic presidents. Averaging across presidential administrations shows that budget deficits were over twice as large (3.2 percent of GDP) under Republican presidents as they were under Democratic presidents (1.3 percent of GDP). In fact, the Clinton administration registered substantial budget *surpluses* in 1999 and 2000, and surpluses were projected well into the future (see Congressional Budget Office 1999). However, the Bush administration's tax cuts and the recession of 2001 erased the surplus and the budget balance fell into a large deficit of 1.5 percent of GDP by 2002. Military and homeland security expenditures after the September 11, 2001 attacks further increased the deficit to 3.5 % of GDP in 2004. However, the Bush administration had no trouble financing these fiscal deficits because it could borrow cheaply in international capital markets.

4b. Financial Regulation under Bush and Reagan

There is anecdotal evidence that Republican administrations deregulated in advance of the two banking crisis in the United States. In the run-up to the Subprime crisis, the Bush administration deregulated financial activities just as capital inflows fueled the domestic expansion. Among the most important changes was the April 2004 decision by the Securities and Exchange Commission (SEC) to relax capital requirements on investment banks and put these firms on a regime of self-regulation (Labaton 2008a). This ruling enabled investment banks to triple their leverage ratios, fueling the growth in mortgage-backed securities supporting subprime mortgages. In retrospect, the SEC conceded that self-regulation of investment banks contributed to the Subprime crisis (Labaton 2008b). So, just as budget deficits induced current account deficits, and capital inflows pushed up real estate prices, financial deregulation encouraged the use of mortgage-backed securities and other risky financial instruments. The stage was set for the Subprime crisis.

The evidence is less supportive of partisan regulatory policy prior to the S&L crisis. This is because one of the principal deregulatory laws of the era—the Depository Institutions Deregulation and Monetary Control Act of 1980 (DIDMCA)—was passed by a Democratic president, albeit with support of the Republican majority in Congress. Among other changes, the DIDMCA phased out deposit interest-rate ceilings, allowed S&Ls and credit unions to offer checkable deposits, and increased the limit for deposit insurance to $100,000 from $40,000. However, the Reagan administration was squarely behind the second key legislative act deregulating financial markets: the Garn-St. Germain Depository Institutions Act of 1982 (Garn-St. Germain). According to the Federal Deposit Insurance Corporation's official history of the crisis, the Reagan administration aimed to fully deregulate the S&L industry with the Garn-St. Germain Act (FDIC 1997). The Act expanded the nonresidential lending powers of S&Ls,

allowing them to move aggressively into commercial real estate lending. For commercial banks, it removed restrictions on real estate lending and relaxed restrictions on loans to a single borrower. In line with its small government ideology, the Reagan administration also used its executive authority to pressure the Federal Home Loan Bank Board and other thrift regulatory agencies to reduce the size of their examination staffs (FDIC 1997, p. 177). Overall, the administration's deregulatory zeal set the stage for a rapid expansion of commercial real estate lending, overbuilding, and the subsequent commercial real estate market collapse. In short, this appears to be another instance in which a conservative U.S. executive presided over financial deregulation in advance of a crisis.

Despite inconsistencies in government partisanship, a regulatory cycle still emerges: at the beginning of the 1980s, with passage of both DIDMCA and Garn-St Germain, deregulation of the financial services industry, especially of S&Ls, was dominant. As the S&L crisis deepened and the banking crisis evolved, the emphasis turned to reregulation. More stringent rules and oversight were reestablished in the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) and the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA). By the late-1990s, with the banking industry's apparent return to stability, deregulation returned to the agenda, and reached fruition during the Bush administration (FDIC 1997).

5. Conclusion

I have examined the possibility that financial crises may be systematically related to "politics" by way of the ideological orientation of the governing political party. The evidence presented in the cross-country comparisons is not sufficient to rule out the existence of a *partisan-policy cycle* that takes the following form: governments in power prior to a major financial crisis are more

likely than the average OECD country to be right-of-center in political orientation. Inasmuch as right-leaning governments are more likely to be in office prior to a major crisis, they are therefore more likely than the OECD average to be associated with policies that predict crises: twin deficits, capital inflow bonanzas, and deregulation of the financial sector. However, once a financial major crisis hits, causing widespread macroeconomic distress, the causal arrow flips and government partisanship becomes a *consequence* of crises. Here, my cross country evidence suggests that the electorate moves to the left after a major financial crisis, and this leftward shift is associated with changes in government partisanship to the left.

The two American financial crises, the S&L crisis and the Subprime crisis, are roughly consistent with the cross-country partisan pattern. There are, for example, clear parallels between the 1980s and the 2000s. In both decades, the Republican federal leadership launched massive tax cuts without imposing discipline on the rate of growth of government spending. In both decades, the result was record budget deficits and record trade deficits. Furthermore, in both decades, foreign capital financed the twin deficits and fueled expansions in real estate. And in both decades, deregulation allowed the boom in real estate to continue unchecked until a financial crisis occurred. As with the cross-country results, these parallels suggest that we cannot rule out the existence of partisan financial cycles.

This is the beginning of research on partisan financial cycles and I am aware of some glaring theoretical and empirical shortcomings in my analysis. On the theory front, I assume that political parties represent different constituencies and make policy choices that reflect the interests of their core constituents when they are in office. But I have not explicitly theorized on why right-wing constituents want the policy mix that I have associated with right-of-center governments prior to crises: burgeoning current account deficits, rapidly deteriorating fiscal

balances, and financial deregulation. Reference to Persson and Svensson's (1989) time-inconsistency argument is just a nod toward a theory that is consistent with right-wing twin deficits and more work needs to be done.

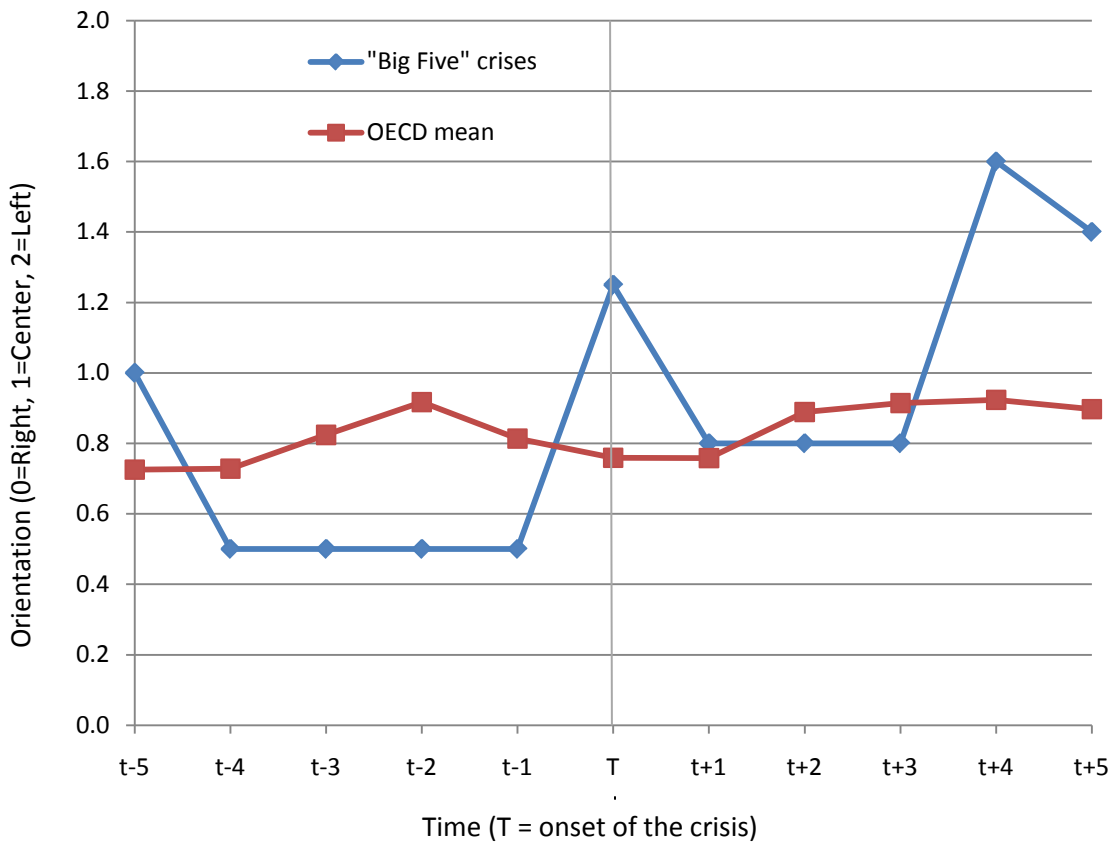
In addition to better theory, the empirical side of the project needs attention. The next step will be a Logit/Probit regression of banking crises to control for political and economic variables that are potentially correlated with government partisanship. While existing research has found that banking crises correlate significantly with various macroeconomic conditions--current account deficits, low growth rates, high inflation rates, and high real interest rates--these models can provide a baseline for the introduction of political factors, including partisanship.

Table 1: Post World War II Bank-Centered Financial Crises in Advanced Economies

Country	Onset of crisis
Severe (systemic) crises: The "Big Five"	
Spain	1977
Norway	1987
Finland	1991
Sweden	1991
Japan	1992
Subprime crises	
United Kingdom	August 2007
United States	August 2007
Germany	August 2007
Switzerland	October 2007
Iceland	September 2008
Ireland	September 2008
Japan	September 2008
Netherlands	September 2008
Spain	September 2008
Milder crises	
United Kingdom	1974
Germany	1977
Canada	1983
United States (savings and loan)	1984
Iceland	1985
Denmark	1987
New Zealand	1987
Australia	1989
Italy	1990
Greece	1991
United Kingdom	1991
France	1994
United Kingdom	1995

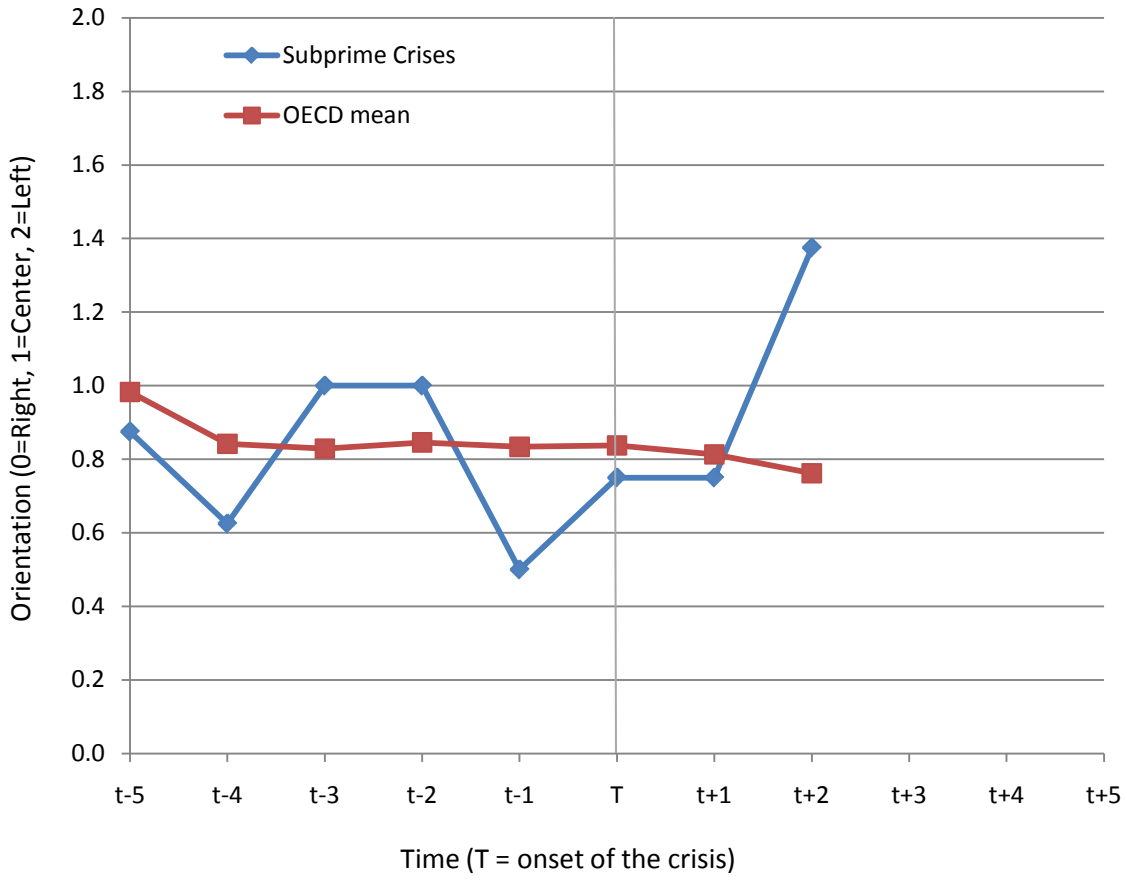
Sources: Table 13.1 in Reinhart and Rogoff (2009); Subprime crisis observations are from Cecchetti, Kohler, and Upper (2009).

Figure 1: Political Orientation of the Chief Executive before and after the "Big Five" Banking Crises



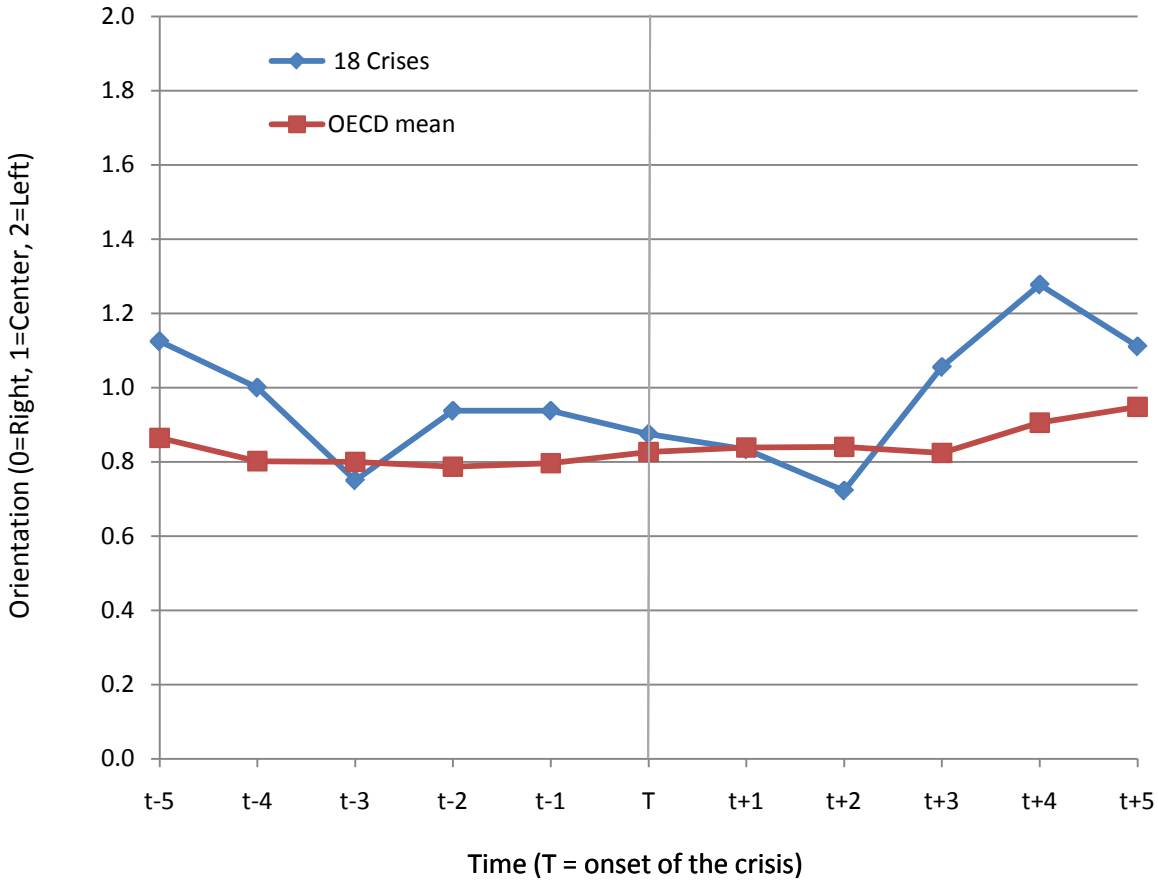
Notes: The "Big Five" crises are: Spain (1977), Norway (1987), Finland (1991), Sweden (1991), and Japan (1992), where the starting year is in parentheses. "OECD mean" is the average political orientation of the chief executive for all OECD countries, minus the country in crisis, during equivalent time periods. Political orientation data are from the World Bank *Database of Political Institutions* (Beck et al. 2001). Missing data as follows: Spain 1977 (*t-5* to *T*). Crisis observations are from Table 13.1 in Reinhart and Rogoff (2009). See **Appendix A** for all data.

Figure 2: Political Orientation of the Chief Executive before and after the Subprime Crises



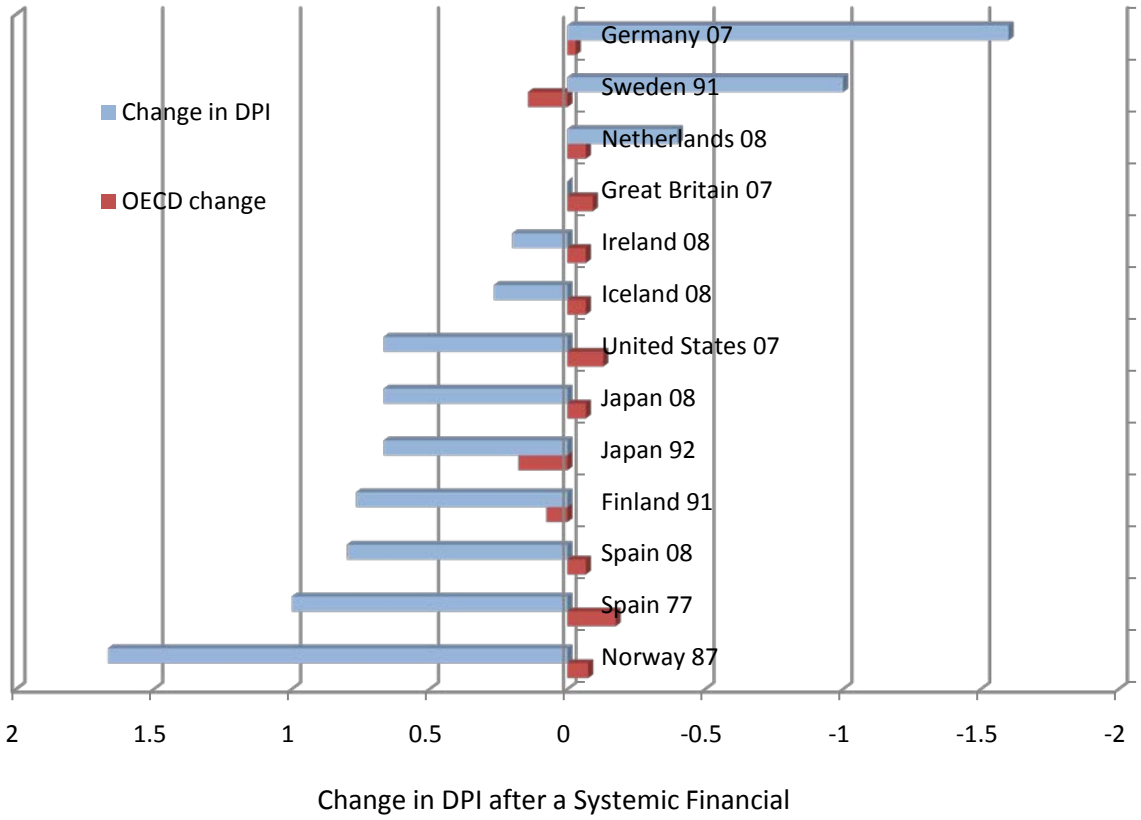
Notes: Subprime crises cases (with the onset date in parentheses): United Kingdom (2007), United States (2007), Germany (2007), Switzerland (2007), Iceland (2008), Ireland (2008), Japan (2008), Netherlands (2008), and Spain (2008). Crisis observations are from Cecchetti, Kohler, and Upper (2009). "Orientation" is from the World Bank *Database of Political Institutions* (Beck et al. 2001). "OECD mean" is the average political orientation of the chief executive for all OECD countries (minus the country in crisis) during equivalent time periods. Missing data as follows: Switzerland 2007 (*t-1* to *t+5*).

Figure 3: Political Orientation of the Chief Executive around 18 Major and Minor Banking Crises in Industrial Countries



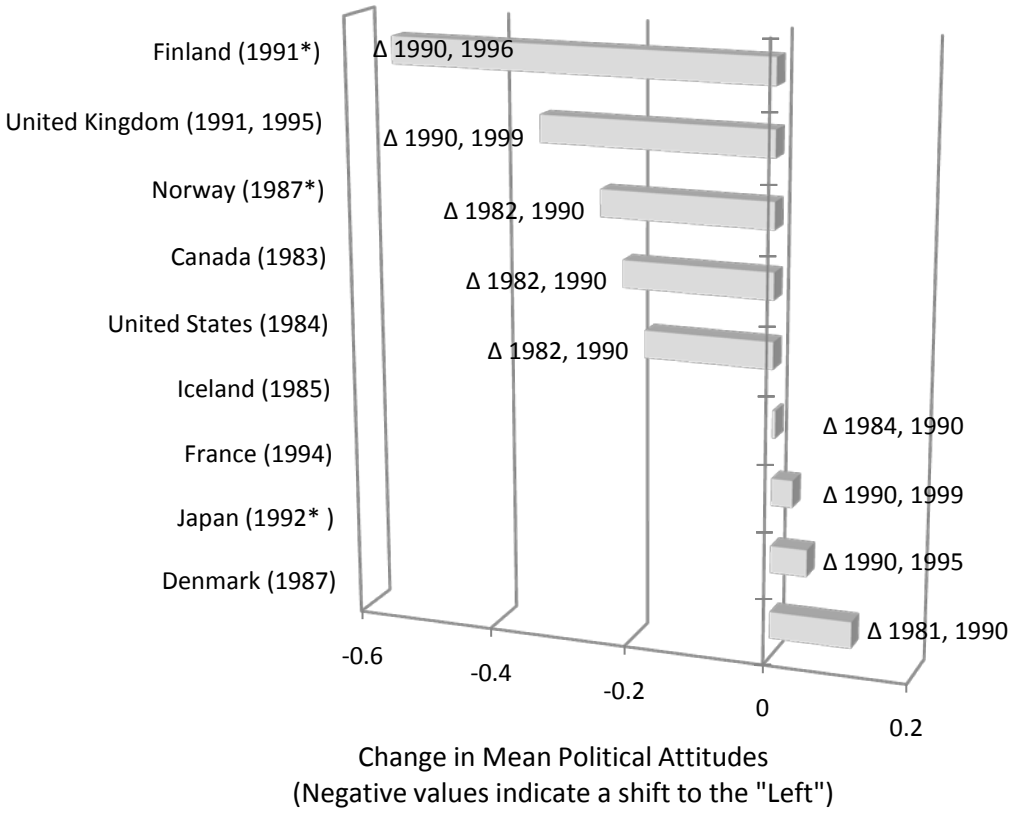
Notes: Crisis observations are from Table 13.1 in Reinhart and Rogoff (2009). The 18 observations include the "Big Five" plus 13 milder banking crises: United Kingdom (1974), Germany (1977), Canada (1983), United States (1984), Iceland (1985), Denmark (1987), New Zealand (1987), Australia (1989), Italy (1990), Greece (1991), United Kingdom (1991), France (1994), and United Kingdom (1995). "Political Orientation" is from the World Bank *Database of Political Institutions* (Beck et al. 2001). "OECD mean" is the average political orientation of the chief executive for all OECD countries (minus the country in crisis) during equivalent time periods. Missing data as follows: United Kingdom 1974 (*t-5* to *T*), and Spain 1977 (*t-5* to *T*).

Figure 4: Change in the Political Orientation of the Chief Executive after a Major Banking Crisis (the "Big Five" plus the Subprime cases)



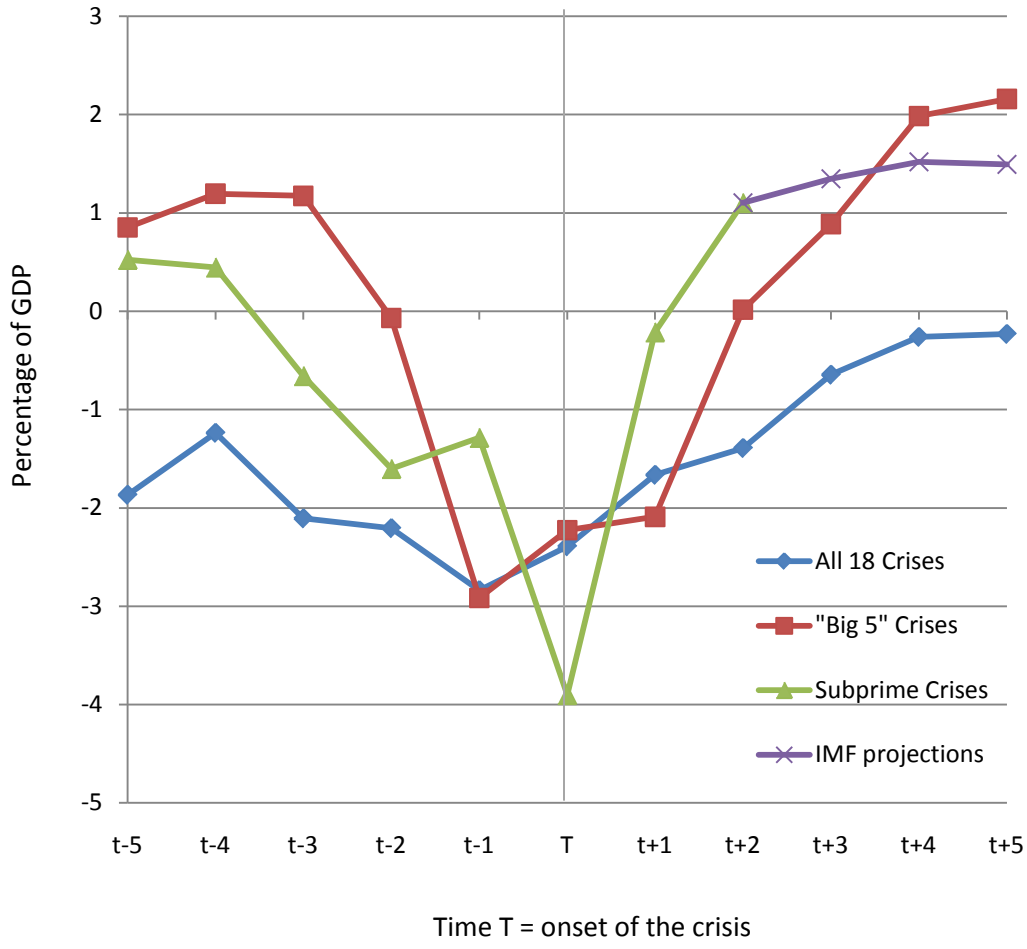
Notes: "Change in DPI" indicate the change in the mean value of the DPI political orientation indicator between the pre-crisis (*t-5* to *t-1*) and the post-crisis (*T* to *t+5*) periods. "OECD change" indicates the change in the OECD average of DPI, minus the country in crisis, in the same period. Note that the post-crisis mean for the subprime cases is constrained to the *T* to *t+2* periods. Positive values indicate a shift to the left. Orientation values for subprime cases after 2009, the latest year of the DPI database, were gleaned from recent election outcomes. The Japan 2008 case represents a judgment call since the Democratic Party of Japan (DJP), which displaced the Liberal Democratic Party (LDP) in August 2009, does not define its policy mandate along the left-right dimension.

Figure 5: Change in Mass Political Orientation after a Banking Crisis, by Country



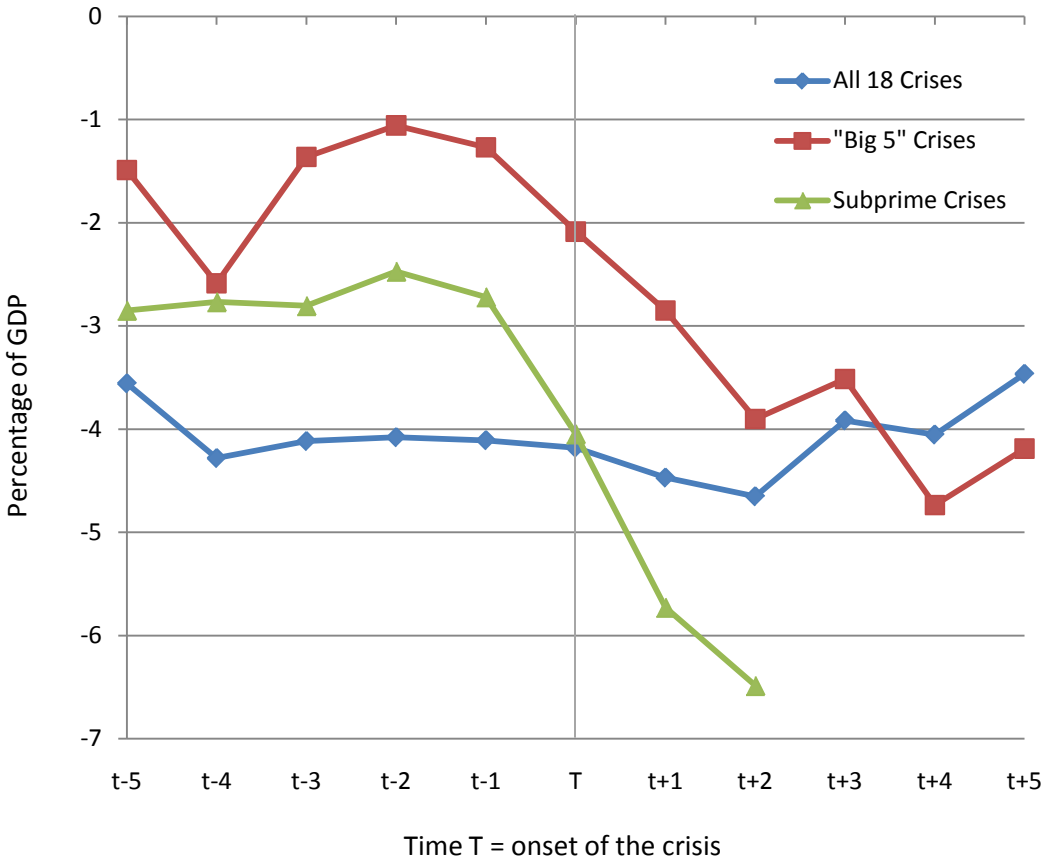
Notes: Data are not available for all cases since a crisis must have occurred between two "waves" of the WVS. Change in "mass political orientation" is measured as the change in the country average of individual responses to the World Values Survey (WVS) query: "In political matters, people talk of "the left" and "the right." How would you place your views on this scale, generally speaking?" Responses range from 1=Left to 10= Right. Countries are indicated on the left, with the onset year of the banking crisis in parenthesis; an asterisk indicates a "systemic" crisis. The deltas and years indicate the WVS survey dates (waves) used to calculate the change in political orientation

Figure 6: Current Account Balance before and after Bank Crises



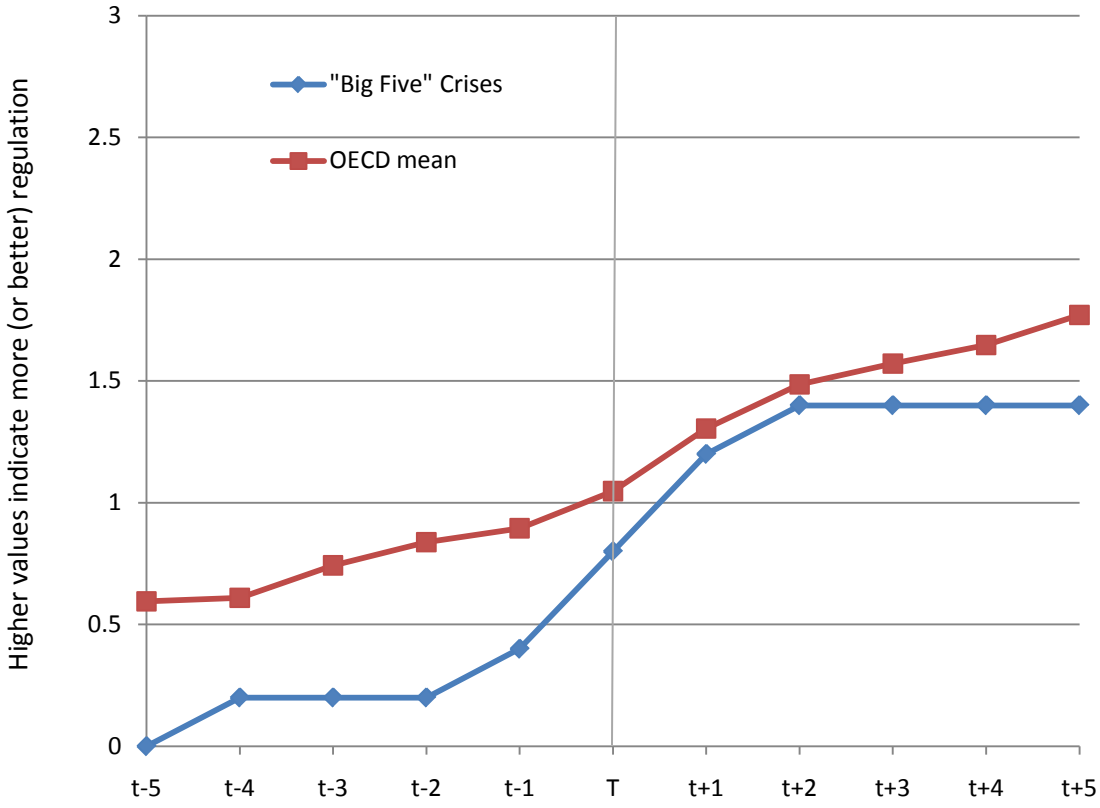
Notes: Current account data are from the IMF's *World Economic Outlook* (WEO) database. Subprime projections to 2012 are IMF estimates. Missing data as follows: Canada 1983 (*t-5* to *t-4*), Germany 1977 (*t-5* to *t+2*), Spain 1974 (*t-5* to *t+2*), and United Kingdom 1974 (*t-5* to *t+5*).

Figure 7: Central Government Structural Budget Balance before and after Bank Crises



Notes: The structural budget balance, or cyclically adjusted budget balance, is the fiscal deficit that would be incurred if the economy was at full employment. Fiscal data are from the IMF's *World Economic Outlook* (WEO). Missing data as follows: Canada 1983 (*t-5* to *t-4*), Denmark 1987 (*t-5* to *t-2*), Germany 1977 (*t-5* to *t+2*), Greece (*t-5* to *t-4*), Iceland 1985 (*t-5* to *t+5*), Iceland 2008 (*t-5* to *t+2*) Spain 1977 (*t-5* to *t+5*), Sweden 1991 (*t-5* to *t+5*), and Switzerland 2007 (*t-5* to *t+2*).

Figure 8: Bank Regulation and Supervision before and after the "Big Five" Crises



Notes: Data on bank regulation and supervision are from Abiad et al. (2008). Scores range from 0 to 3, with higher values indicating more (or better) regulation. See **Appendix C** for their coding details.

Figure 9: Bank Regulation and Supervision before and after the all 18 Crises

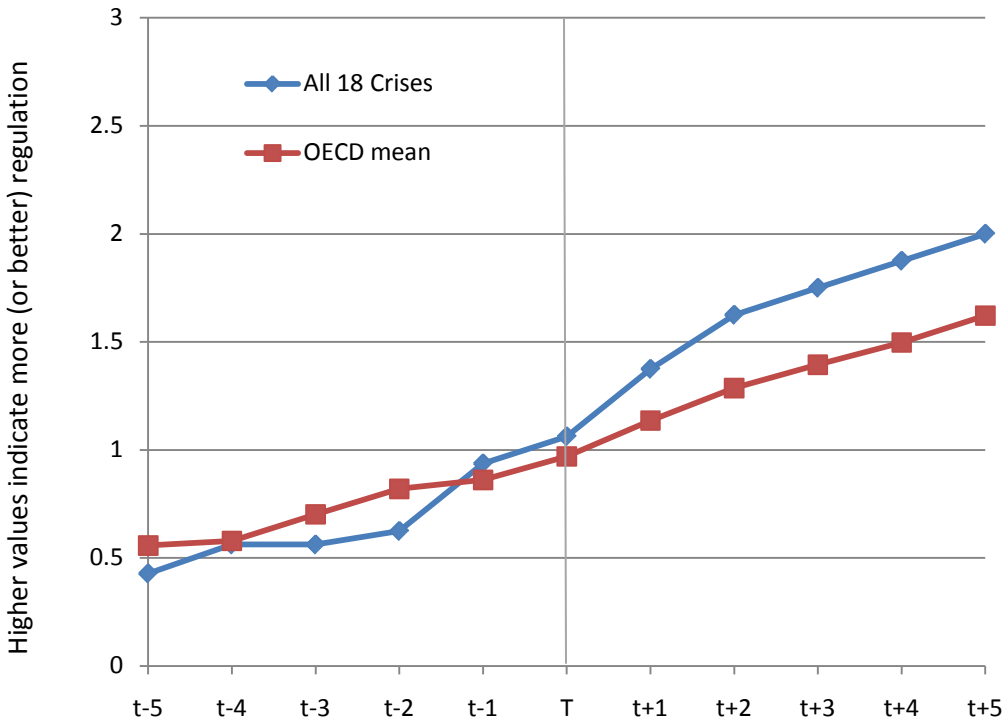
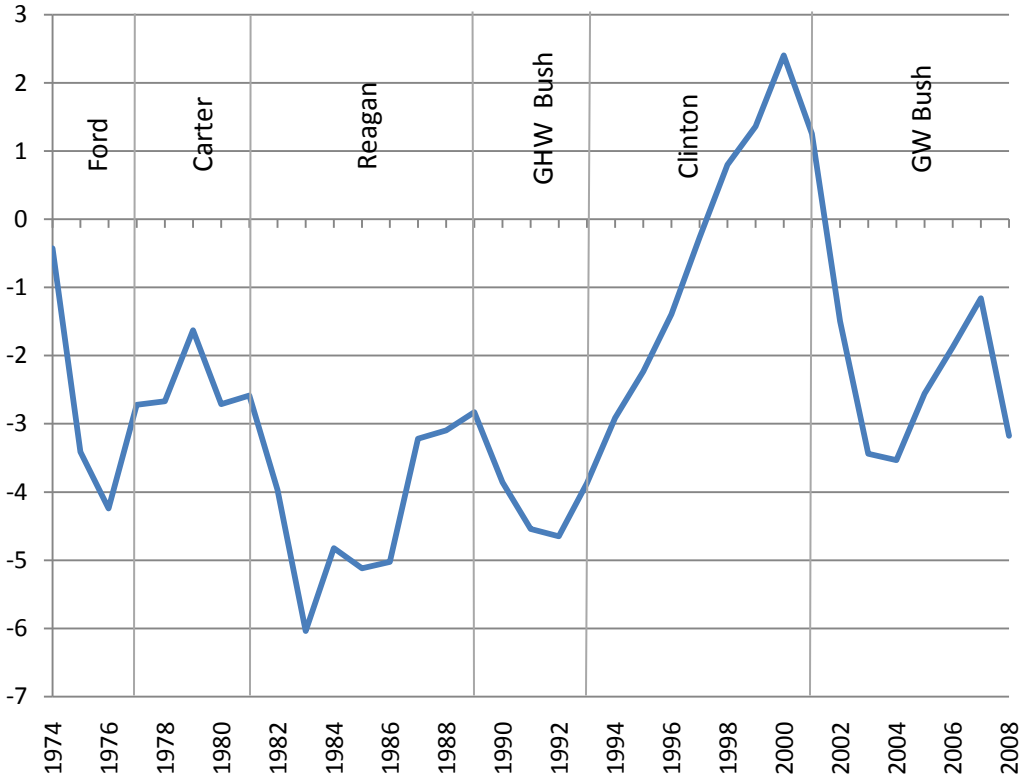


Figure 10: U.S. Federal Budget Deficit as Share of GDP, by Presidential Term



Notes: Between 1974 and 2008, the federal budget balance averaged -3.2 % of GDP under Republican administrations (Ford, Reagan, GHW Bush, and GW Bush) and -1.3 % of GDP under Democratic administrations (Carter and Clinton). Data are from the Congressional Budget Office.

References

Abiad, Abdul G., Tressel, Thierry, and Detragiache, Enrica. 2009. "A New Database of Financial Reforms." *IMF Staff Papers* advance online publication (6 October): 1-28. The database is available online at http://www.imf.org/external/pubs/ft/wp/2008/data/wp08266.zip.

Alesina, Alberto, and Guido Tabellini. 1990 "A Positive Theory of Fiscal Deficits and Government Debt." *Review of Economic Studies* 57 (3): 403-414.

Alesina, Alberto, Cohen, Gerald D., and Nouriel Roubini. 1993. "Electoral Business Cycles in Industrial Democracies. *European Journal of Political Economy 9*, 1 (March): 1-23.

Armingeon, Klaus, Sarah Engler, Marlène Gerber, Philipp Leimgruber, Michelle Beyeler. 2009. *Comparative Political Data Set 1960-2008*. Institute of Political Science, University of Berne.

Beck, Thorsten, George Clarke, Alberto Groff, Philip Keefer, and Patrick Walsh. 2001. "New Tools in Comparative Political Economy: The Database of Political Institutions." *World Bank Economic Review* 15:1 (September):165-176).

Bernanke, Ben. 2005. "The Global Savings Glut and the U.S. Current Account Deficit." Speech given at the Homer Jones Lecture in St Louis, Mo on April 14, 2005. Available at http://www.federalreserve.gov/boarddocs/speeches/2005/200503102

Bordo, Michael D. 2008. "An Historical Perspective on the Crisis of 2007-2008." NBER Working Paper No. 14569 (December).

Budge, Ian, Hans-Dieter Klingemann, Andrea Volkens, Judith Bara, and Eric Tanenbaum. 2001. *Mapping Preferences: Parties, Electors, and Governments, 1945-1998.* London: Oxford University Press.

Cameron, David. 1985. "Does Government Cause Inflation? Taxes, Spending, and Deficits." In *The Politics of Inflation and Economic Stagnation*. Edited by Leon N. Lindberg and Charles S. Maier, pp. 224-295.Washington, DC: Brookings Institution

Caprio, Gerald Jr., and Daniela Klingebiel. 1996. "Bank Insolvency: Bad Luck, Bad Policy, or Bad Banking?" In *Annual World Bank Conference on Development Economics, 1996*. Edited by Boris Pleskovic and Joseph Stiglitz, pp. 79-104, Washington, DC: World Bank.

Cecchetti, Stephen G, Marion Kohler and Christian Upper. 2009. "Financial Crises and Economic Activity." NBER Working Paper No. 15379 (September).

Chinn, Menzie D. 2005. *Getting Serious about the Twin Deficits.* Council Special Report No. 10, Council on Foreign Relations Press (September): 1-48.

Chinn, Menzie D., and Jeffry Frieden. 2009. "Reflections on the Causes and Consequences of the Debt Crisis of 2008." *La Follette Policy Report* 19, 1 (Fall): 1-5.

Chinn, Menzie D. and Hiro Ito. 2007. "Current Account Balances, Financial Development and Institutions: Assaying the World "Saving Glut"." *Journal of International Money and Finance* 26, 4 (June): 546-569.

Congressional Budget Office. 1999. "The Economic and Budget Outlook: Fiscal Years 2000-2009." Washington D.C.: GPO.

Cusack, Thomas R. 1999. "Partisan Politics and Fiscal Policy." *Comparative Political Studies* 32, 4 (June): 464-486.

Demirguc-Kunt, Asli, and Enrica Detragiache. 1998. "The Determinants of Banking Crises in Developing and Developed Countries." *IMF Staff Papers* 45: 81-109

Destler, I. Mac, and C. Randall Henning, 1989. *Dollar Politics: Exchange Rate Policymaking in the United States*. Institute for International Economics, Washington, D.C.

Federal Deposit Insurance Corporation. 1997. *History of the Eighties — Lessons for the Future.* Volumes 1 and 2. Division of Research and Statistics, Federal Deposit Insurance Corporation. Available at http://www.fdic.gov/bank/historical/history/

Frankel, Jeffrey. "The Making of Exchange Rate Policy in the 1980s." NBER Working Paper No. 3539 (December): 1-95

Garrett, Geoffrey, and Peter Lange. 1991. "Political Responses to Interdependence: What's "Left" for the Left?" *International Organization* 45, 4 (Autumn): 539-564.

Hibbs, Douglas A. 1977. "Political Parties and Macroeconomic Policy." *American Political Science Review* 71, 4 (December): 1467-1487.

Kaminsky, Graciela L., and Carmen M. Reinhart. 1999. "The Twin Crises: the Causes of banking and Balance-of-Payments Problems." *American Economic Review* 89 (3): 473-500.

King, Gary, Robert O. Keohane, and Sidney Verba. 1994. *Designing Social Inquiry: Scientific Inference in Qualitative Research*. Princeton, NJ: Princeton University Press.

Labaton, Stephen. 2008a. "Agency's '04 Rule Let Banks Pile Up New Debt." *New York Times* October 2, 2008.

Labaton, Stephen. 2008b. "S.E.C. Concedes Oversight Flaws Fueled Collapse." *New York Times* September 26, 2008.

Laeven, Luc and Fabian Valencia. 2008. "Systemic Banking Crises: A New Database." IMF Working Paper WP/08/224 (November): 1-80.

Persson, Torsten, and Lars E. O. Svensson. 1989. “Why a Stubborn Conservative would run a Deficit: Policy with Time-Inconsistent Preferences.” *The Quarterly Review of Economics* 104, 2 (May): 324-345.

Obstfled, Maurice, and Kenneth Rogoff. 2007. “The Unsustainable U.S. Current Account Position Revisited.” In *G7 Current Account Imbalances: Sustainability and Adjustment.* Edited by Richard H. Clarida, pp. 339 – 376. NBER and University of Chicago Press.

Ohlsson, Henry, and Anders Vedrin. 1996. “Political Cycles and Cyclical Policies.” *Scandinavian Journal of Economics* 98 (2): 203-218.

Reinhart, Carmen M., and Vincent R. Reinhart. 2009. “Capital Flow Bonanzas: An Encompassing View of the Past and Present.” In *NBER International Seminar in Macroeconomics* 2008, edited by Jeffrey Frankel and Francesco Giavazzi, pp. 1-54. Chicago: Chicago University Press for the National Bureau of Economic Research.

Reinhart, Carmen M., and Kenneth S. Rogoff. 2008. “Is the 2007 U.S. Subprime Crisis So Different? An International Historical Comparison.” *American Economic Review* 98, 2 (May):339–344.

Reinhart, Carmen M., and Kenneth S. Rogoff. 2009. *This Time is Different: Eight Centuries of Financial Folly*. Princeton, NJ: Princeton University Press.

Appendix A: Data on Banking Crises and the Political Party of the Chief Executive, 1975-present

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
AUS	L	R	R	R	R	R	R	R	R	L	L	L	L	L	L	L	L	L	L	L	L	L	R	R	R	R	R	R	R	R	R	R	R	L	L	.
CAN	L	L	L	L	L	R	L	L	L	L	R	R	R	R	R	R	R	R	R	L	L	L	L	L	L	L	L	L	L	L	L	L	R	R	R	.
DNK	R	L	L	L	L	L	L	L	R	R	R	R	R	R	R	R	R	R	R	L	L	L	L	L	L	L	L	R	R	R	R	R	R	R	R	.
FIN	L	C	C	L	L	L	L	L	L	L	L	L	L	R	R	R	C	C	C	C	C	L	L	L	L	L	L	L	C	C	C	C	C	C	C	.
FRA	R	R	.	.	R	R	R	L	L	L	L	L	R	R	L	L	L	L	L	R	R	R	R	L	L	L	L	L	R	R	R	R	R	R	R	.
DEU	L	L	L	L	L	L	L	L	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	L	L	L	L	L	L	L	R	R	R	R	R
GRC		.	.	.	.	.	R	R	R	R	R	R	L	L	L	L	R	R	R	L	L	L	L	L	L	L	L	L	L	L	R	R	R	R	R	.
ISL	R	R	R	R	C	R	R	R	R	R	R	R	R	C	C	C	C	R	R	R	R	R	R	R	R	R	R	R	R	R	C	C	R	R	R	L
IRL	R	R	R	C	C	C	C	R	R	R	R	R	R	C	C	C	C	C	C	C	R	R	R	C	C	C	C	C	C	C	C	C	C	C	C	C
ITA	C	C	C	C	C	C	C	C	C	L	L	L	L	C	C	C	C	C	L	L	R	R	C	C	C	C	C	R	R	R	R	R	L	L	R	.
JPN	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	L	L	R	R	R	R	R	R	R	R	R	R	R	R	R	L
NLD	L	L	L	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	L	L	L	L	L	L	L	L	L	R	R	R	R	R	R	R
NZL	L	R	R	R	R	R	R	R	R	R	L	L	L	L	L	L	R	R	R	R	R	R	R	R	R	L	L	L	L	L	L	L	L	L	R	.
NOR	L	L	L	L	L	L	L	R	R	R	R	R	L	L	L	R	L	L	L	L	L	L	L	R	R	R	R	R	R	R	R	L	L	L	L	.
ESP	.	.	.	C	C	C	C	C	L	L	L	L	L	L	L	L	L	L	L	L	L	L	R	R	R	R	R	R	R	R	L	L	L	L	L	L
SWE	L	L	C	C	L	C	C	C	L	L	L	L	L	L	L	L	L	R	R	R	L	L	L	L	L	L	L	L	L	L	L	L	R	R	R	.
CHE	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
GBR	L	L	L	L	L	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	L	L	L	L	L	L	L	L	L	L	L	L	L
USA	R	R	L	L	L	L	R	R	R	R	R	R	R	R	R	R	R	R	L	L	L	L	L	L	L	L	R	R	R	R	R	R	R	L	L	

Notes: Shaded cells indicate the onset of a banking crisis. Cells in red denote the onset of a "Big Five" crisis. R=Right, C=Center, L= Left. Partisanship data for 2010 are extrapolated from recent election outcomes. Party shifts occurred in Iceland following the April 25, 2009 election, and in Japan after the August 30, 2009 election.

Appendix B: Coding Rules for the Partisan Orientation of Executives, Beck et al. 2001. "New Tools in Comparative Political Economy: The Database of Political Institutions."

World Bank researchers used two types of criteria to code the partisan orientation of executives in the DPI: the content of party names and judgments by academic and professional commentators (Beck et al. 2001). In terms of content, they defined parties as "right-wing" based on whether terms such as "Conservative" or "Christian Democratic" was included in party names. A "left-wing" definition followed from party names with terms such as "Communist," "Marxist," "Socialist," or "Social Democratic." Failing a clear indication based on content, academic and professional commentator judgments were used. The "centrist" classification followed from no clear criteria based upon party name, thus academic and professional judgment was the primary source. For example, a party was classified as Centrist if it advocated the strengthening of private enterprise but also supported some substantial redistributive role for government. If both name-based and commentator-based criteria could not clearly classify a party into left-wing, right-wing, or centrist category, it was placed in a fourth classification as "Other." For more information, see Beck et al (2001).

Appendix C: Coding Rules for Banking Sector Supervision, Abiad et al. (2009) "A New Database of Financial Reforms."

The following is excerpted from Abiad et al (2009):

1. *Has a country adopted a capital adequacy ratio based on the Basel standard? (0/1)*
    - Coded as 0 if the Basel risk-weighted capital adequacy ratio is not implemented. Date of implementation is important, in terms of passing legislation to enforce the Basel requirement of 8 percent capital adequacy ratio (CAR).
    - Coded as 1 when Basel CAR is in force. (Note: If the large majority of banks meet the prudential requirement of an 8 percent risk-weighted capital adequacy ratio, but this is not a mandatory ratio as in Basel, the measure is still classified as 1.)
      Prior to 1993, when the Basel regulations were not in place internationally, this measure takes the value of 0.
2. *Is the banking supervisory agency independent from executives' influence? (0/1/2)*
   A banking supervisory agency's independence is ensured when the banking supervisory agency can resolve banks' problems without delays. Delays are often caused by the lack of autonomy of the banking supervisory agency, which is caused by political interference. For example, when the banking supervisory agency has to obtain approval from different agencies such as the ministry of finance in revoking or suspending licenses of banks or liquidating banks' assets, or when the ultimate jurisdiction of the banking supervisory agency is the ministry of finance, it often causes delays in resolving banking problems. In addition to the independence from political interference, the banking supervisory agency also has to be given enough power to resolve banks' problems promptly.[11]
    - Coded as 0 when the banking supervisory agency does not have an adequate legal framework to promptly intervene in banks' activities; and/or when there is the lack of legal framework for the independence of the supervisory agency such as the appointment and removal of the head of the banking supervisory agency; or the ultimate jurisdiction of the banking supervision is under the ministry of finance; or when a frequent turnover of the head of the supervisory agency is experienced.
    - Coded as 1 when the objective supervisory agency is clearly defined and an adequate legal framework to resolve banking problems is provided (the revocation and the suspension of authorization of banks, liquidation of banks, and the removal of banks' executives, and so on) but potential problems remain concerning the independence of the banking supervisory agency (for example, when the ministry of finance may intervene into the banking supervision in such as case that the board of the banking supervisory agency board is chaired by the ministry of finance, although the fixed term of the board is ensured by law); or although clear legal objectives and legal independence are observed, the adequate legal framework for resolving problems is not well articulated.
    - Coded as 2 when a legal framework for the objectives and the resolution of troubled banks is set up and if the banking supervisory agency is legally independent from the executive branch and actually not interfered with by the executive branch.

3. *Does a banking supervisory agency conduct effective supervisions through on-site and off-site examinations? (0/1/2)*
   Conducting on-site and off-site examinations of banks is an important way to monitor banks' balance sheets.
   - Coded as 0 when a country has no legal framework and practices of on-site and off-site examinations is not provided or when no on-site and off-site examinations are conducted.
   - Coded as 1 when the legal framework of on-site and off-site examinations is set up and the banking supervision agency have conducted examinations but in an ineffective or insufficient manner.
   - Coded as 2 when the banking supervisory agency conducts effective and sophisticated examinations.
4. *Does a country's banking supervisory agency cover all financial institutions without exception? (0/1)*
   If some kinds of banks are not exclusively supervised by the banking supervisory agency or if offshore intermediaries of banks are excluded from the supervision, the effectiveness of the banking supervision is seriously undermined.
   - Coded as 1 when all banks are under supervision by supervisory agencies without exception.
   - Coded as 0 if some kinds of financial institutions are not exclusively supervised by the banking supervisory agency or are excluded from banking supervisory agency oversight.

These questions' scores are summed as follows: highly regulated=6, largely regulated=4 or 5, less regulated=2 or 3, not regulated=0 or 1. After a raw score is assigned, it is normalized to a 0–3 scale.