Political Institutions, Credible Commitment, and Sovereign Debt in Advanced Economies

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This article tests systematically the effect of political structures on the credibility of sovereign debtors in advanced economies. It argues that power sharing and party system polarisation have important effects on long-term interest rates. Where collective responsibility is high and polarisation is low the market perceives a more credible commitment on the part of sovereign debtors. These arguments derived from the theory of credible commitments perform much better than alternative accounts of the politics of sovereign debt, namely a market preference for right-wing governments and more flexible polities. The principal data consists of a panel of twenty-three rich countries between 1970 and 2009. There are tests for robustness to a wider sample and a variety of different measurements.

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In August 2011, the ratings agency Standard and Poor’s downgraded the long-term credit rating of the United States from “AAA” to “A+”, even though the US has a default-free record of over two hundred years. In July 2011, another leading ratings agency, Moody’s downgraded Ireland, recently an “AAA” country to “Ba1”, also known as “junk status”. These and other dramatic developments are a reminder that sovereign debt is a political choice. Sovereigns decide whether or not to borrow and they decide whether or not to pay their debts. Sovereign debt, both in absolute terms and relative to GDP, is concentrated in the developed world. However, the literature on the politics of sovereign debt in advanced economies is sparse. Rather, the majority of studies focus emerging economies, which face very different challenges when borrowing on international markets.

By reconsidering the political determinants of sovereign debt in the advanced economies this article fills a major gap in the international political economy literature and directly addresses the current economic and political crisis. We do so by employing one of the most powerful concepts in political economy: credible commitment.¹ In recent decades, this concept has been central to the increasingly successful engagement between international relations, comparative politics and economics. We test a series of hypotheses about political structures and sovereign debt. These hypotheses are derived from the theory of credible commitment, as well as research on the impact of political ideology and flexible policy-making. We argue that power-sharing institutions and party system polarisation have important effects on long-term interest rates. Where polarisation is low and collective responsibility is high the market perceives a more credible commitment on the part of sovereign

¹ Kydland and Prescott 1977.
debtors. This credibility argument outperforms alternative accounts of the politics of sovereign debt, namely a market preference for right-wing governments and more flexible polities. The data consists of a panel of twenty three rich countries between 1970 and 2009. Our dependent variable is long-term government bond yield and we control for a vector of conventional economic variables.

The article proceeds as follows. First, we review the literature on sovereign debt. Second, we argue that studies of sovereign debt in developed economies should be anchored within the wider political economy literature that emphasises institutions, political competition, and credible commitments. The third section applies these ideas to the problem of sovereign debt and derives hypotheses. Fourth, we test the hypotheses on a panel dataset. Fifth, we conduct a range of robustness tests. The sixth and final section is the conclusion.

The Sovereign Debt Literature

Politics plays a central role in rating agencies’ assessments of sovereign debt. Standard and Poor’s emphasises how sovereign debt differs from other types of debt:

‘Willingness to pay is a qualitative issue that distinguishes sovereigns from most other types of issuers. Partly because creditors have only limited legal redress, a government can (and sometimes does) default selectively on its obligations even when it possesses the financial capacity for timely debt service’. ²

² Standard and Poor’s 2008, 2.
In keeping with this emphasis, political risk is the first of the nine sets of criteria used to decide on ratings. This category “encompasses institutions as well as systems and processes”. Most of the criteria in this category are very general and relate to levels of democracy, the rule of law and risk of war. Some of the language is very redolent of the credible commitments paradigm, which we use to study the impact of political institutions on sovereign debt: “The stability, predictability, and transparency of a country’s political institutions are important considerations”. Many scholars also emphasise the political nature of sovereign debt. Nonetheless, there is considerable variation in the extent to which the literature takes politics seriously.

It is possible to very roughly rank sovereign-debt studies from least to most political. Reinhart and Rogoff’s seminal contribution aspires to a general explanation, but analyses sovereign default in terms of undifferentiated, unified state actors. This approach is common in theoretical models and in empirical research. Politics are often reduced to the history of default. Tomz cleverly combines economic context and default history to show how the market can infer the preferences of a state. He suggests that history is the most importance source of information on credit risk, but most of the contemporary literature prefers a forward-looking perspective. For most of the three centuries Tomz considers, even the broadest political intelligence would have been very hard to gather. Perhaps in the past, a sovereign’s history was weighted

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3 Tomz 2007, 15.
4 Reinhart and Rogoff 2009, 52-53.
5 Qian 2010, 4.
7 Tomz 2007, 17-19.
8 Ibid., 30.
more strongly than it is in the age of newswires, business television stations and the internet.

Many papers include survey-based measures of political risk. They control for politics, but cannot explain them.\(^9\) An emphasis on political instability is more satisfying and identifies some events that may increase uncertainty for investors: for example, elections,\(^10\) popular protests, and executive turnover.\(^11\) Even more appealing is the growing literature on regime type and sovereign debt,\(^12\) which focuses on the essence of a political system to explain variations in risk in the market for sovereign debt. This is, of course, part of a much larger debate about the existence, extent, and nature of a “democratic advantage” across a range of social, economic,\(^13\) and political outcomes. However, the evidence on a democratic advantage in selling sovereign debt is mixed. Saiegh finds no evidence of a democratic advantage in a group of eighty developing countries from 1971-1997.\(^14\) Archer, Biglaiser and DeRouen also find no evidence that regime type or political institutions matter for sovereign credit ratings.\(^15\) By contrast, Biglaiser, Hicks, and Huggins have found some evidence of a democratic advantage, particularly for the poorest countries.\(^16\) Furthermore, Beaulieu, Cox, and Saiegh found that autocracies are much less likely to try to obtain a credit

\(^{9}\) Baldacci and Kumar, 2010; Diamonte, Liew, and Stevens, 1996.

\(^{10}\) Block and Vaaler, 2004.

\(^{11}\) Cosset and Roy 1991.

\(^{12}\) Archer, Biglaiser, and DeRouen 2007.

\(^{13}\) Przeworski et al. 2000; Schultz and Weingast 2003.

\(^{14}\) Saiegh 2005.

\(^{15}\) Archer, Biglaiser, and DeRouen 2007.

\(^{16}\) Biglaiser, Hicks, and Huggins 2008.
rating in the first place, suggesting that the democratic advantage comes in the form of credit-rationing. This is hardly surprising, as there is also a dissensus on democracy and foreign direct investment. Another line of research codes specific institutional configurations. Stasavage looked at constitutional checks on rulers in European states from 1274-1785 and Dincecco examined the centralisation and limitation of power in Europe between 1750 and 1913. Kohlscheen studied the effect of parliamentary regimes and checks and balances on debt rescheduling from 1976 to 1999. Institutions have also been the focus of case studies such as North and Weingast on Britain after the Glorious Revolution of 1688, Stasavage on Britain and France from 1688 to 1789, Vizcarra on nineteenth-century Peru, and Saiegh on Argentina. Stasavage is particularly interesting in the context of this article. Like us, he interacts domestic political competition and political institutions, although he thinks of both rather differently than we do. Moreover, Stasavage’s work relates to pre-democratic Europe, not contemporary wealthy countries.

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17 See Beaulieu, Cox, and Saiegh 2011. Furthermore, a recent study on sovereign borrowing by Oatley, 2010, also found that regime type matters: among developing countries, autocratic governments accumulate significantly more foreign debt than democratic governments.


20 Kohlscheen 2010.

21 North and Weingast 1989.

22 Stasavage 2003.

23 Vizcarra 2009.

Most existing work has focused on developing countries, or historical studies of early developers in Europe. There is very little research on the politics of sovereign debt among developed economies. One reason for this has been the quiescence of the bond market in rich countries, compared with the debt crises that spread across emerging economies in the eighties and nineties. These dramatic events obscured significant variations in interest rates charged to rich sovereign debtors. Another reason has been the approach to politics taken in much of the literature. A developed economy has not defaulted since the Second World War; all have been democracies since the mid nineteen seventies; and political risk surveys do little to separate developed economies from each other. However, it is obvious that there are very important differences in the political arrangements of developed economies. Thus, an emphasis on political institutions seems to be the only approach in relation to which there is sufficient variation on the independent variable in developed economies. Also, formal institutions matter more in politically stable, highly institutionalised contexts.\textsuperscript{25} Fortunately, as the next section will show, this is also an approach that fits into a flourishing research programme on political economy more generally, and one that can avail of a powerful theory, that of credible commitment.

\textbf{Political Economy and Credible Commitments}

The political origins of economic performance has been one of the fastest growing areas of social science research in recent decades. Papers in this tradition have tackled fiscal deficits,\textsuperscript{26} economic growth,\textsuperscript{27} corruption,\textsuperscript{28} forms of innovation,\textsuperscript{29} stock market

\textsuperscript{25} Clague et al. 1996, 253; Keefer 2005, 14.

\textsuperscript{26} Author 2008; Roubini and Sachs 1989.

\textsuperscript{27} Przeworski et al. 2000, 142-213.
performance\textsuperscript{30} and a plethora of other economic outcomes. However, this research school has yet to systematically address the question of sovereign debt in advanced economies. Credibility is a key word used by politicians and commentators in the current international debt crisis. However, the credibility of governments’ commitments is important and questionable in a range of other areas too.

Governments make promises all the time. The content of their promises matters, but so does the credibility of those promises. Variation in the credibility of political commitments is now recognised as a vital explanation for a range of important economic outcomes. The commitment problem has two closely related variants:\textsuperscript{31} time inconsistency and political instability.\textsuperscript{32} A famous example of time inconsistency relates to the management of aggregate demand.\textsuperscript{33} Policymakers announce a policy of low inflation. This results in lower inflationary expectations and small wage increases. Then, the policymakers opt for a more inflationary policy in an attempt to reduce unemployment. However, “current decisions of economic agents depend upon future expected policy”.\textsuperscript{34} This undermines the credibility of the low inflation pledge, as workers know that policymakers will opt for expansion if inflation falls. Therefore, they will continue to expect inflation and demand wage increases too large to allow a

\textsuperscript{28} Treisman 2008.

\textsuperscript{29} Hall and Soskice 2000; Soskice 1999.

\textsuperscript{30} Bechtel 2009; Sattler 2010.

\textsuperscript{31} Author 2009, 47-51.

\textsuperscript{32} Kydland and Prescott 1977; Rogoff 1985.

\textsuperscript{33} Ibid., 377-480.

\textsuperscript{34} Ibid., 487.
fall in unemployment. The inconsistency between the policymakers’ incentives at different times undermines the credibility of their policy commitments.

The political instability argument is simpler. Since the distribution of political authority can change, policymakers cannot credibly commit the state to a policy. For example, two parties may disagree on the level of public spending. Ironically, a party that wants to restrain public spending in the future may increase the budget deficit in power in order to constrain a successor that prefers higher levels of spending.\footnote{Persson and Svensson 1989.}

Institutions can alleviate credible commitment problems. The dominant prescription is constraint. There are two fundamentally different types of restraint. One is to share power amongst actors, making policy change slow and difficult. Lijphart calls this “joint-power”.\footnote{Lijphart 1999, 5.} North and Weingast argue that joint-power between the King and Parliament enabled a credible commitment to the protection of property rights after the Glorious Revolution of 1688 in Britain. They quote constitutional authority Erskin May, “The Crown demands, the Commons grants and the Lords assent to the grant”.\footnote{North and Weingast 1989, 818.} Joint power between all three actors credibly committed the state and underpinned an increase in investment and economic growth.

The other type of restraint is delegation to an actor, which is insulated from political instability and/or has time-consistent incentives. In Lijphart’s terms this is
“divided power”. The classic example is an independent central bank with an inflation target. Unlike the policymakers in the Kydland and Prescott analysis, such a bank should never be tempted to inflate the economy to reduce unemployment. It is politically insulated from politicians concerned with unemployment and other economic outcomes. Moreover, it is insulated from changes in the preferences of elected politicians. The grant of independence to many central banks in the 1990s is often at least partly attributed to the rise of theories of credible commitment and time inconsistency in economics. A similar rationale frequently underpins a range of other non-majoritarian institutions.

Of course, most institutions have not been designed according to the theory of credible commitment and its role in contemporary economics, and indeed many institutions have evolved and were never designed. Nonetheless, the idea of credible commitment to protecting particular political interests, rather than a general economic interest, may lie behind the restraining institutions of many countries. Dividing power, through federalism and judicial independence, credibly committed central governments not to infringe the rights of minority groups. Joint power, especially in religiously or ethnically divided societies, credibly committed polities to compromise and consensus. These political settlements may have had positive externalities in economics, as they also credibly committed regimes to stable policies that facilitated

38 Lijphart 1999, 5.
40 Author 2005; Gilardi 2002; Majone 2001; Stasavage and Guillaume 2002; Thatcher and Stone Sweet 2002.
long-term investments. A polity’s capacity for credible commitment is much more likely to be a result of historical accident rather than economic policy.

In contrast to the literature on constraint, some emphasise the need for the flexibility that a concentration of power provides. For example, there is a tradition of arguments about the importance of state strength and autonomy to economic development. MacIntyre argues that constraint leads to damaging rigidity and concentration to damaging volatility. Instead, investors should have greater confidence in a political system that combines flexibility and credibility. MacIntyre’s argument is mostly presented as a “golden mean”, but he also hints that credibility and flexibility may be particularly appropriate to different policy areas. Alternatively, the appropriateness of the two types of institutional configurations could depend on time horizons. In the short-term, concentrated political systems may have the flexibility to deal with emergencies and changing circumstances. In the longer term, concentration of power represents too great a policy risk for economic agents who would prefer credible commitment to a policy structure. In democracies, this policy risk is often crystallised in an election and a possible change of government.

Credible Commitments and Sovereign Debt

Both variants of the credible commitment argument apply to sovereign debt. The incentives of a debtor government are time-inconsistent. For example, at time point one, a government can promise to reduce the budget deficit. At time point two, its

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41 Evans 1995.

42 MacIntyre 2001, 86.
creditors recalculate the probability of getting their money back; demand for the debt increases; and the interest rate comes down. At time point three, the government reneges on its commitment, using the reduced interest rate to fund increased public spending, instead of a further reduction in public debt. Of course, economic agents are aware of this inconsistency and can predict that the government will renege on its promise. Since the government is not credibly committed, lenders demand a higher interest rate.

Political instability also affects the credibility of sovereign debtors. At time point one, a government can promise to reduce the budget deficit. At time point two, creditors again reduce interest rates. At time point three, the government is replaced by a new government that does not feel bound by its predecessor’s commitment to control public debt and instead chooses to spend the proceeds of the lower interest rate. Again, economic agents are aware that an election might bring about a change in policy and price this into the interest rates they charge on sovereign debt. The commitment lacks credibility not because of time inconsistency but because a government at time point one cannot guarantee the policies of a government at time point three.

Political institutions can change the credibility of sovereign debtors in both types of commitment problem. In each case, institutions should affect both the preferences of government and their potential for policy change. Firstly, let us consider time inconsistency. The greater the concentration of power the greater is the incentive to renege on a commitment to control public debt. If power is concentrated in a narrow group, it can target spending at a particular group and will be less concerned about the
costs a higher interest rate will impose on society as a whole. If power is shared it will be more difficult to target spending to satisfy the government’s constituents and the greater will be those constituents share in the overall cost of higher interest rates.\textsuperscript{43} Also, if power is shared it will be more difficult to agree on any decision, including reneging on a commitment to control public debt. Secondly, there is political instability. The more concentrated is power the more likely it is that an election will produce a new government unconnected to the original promise to control debt. Moreover, the more concentrated is government the easier and quicker it is to decide to renege on the previous government’s commitment. Under joint power, a government would have to manage bargaining amongst coalition partners, other parties and committees in the legislature and amongst representatives of civil society.

There are other ways to think about institutions and economics. Some research on political economics employs particular institutions as their independent variables. For example, Persson and Tabellini centre their analysis on contrasts between majoritarian and proportional electoral systems and presidential and parliamentary forms of government.\textsuperscript{44} By contrast, a focus on the dispersion of power uses a simple concept to capture a complex reality. We choose Lijphart’s notion of joint power to capture the credibility of sovereign debtors. Similar ideas are very common in comparative politics.\textsuperscript{45} Lijphart’s alternative, more concrete name for joint power is the “executives-parties” dimension. We seek to identify the central tendency of the set of

\textsuperscript{43} Bueno de Mesquita et al. 2003, 87; Olson 2000, 3-6; Olson 1982.

\textsuperscript{44} Persson and Tabellini 2005.

\textsuperscript{45} Armingeon, 2002; Powell 2000; Tsebelis 1995; Tsebelis 2002.
institutions responsible for managing a sovereign’s finances by looking at the extent to which power is shared amongst these actors.

Theories of credible commitment tend to theorise domestic economies. In these models, economic actors collect information about one polity. However, participants in the international market for sovereign debt need information about many political systems. The more political systems an investor has to analyse the less information she is likely to collect on each individual country. Presumably, this is the main reason why ratings agencies play such an important role in sovereign debt. Time- and information-poor international investors will tend to focus on the central tendency of a political system.

Ideology, Political Institutions and Sovereign Debt

The most obvious political alternative to institutions is the ideology of political competitors. The ideology of governments is one of the most popular variables in political economy research. We are sceptical about the potential of government ideology to explain the credibility of sovereign debtors. To be sure, right-wing governments grant more legitimacy to markets, including international markets. Also, they are less worried about cutbacks to social programmes. For these reasons, it is imaginable that their promises would be more credible. However, such arguments tend towards identity rather than incentives. Regardless of ideology, all governments should be subject to time inconsistency. After a commitment to fiscal control, and ensuing lower rates on sovereign debt, right-wing governments may also be tempted to renege, perhaps by cutting taxes instead of increasing spending. Even more clearly,

46 Mosley 2003, 8.
right-wing governments also have to face the electorate, and political instability undermines the credibility of their commitments.

The diversity, rather than the ideology, of political preferences fits much better into a credibility approach. It is another staple variable of international political economy. The more diverse are political preferences, the greater the policy risk from political instability. Moreover, the diversity of preferences interacts with political institutions. The more power is shared, the greater the range of interests involved in making decisions. Control of a joint power political system is spread across the ideological spectrum and elections do not tend to bring about major changes in the distribution of power. A concentrated political system awards power to one party and the distribution of power can change radically with an election. Therefore, diversity of preferences creates a much greater policy risk in a concentrated political system. Government ideology could interact with institutions in the same way. Differences between right and left-wing governments are likely to be much larger in concentrated than in joint-power political systems.

We will test three types of hypotheses about the influence of political institutions on sovereign debt: credible commitment hypotheses, alternative political hypotheses, and combinations of credible commitment and other political perspectives. The first three hypotheses derive from the theory of credible commitment.

\[ H1. \text{ The more decision-making is shared, the more credible is a sovereign debtor.}\]

\[47\] Leblang and Bernhard 2000; Leblang and Mukherjee 2005.
H1a. The more decision-making is shared, the more credible is a sovereign debtor’s commitment to fiscal retrenchment.

H2. The greater the ideological polarization, the less credible is a sovereign debtor.

H2a. The greater the ideological polarization, the less credible is a sovereign debtor’s commitment to fiscal retrenchment.

H3. The effect of the overall ideological polarisation of the system is greater where power is concentrated.

H3a. The effect of the overall ideological polarisation of the system on the credibility of a commitment to fiscal retrenchment is greater where power is concentrated.

The next two hypotheses express different views of the politics of sovereign debt, but we also express both in terms closer to credible commitment.

H4. Moderately dispersed systems are charged less interest than highly dispersed or highly concentrated systems.

H4a. Concentrated systems are charged lower short-term interest, while dispersed systems are charged lower long-term interest.

H5. Right-wing governments are charged less interest than left-wing governments.

H5a. The effect of government ideology is greater where power is concentrated.

Data and Operationalization
We use a fixed effects model to test our hypotheses on a sample of 23 countries from 1970-2009. The countries are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Israel, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Poland, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and the United States. Our dependent variable is the long-term government bond yield. This is the best measure of sovereign risk for the advanced economies because it is a market-driven measure of their cost of borrowing. Moreover, it has been used in several previous studies on sovereign debt in the advanced economies.

The first variable to operationalize is the concentration power in the political system. The last two decades have seen an explosion of institutional studies in social science, including international relations, politics and economics. One approach is to select particular institutions, such as presidentialism and parliamentarism, or

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48 Our models include country effects to control for the unobservable characteristics of the sample countries. We do not report year effects because our dependent variable is not driven by factors that exhibit fundamental change over the long-term. The augmented Dickey-Fuller test for unit root issues found that all of the variables are stationary. We also replicated all of our models with an alternative statistical approach: linear regression with panel-corrected standard errors (PCSE). Each of the alternative specifications was repeated with the AR1 correction and with (out) country-fixed effects. The results are available on request and are little changed from our original specification.

49 Sovereign credit ratings tend to lag significantly behind market driven indicators among the advanced economies. The current crisis illustrates this well, as ratings did not react until it was well underway. Flandreau, Gaillard, and Packer 2011, show that this is also true historically among the advanced economies, as the ratings’ agencies were similarly tardy during the interwar foreign debt crisis.

50 Baldacci and Kumar 2010; Mosley 2003.
majoritarian and proportional electoral systems. However, political systems are constituted by complex interactions of institutions, rather than defined by a single institutional rule. We need to find the overall tendency of a polity in relation to the concentration of power. In doing so, we draw on Lijphart’s first dimension. His concept of joint power matches our emphasis on the number of actors involved in making a commitment to repay debt. Moreover, his indicators of joint power target the executive, legislative and partisan actors that have the greatest influence over fiscal policy. Our measure of concentration is a weighted index of the effective number of parliamentary parties, concentration versus power-sharing in the cabinet, executive-legislative relations, electoral disproportionality and interest group pluralism. In order to efficiently leverage variation, we use principal components analysis to summarise the measures.

Our second variable is the polarization of the political system. We measure this using left-right scores from the Comparative Manifesto Project (CMP). The scores are calculated by subtracting the percentage of the manifesto coded as right-wing in

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51 Cheibub 2007; Persson and Tabellini 2005, 73-112.
52 Lijphart 1999.
53 To construct this variable, we draw on several data sources, including the Comparative Manifesto Project, Lijphart 1999, and the authors’ own calculations. We could not use Lijphart’s original measure of executive-legislative relations due to data limitations. Instead, we constructed an index that measures the degree to which cabinet government is fractionalized along party lines, capturing most of the original index, namely the relationship between the executive and the legislature, as cabinets that are not fractionalized tend to dominate the legislature.
54 An unweighted mean, as used by Lijphart 1999, 247, produces similar results to those reported below.
emphasis from the percentage coded as left-wing and are measured at each election.\textsuperscript{55}

\textsuperscript{56} Party system polarization is the difference between the two largest parties in a given country at a given time.\textsuperscript{57}

Thirdly, to test hypotheses on the importance of ideology, we again use the CMP data and employ the following standard formula for government ideology\textsuperscript{58}

\[
\text{Government Ideology} = \sum \{(\text{Left} - \text{Right}) \ast (\# Posts / \text{Total})\}
\]

where \( \text{Left} - \text{Right} \) is a measure of government ideology, \( \text{Posts} \) is the number of cabinet posts controlled by party and \( \text{Total} \) is the number of posts in the cabinet.

To model the economic determinants of interest rates we use the following control variables: general government balance as a percentage of GDP, general government gross debt as a percentage of GDP, consumer price inflation, and output growth. The impact of most of these variables on sovereign risk should be self-explanatory. However, it is likely that the level of government debt does not have a linear effect on sovereign bond yields, so we also include the squared term. Our approach to modelling the economic determinants of interest rates is similar to a recent study by Baldacci and Kumar and also echoes that of Mosley’s analysis, which argues that financial markets focus on just a few key policy indicators and are not interested in

\textsuperscript{55} Budge et al. 2001, 21.

\textsuperscript{56} Another way of assigning left-right positions to political parties is by expert survey. Unfortunately, such surveys have only been conducted at a handful of time points and are therefore less suitable for panel analysis.

\textsuperscript{57} Pontusson and Rueda 2008, 328-29.

\textsuperscript{58} Kim and Fording 2001, 166.
the wider spectrum of government policy, whereas markets seek more information on risk in developing and emerging markets.\textsuperscript{59}

We test not only a polity’s overall credibility, but also the credibility of a specific commitment. Fiscal retrenchment is a stern test for any democracy. It is difficult to embark on in the first place, but, due to time-inconsistency and political instability, it is especially difficult to continue fiscal retrenchment in the medium or long-term. Of course, the ability to correct large budget deficits is vital to a state’s commitment to repay its debts. A reduction in the fiscal deficit might reflect any combination of cyclical, accidental, or purposeful changes in government policy. The variable we use – \textit{consolidation} – isolates only the purposeful reductions. Accordingly, we are able to test both a general argument on whether the ability to credibility commit matters, and a more nuanced argument the ability to commit specifically to deficit reduction. The variable comes from Devries et al.’s new dataset of action-based fiscal consolidation and is derived from an historical and qualitative analysis of government policy.\textsuperscript{60} Although it is the most comprehensive measure of fiscal policy to date, it is only available for a smaller panel of seventeen countries from 1980-2009.\textsuperscript{61}

\textbf{Findings and Discussion}

\textit{Credible Commitments and Sovereign Debt}

\textsuperscript{59} Baldacci and Kumar 2010; Mosley 2003.

\textsuperscript{60} Devries et al. 2011.

\textsuperscript{61} This panel includes Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Netherlands, Portugal, Spain, Sweden, the United Kingdom, and the United States.
Our findings are presented in Table 1, the first column of which is the base specification. The next six columns present estimates which test H1-H3 and their variants on fiscal retrenchment, H1a-H3a. Accordingly, column two adds our measure of the degree to which power is concentrated in the political system and column three adds the action-based fiscal consolidation variable, and an interaction term. Column four presents estimates of the effect of ideological polarization on credibility and column five introduces the fiscal consolidation variable and an interaction with the level of ideological polarization. Column six introduces the concentration of power and ideological polarization into the same specification, and interacts both variables in order to test the hypothesis that the effect of ideological polarization should be greater where power is concentrated. Column seven includes all of the aforementioned variables and interactions in order to test the hypothesis that the effect of ideological polarization on the credibility of a commitment to fiscal retrenchment should be much greater where power is concentrated.

[TABLE 1 HERE]

Unsurprisingly, the findings confirm that the level of inflation and the fiscal balance as a percentage of GDP are robust predictors of the yield on sovereign debt. Thus, the baseline model is a plausible basis on which to test our hypotheses. The models provide very strong support for our argument and confirm all credible commitment hypotheses. The degree to which power is concentrated in the political system is a strong predictor of the yield on government debt, as is the polarization of the political system. Moreover, we find that the effect of ideological polarization is greater where power is concentrated, as the interaction of polarization and the concentration of power is statistically significant. In all of the models where we have added the new action-based measure of fiscal consolidation, it predicts substantial
variation in the interest rate on government bonds. Most impressively, three out of 
four political coefficients double in magnitude when we control for fiscal 
consolidation, while the fourth is almost unaffected. The political sources of credible 
commitment explain variations in long-term interest rates across four decades, in 
twenty four countries, and are robust to standard economic and financial covariates, as 
well as fiscal policy. The last we consider a particularly severe test of our theory.

[FIGURE 1. HERE]

Not only are the political variables statistically significant, they have substantively 
large effects on interest rates. A move from the most concentrated system to the most 
dispersed would cost society an additional 3.31 percent charge on government debt. A 
one standard deviation increase, on the other hand, leads to an additional 0.7 percent 
yearly charge on government debt. While at first glance this might not seem like 
much, a small effect like this can cost the taxpayer a fortune in the long-term. A 
country starting with this higher rate in 1970 would end up paying nearly three 
additional years of interest payments by the 2009. And this is not even considering the 
opportunity cost: how the money lost to the government’s creditors might have 
otherwise been used productively. The level of ideological polarization has a similar 
effect. Our model predicts that a move from the lowest level of polarization to the 
highest results in an additional charge of 2.95 percent and a standard deviation change 
predicts an increase of 0.65 percent.\textsuperscript{62} Figure 1 illustrates the effect of polarization on 
the interest rate at different levels of power concentration. It shows that a move from a 
dispersed system that is not ideologically polarised, to a concentrated system that is

\textsuperscript{62}The substantive effects for the concentration of power are taken from model two and the effect for 
ideological polarization are taken from model three (the estimates from of which are presented in Table 
1). The substantive effects from these models are very similar to our full model (model seven).
very polarized pushes up the yield on sovereign debt. The substantive effect is
dramatic: a move from the most polarized and concentrated system to one that is the
least polarised and where power is most dispersed would save 7.26 percent. If a
sovereign debtor were to continue to rollover a dollar at this higher rate for ten years,
it would have to pay an additional dollar for the privilege. Such a move would
probably disqualify a sovereign from borrowing altogether. Figure 2 illustrates a
similar effect: it shows that ideology matters the more power is concentrated in the
political system. And furthermore, it shows that the confidence intervals narrow
significantly at higher levels of power concentration, meaning that estimates at higher
levels of concentration are more reliable.

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Table 2 presents estimates which test H4 and H5, and their variants, H4a and H5a. H4
tests whether the flexibility of institutions can reduce interest rates, while H5
examines whether the ideology of governments makes a difference. In the first
column, we find no support for the hypothesis that the concentration of power has a
non-linear effect on market perceptions of risk. The variable representing this concept
is statistically significant but incorrectly signed. In other words, we reject MacIntyre’s
argument that the markets do not trust excessively concentrated or dispersed power,
but prefer a golden mean. The second column presents estimates on an alternative
dependent variable: the short-term interest rate on government bonds. Our purpose
here is to test the argument that concentrated systems should be charged lower short-
term interest rates, while dispersed systems should be charged lower long-term
rates.63 The supposed decisiveness of concentrated systems may be more credible in

63 MacIntyre 2001.
the short term, even if it is less credible in the long term. The data rejects this hypothesis. The coefficient on power concentration is even larger and runs in the same direction as in the models where the long-term rate is the dependent variable.

*TABLE 2 HERE*

The estimates in column three reject the argument that government ideology affects interest rates. Ideology is not statistically significant at conventional levels but it is correctly signed, showing that a move to the right is associated with a reduction in the interest rate. Although ideology *per se* is not driving the yield on government bonds, it is possible that it interacts with the degree to which power is concentrated. Here, we find some evidence that this is true as the interaction of ideology and the concentration of power, in column four, is statistically significant and the coefficient in the right direction. Markets appear to prefer right-wing governments when they are sufficiently free to exercise power. These alternative hypotheses perform weakly in comparison to the centrality of joint power institutions in credibly committing sovereigns to repay their debts.

*Robustness Checks*

Table 3 presents a number of robustness tests. The first set of changes deal with the substantial impact of European economic and monetary integration on interest rates in the region.  

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64 Several authors have found that other forms of international organisation also had an impact on sovereign debt. Ferguson and Schularick (2006) found an ‘empire effect’ where British colonies enjoyed improved access to credit. Obstfeld and Taylor (2003) found that the Gold Standard conferred a seal of approval before 1914. Perhaps with hindsight, the effect of international organisation on credibility is fleeting. Even membership of the Eurozone no longer confers the same benefits.
interest rates across the region.\textsuperscript{65} Governments that were once less credible in the eyes of the market enjoyed lower rates in the run-up to, and in the new era of, the euro. They imported credibility and capital from the region’s stronger economies. Even governments outside of the European Union benefitted from the credibility-enhancing effects of integration, as closing a negotiation chapter of the accession process is associated with lower spreads on sovereign debt.\textsuperscript{66} We are interested in whether our explanation holds among these countries, even during a period when many could borrow extensively at very low rates.

To test the robustness of our argument in light of European integration we have restricted the sample to the original 11 members of EMU and performed an analysis on two time periods: 1992-2009 to capture the introduction of the Maastricht criteria and 1999-2009 to isolate the effect of eventual monetary union. We have also repeated the specifications on a larger sample of 19 countries that signed up to the Maastricht criteria. Remarkably, we find that our argument holds, even during an age when many commentators believed that government bonds in the advanced economies were entirely risk-free. In all of the models, the interaction between the concentration of power and the level of ideological polarization is statistically significant and in the right direction.\textsuperscript{67} Overall, our findings imply that the ‘economic fundamentals’ are much less important than the political foundations of credibility, as none of the economic variables are statistically significant. Even the level of inflation

\textsuperscript{65} Compliance with the Maastricht criteria as a ‘seal of approval’ is discussed in Mosley 2003 and Mosley 2004.

\textsuperscript{66} Gray 2009.

\textsuperscript{67} The sign on the concentration of power is in the wrong direction in these models but we do not interpret this as significant because it is a lower order term in our interaction.
and the fiscal balance do not predict variation in interest rates. It appears that when governments make joint political commitments, their individual economic characteristics are much less important to market actors, but the credibility of their individual political systems still matters.

The second set of changes to our original specification is that we have substituted our principal explanatory variables with an alternative measure: Henisz’s index of political constraints. The index measures the feasibility of policy change by capturing the extent to which ‘a change in the preferences of any one actor may lead to a change in government policy’.\(^{68}\) It does so by identifying the preferences of each branch of government for policy change based on party composition and the branch’s ability to veto change. It goes even further by capturing the difficulty of overturning policy within and between each branch of government. Although the new measure does not allow us to test the more sophisticated story on the interaction of polarization and decision-making authority, it nevertheless allows us to subject our analysis to further rigorous testing using an alternative variable that captures roughly both of our explanatory variables. We find that the coefficient on Henisz’s index runs in the expected direction and is statistically significant. Our results are not an artefact of our measure of institutional configuration.

[TABLE 3 HERE.]

In the final set of changes to our base model, we re-evaluate our finding on the role of government ideology by substituting our original measure of ideology with an

\(^{68}\) Henisz 2002.
alternative measure from the World Bank’s Database of Political Institutions (DPI).\textsuperscript{69} We derived several new variables to capture ideology from this source, including dummy variables that indicate the presence of right-wing and left-wing government. We also repeated each specification with a variable to capture a change in government, rather than the starting value. Our findings show that government ideology is a poor predictor of variation in interest rates with one exception: a change in government ideology towards the right, using our original measure of the concept derived from the Comparative Manifesto Project, is associated with a significant reduction in the yield on sovereign debt. None of the binary variables from the DPI were statistically significant. Thus, on the balance of evidence, the role of ideology is less important than more durable aspects of the political system. While there is some evidence pointing to the importance of ideology, unlike our credible commitments argument, it is not robust to an alternative measure of the independent variable.

We also performed a series of further robustness checks which are not presented in this article but are available on request:

First, a lagged dependent variable (LDV) was added to our main specification. Due to the well-documented problems associated with the use of a LDV,\textsuperscript{70} we are skeptical of the validity of the coefficients as the fiscal balance as a percentage of GDP, one of the main predictors of the interest rate, is no longer significant at conventional levels. The only variables which attain significance are inflation and our political variables.

\textsuperscript{69} We used the GOV1RLC indicator from the DPI, which captures the largest governing party’s ideology as right, left, or center.

\textsuperscript{70} Achen 2000.
Second, we included the short-term interest rate on government bonds as an additional covariate. Like a lagged dependent variable, once it is included the model explains a much higher percentage of variation. And again we are reluctant to interpret the coefficients for the same reason, but our political variables still attain significance at conventional levels.

Third, we dropped the United States as an observation and used the rate on US Treasury Bills (T-Bills) as a control variable. Arguably, the interest rate on US government debt is of systemic importance and should enter the specification on the left-hand-side.\textsuperscript{71} We found that the rate is statistically significant in all of our specifications; however, our main finding is robust. There is also reason to be skeptical on the use of US T-Bills as a control variable among the advanced economies specifically, as other government debt is considered as safe, if not more so, than US government debt.

Finally, we replicated our main specifications with a new dependent variable: the difference between the rate on US T-bills and other government debt, also known as the ‘spread’. The spread enters as a natural log so that the data conform to the normal distribution. Again, our argument is robust but there are some notable differences between the determinants of the spread and general interest rates. For one, action-based fiscal consolidation is not a statistically significant predictor of the spread, whereas it is a strong predictor of the interest rate. Moreover, the concentration of power is not statistically significant and the level of polarization is only significant at the ten percent level. When interacted, however, the variables are significant at conventional levels.

\textsuperscript{71} We also repeated the specification with the squared term, as a low US interest rate might signal turbulence, as markets take flight to the safety of US treasury bills.
Conclusion

Sovereign debt is a vital feature of international political economy, which has gained even greater prominence during the ongoing global economic and political crisis, most obviously in Europe. Yet, the politics of sovereign debt in the advanced economies has received less attention among scholars of international relations. In particular, the question of how basic political structures influence long-term interest rates in the advanced economies has gone unanswered. This is especially important given that sovereigns, unlike other debtors, can choose not to pay. Their credibility as debtors depends on political choice. In this paper, we focus on the broad characteristics of political institutions. In doing so, our approach is consistent with a major strand of economic theory and with rating agencies’ emphasis on long-term risk. Our two key variables are the polarization of the party-system on the classic left-right dimension of economic ideology and the relative concentration of power within the executive and party system. When polarisation is low and power is shared, markets perceive a highly credible commitment to pay back debt. In other words, the risk of policy change, introducing the possibility of non-payment of debts, is low. Our calculations show that constrained political institutions can save countries a fortune in interest payments. Our results clearly reject hypotheses that predict more credible commitments from flexible institutions and are somewhat ambiguous regarding government ideology.

Several contemporary proposals seek to boost the credibility of sovereigns with debt problems. These proposals target fiscal management by introducing fiscal councils, constitutional rules on balanced budgets and constitutional debt brakes. If a polity has a fundamentally credible political structure, because of power sharing and
low polarization, such innovations are unlikely to boost credibility much further. In less credible political systems, commitments to obey fiscal rules may be threatened by the same time inconsistency and political instability problems that undermine promises to repay debt. A fiscal rule may be introduced at time point one in a sovereign debt crisis; reduce interest rates at time point two; and be reneged upon at time point three. Of course, markets will anticipate this process, keeping yields high.

The issue is whether such rules will be mere policy commitments or fundamental policy constraints. In the longer term, such rules can be grafted on to systems of concentrated power and polarized competition. However, in the short term, such policies are likely to be interpreted as fundamental shifts in fiscal policy. Unfortunately, the prescription arising from our research is fundamental political change, not policy tinkering. Such changes are rare because elites are usually loath to change a system under which they have become elites and institutional innovations seem alien to established political cultures. The UK’s recent rejection of a new voting system is a typical example, but the fundamental change in New Zealand’s political system in the 1990s show that wholesale changes can and do take place. In the midst of a sovereign debt crisis, exhortations to fundamentally change political systems exhibit a good understanding of the problem, together with a desperate awareness of how hard it is to fix. An excellent illustration is European leaders’ call on Greece’s opposition to emulate their Irish and Portuguese counterparts and support the government’s austerity drive, even though the Greek parties are polarized and power is concentrated.
FIGURE 1. Marginal effect of government ideology on interest rates

FIGURE 2. Marginal effect of polarization on interest rates
### TABLE 1. Sovereign debt and the political system

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Standard errors in parentheses
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### TABLE 2. Sovereign debt, ideology and flexibility

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### APPENDIX: Descriptive statistics and data sources

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Sources: (1) OECD; (2) World Economic Outlook; (3) Budge et al. and Klingemann et al.; (4) Lijphart; (5) International Financial Statistics; (6) Beck et al.; (7) Henisz; (8) Abbas et al.; (9) World Development Indicators; (10) Authors’ calculations; (11) Devries et al.
References


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World Bank. 2009. World Development Indicators. *Online (WDI) database*. 