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Veto Players and the Choice of Monetary Institutions

By Mark Hallerberg

Abstract

This paper argues that two types of veto players matter in the choice of monetary institutions: party veto players and sub-national governments, which are strong in federal systems but weak in unitary systems. A crucial issue is whether voters can readily identify the manipulation of the economy with party players. A second issue concerns the national party veto player’s controllability of either fiscal or monetary policy. In one-party unitary governments identification and control are clear, and parties where such governments are common prefer flexible exchange rates and dependent central banks. In multi-party coalition governments in unitary systems identification is traditionally difficult, and the ability to target benefits to specific constituencies under fiscal policy makes fiscal policy autonomy more attractive for coalition governments. Such governments prefer central banks that are politically independent but that finance government debt. Under federalism parties that constitute the central government have less control over fiscal policy and they prefer flexible exchange rates. Sub-national governments do not support a dependent central bank that gives more power to the central government.
It is indisputable that the government’s economic institutions are important. Scholars have focused considerable attention on the implications of exchange rate regimes, the relative independence of central banks, open versus closed capital markets, the structure of labor markets, and the like on economic policy and economic performance. An innovative body of literature the last decade has moved beyond a consideration of the effects of economic institutions to consider why governments choose some institutional forms over others. That literature usually discusses the choices in isolation. The papers in this volume constitute a second generation of scholarship that addresses the interaction of these institutional choices, and in particular the joint choice of a level of central bank independence and the exchange rate regime.¹

This paper’s contribution is to present a veto player argument for why industrialized countries select their levels of central bank independence and their exchange rate regimes. Based largely on a Mundell-Fleming model expanded in Clark and Clark and Hallerberg, it considers circumstances under which governmental parties agree to delegate decisions on monetary decisions to an independent body and to choose a certain exchange rate regime under full capital mobility.² The model assumes only opportunistic behavior on the part of political parties; that is, parties are office-seekers. Differences in ideology play no role in the model. This focus on what monetary institutions veto players prefer differs from Keefer and Stasavage, who focus on how the number of veto players affects the effectiveness of central bank and exchange rate commitments.³

It finds that two types of veto players matter—sub-national governments, which are strong in federal systems but weak in unitary systems, and party veto players. A crucial issue for party players is whether voters can readily identify the benefits, and the costs, of their manipulation of the economy directly to them. A second issue concerns the veto player’s controllability of a given type of policy.

Identifiability and controllability vary systematically across the four possible combinations of veto players. In one-party unitary governments identification and control are clear, and parties where such governments are common prefer flexible exchange rates and the monetary policy autonomy that accompanies it as well as

¹ Broz, Bernhard, and Clark this volume.
² Clark Forthcoming and Clark and Hallerberg 2000.
dependent central banks. In multi-party coalition governments in unitary systems identification is traditionally difficult, and the ability to target benefits to specific constituencies under fiscal policy makes this option more attractive for coalition governments. Such governments also prefer politically independent central banks, although they do value banks that finance government debts. Under federalism the predictions do not vary. Party(ies) that constitute the federal government have less control over fiscal policy because sub-national governments compose much of total government involvement in the economy, and such sub-national governments generally do not support a dependent central bank that gives more power to the federal government. The common expectation is a combination of flexible exchange rates and independent central banks.

The paper is organized as follows. Section 2 provides a brief overview of previous research on the choice of levels of central bank independence and exchange rate regime. It consciously builds upon Bernhard, Broz, and Clark and adds material only where it is necessary to explain the argument. Section 3 provides the model. Section 4 tests the model empirically. Section 5 concludes.

2. Veto Players and Monetary Institutions

A crucial variable in the analysis is the number of veto players. While I will provide a more detailed theoretical discussion of why I think some types of veto players are relevant in Section 3, a definition at this stage of the paper allows the reader to compare my use of the term with other work in the field.

As Tsebelis explains, in their simplest form veto players are institutions, organizations, and/or individuals that have the power to block change from the status quo. Two different types of veto players are relevant when considering the joint choice of the level of central bank independence and exchange rate regime—party veto players and sub-national veto players. I count party veto players as the number of political parties whose assent is needed to change the status quo. In the theoretical section, I reduce the discussion to countries either with one party veto player or with more than one. The second dimension is the

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3 Keefer and Stasavage this volume.
4 Bernhard, Broz, and Clark this volume
relevance of sub-national checks on central government action, which I simplify to a federalist-unitary dichotomous variable. The check on the central government is present in federalist systems but absent in unitary systems.6

The remainder of this section briefly reviews what the existing literature argues about the effects of veto players on monetary institutions.

*Veto Players and Explanations of Central Bank Independence*

Several scholars argue that increasing the number of some type of “veto player” increases the discretion of the central bank to determine monetary policy.7 It simply becomes harder for the government to unite to overturn the decision of the central bank when there are more veto players.

Who these “veto players” are, however, and the exact role that they play differ. Lohmann’s focus is on Germany, and she notes that the discretion of the Bundesbank increases when the government’s parties do not hold a majority of seats in the upper house of parliament, the Bundesrat.8 Discretion therefore increases when Germany experiences periods of divided government; the number of partisan players in government is not consequential.

Bernhard considers a combination of institutional and partisan veto players. He codes countries with “strong bicameralism” and indicates that such states are more likely to have independent central banks.9 He also creates a “punishment index,” which includes polarization, parliamentary or congressional committee strength, and whether or not a country has a coalition or minority government. Increases in this index lead to greater independence. Neither of his variables

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6 This definition is broadly consistent with two uses of veto players in the literature—Tsebelis 1999 and 2001, which Clark this volume uses, and Birchfield and Crepaz 1998 and Crepaz 2002. Here I dichotomize the number of party players, which would correspond to the cases for Tsebelis where the ideological distance is zero and where the ideological distance is greater than zero. The paper’s dichotomy of unitary and fiscal systems also is consistent with the Tsebelis 2001, Chapter 6. With regard to Birchfield and Crepaz 1998 and Crepaz 2002, the discussion of party players parallels their consideration of “collective veto points,” although again I dichotomize the variable. The presence of federalism is similarly covered under their definition of “competitive veto points.” One difference is that they also consider upper chambers as additional veto players, while here they are relevant only if they have different partisan majorities than in the lower house.
8 Lohmann 1998a.
9 Bernhard 1998.
match completely the definition provided in this paper—strong bicameral states are coded the same way whether one party or more than one party controls them, while the punishment index codes coalition governments and one-party minority governments the same way—but Bernhard’s results are consistent with an argument that increases in veto players increases independence of the bank.

Moser, in contrast, focuses on the level of institutional checks and balances for a cross section of 22 OECD countries rather than partisan control. He creates dummy variables for countries with strong checks and balances, weak checks and balances, and no checks and balances.10 One should note that he considers (in most cases) the potential for different partisan majorities to control bicameral legislatures, which makes the argument distinct from Tsebelis who counts only actual differences in partisan control.11 Moser produces results to argue that states with strong institutional checks and balances have more independent banks as well as lower inflation rates than states without them even controlling for the level of central bank independence.12

A final way of considering veto players is to contrast federal versus unitary political systems, which is the second definition used in this paper. The idea is that there are additional sub-national checks on changes from the status quo in federal systems than in unitary ones. Indeed, a consistent finding is that federalism is associated with central bank independence.13 The literature differs, however, on why this association exists. Posen stresses that there is an increase in access points to decision-makers under federalism.14 The financial sector has more opportunities to voice its opposition to higher inflation, which leads to higher readings of CBI. In another article, Lohmann notes that countries where state

11 Tsebelis 1995, 1999. Moser 2000 does note that, in cases where the coding is unclear, he looks at partisan control and rules a country as having no checks and balances if the same parties always control both houses. He does this in his coding for three countries—Belgium, Italy, and Japan.
12 There is a problem with the way he formulates his regression equation. He includes central bank independence (CBI), two dummy variables for checks and balances (weak and strong dummies), and terms that interact CBI with the checks and balances dummies. But he does not include CBI alone in the regression. The structure of his regression equation therefore assumes that the effect of CBI on inflation in the absence of checks and balances is zero, and his results by themselves cannot be interpreted as evidence that independent banks are more effective with strong checks and balances (Thanks to William Roberts Clark for helpful discussions on this issue.)
13 Lijphart 1999.
governments appoint a part of the bank’s council in a federalist country like Germany are more likely to have councils with a significant proportion of members appointed by the current government’s political opponents.\textsuperscript{15}

In sum, therefore, there are two fairly distinct ways of looking at veto players and central banks. One view emphasizes the importance of party veto players and insists that institutional veto players do not matter in practice if they are controlled by the same party. The other view emphasizes institutional divisions of power regardless of the partisan control of those institutions, and the available evidence argues for a unitary-federalism dichotomy. In fact, the one exception that looks at “checks and balances” without partisan players and without federalism, which is Moser, may present as good a measure of federalism as checks and balances in practice.\textsuperscript{16}

While the two types of veto players—party players as well as the federalism-unitary dichotomy—appear in the literature, there has been thus far no attempt to consider which of these types of veto players can explain more completely the presence or absence of central bank independence. Moreover, while the literature on the connection between federalism and CBI is fairly developed, less attention has been paid to how party veto player differences on their own translate into CBI differences. The discussion of the model will address how different types of veto players lead to different types of central bank independence.\textsuperscript{17}

\textit{Exchange Rate Regime Choice}

\begin{footnotesize}
\begin{enumerate}
\item[15] Lohmann 1998b.
\item[16] Moser 1999, 2000. The five states Moser classifies as having strong checks and balances are the same OECD states Lijphart 1999 classifies as truly federalist states. Yet one of them, Canada, should not be a case of “strong checks and balances” according to Moser’s own classification scheme, which emphasizes that chambers must have equal power and have different procedures to elect them for the checks to be strong. As Bird and Tassonyi 2000, 11 note, “Canada appears to be unique among federations in the complete absence of any formal representation of provincial interests at the federal level,” and representatives that do sit in the upper house, the Senate, are appointed directly by the federal government. More generally, on Lijphart’s federalism scale from one to five, Moser’s “strong checks and balances” states all score a five, while the average of the remaining states is just 1.9.
\item[17] I ignore here many of the nuanced implications of partial central bank independence and its interaction with the exchange rate regime; see Franzese 1999 and 2000.
\end{enumerate}
\end{footnotesize}
The relationship between the number of veto players and exchange rate regime choice is not as developed in the literature. One reason may be that economists have until recently been the predominant authorities on the topic. Exchange rate regime choice is often considered fairly technical. Much of the work in economics concerns whether a given country would benefit from a change from one type of regime to another. Efficiency reasons clearly matter, and this is especially the case for the largest and smallest states. Yet, as Bernhard, Broz, and Clark’s discussion makes clear, a theory based purely on efficiency grounds is not a sufficient predictor of why states make their exchange rate regime choices.

Some scholars do, however, argue that the number of party veto players matters. One group focuses on the ability of countries to maintain fixed exchange rates. Keefer and Stasavage discuss the ability of governments to bear the adjustment costs of maintaining a fixed exchange rate, and they contend that countries with fewer veto players are able to make the necessary adjustments while countries with many veto players are not. Edwards makes the same argument for developing countries. In her study of the inter-war period, Simmons argues that states with more government instability are more likely to devalue. To the extent that one-party governments are more stable than multi-party coalitions, states with one party governments are more suitable for fixed exchange rates.

Bernhard and Leblang, in contrast, make an opposing argument. They consider what is in the best interests of the government of the day. In states where the electoral costs of defeat are high, and where electoral timing is exogenous, governments do not want to give up the tool of monetary policy to influence the economy before elections. Conversely, in states where the electoral

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18 Cohen 2000.
19 Bernhard, Broz, and Clark this volume. Another reason for a lack of scholarly attention to the impact of veto players on exchange rate choice could be because there is no functional reason for multiple veto player states to choose a given regime in the first place. Keefer and Stasavage, this volume, argue that increases in veto players should not make fixed exchange rates any more effective in fighting inflation. This would suggest that there is no a priori reason why countries with more veto players should be any more likely to adopt one type of exchange rate regime over another.
20 Keefer and Stasavage, this volume.
22 Simmons 1994.
costs to defeat are low, and where the political opposition is influential in the making of policy, states opt for fixed exchange rates. Such rates allow coalition partners in proportional systems to agree on a focal point. The rates also imply that the government is giving up less when it agrees to fixed exchange rates in states where the influence of the political opposition is high. In practice majoritarian/low opposition influence states, such as the United Kingdom, should opt for flexible exchange rates, while proportional/high opposition influence states, such as Denmark, should opt for fixed exchange rates. In their empirical analysis they consider the exchange rate regime choices of OECD countries for the period 1974-1995.

3. The Model
   a. General Framework

   This paper attempts both to build upon and to synthesize the two mostly separate literatures on central bank independence and exchange rate regime choice (exceptions include the papers in this volume). It begins with the focus in Bernhard and Leblang on the importance of government type. It also relies upon Bernhard and Leblang’s and Clark’s assumption that governments make choices to further their chances of electoral survival—they choose flexible exchange rates when they judge monetary policy to be the most optimal economic policy to further their reelection chances.\(^{24}\)

   Unlike Bernhard and Leblang, however, I argue that the choice in exchange rates is not between the use of monetary policy or no policy to manipulate the economy, but rather between monetary policy and fiscal policy. As Clark and Clark and Hallerberg illustrate, in a world of open capital mobility governments may engage in opportunistic fiscal behavior before elections in countries with fixed exchange rates.\(^{25}\)

   I also use the broader discussion to consider the choice of an independent central bank. An independent central bank is a device to assure that explicit political manipulation of the money supply does not occur. States have independent central banks when one or more key veto players stands to lose, or

\(^{23}\) Bernhard and Leblang 1999.
\(^{24}\) Bernhard and Leblang 1999 and Clark this volume.
even expects to lose, from manipulation of the money supply and when the losing player can hurt the others. It should be noted that this argument is stronger than the traditional veto player argument, which deals only with whether one can move from the status quo.

Assumptions about General and Distributional Effects of Monetary and Fiscal Policy

As the Mundell-Fleming model indicates, states can only maintain two of the following three policy options: monetary policy, fixed exchange rates, and open capital. An important corollary to this argument concerns fiscal policy—while monetary policy is effective only under flexible exchange rates when capital is mobile, fiscal policy is effective only under fixed exchange rates.\(^{26}\)

This framework has important implications for the choice of the level of capital openness as well as for the exchange rate. A state that chooses to close its capital markets can maintain both fiscal and monetary policy autonomy. A move to mobile capital, however, increases the implications of the choice between flexible and fixed exchange rates. A choice of flexible exchange rates means the choice of effective monetary policy, while a choice of fixed exchange rates means the choice of effective fiscal policy.

This discussion is assuming, of course, that states can choose both the level of openness of their capital markets as well as their exchange rate regime. Several authors argue that, after the collapse of the Bretton Woods system, there was a systemic change in the level of capital mobility. Because of new technologies that made it easier for individuals to evade government controls, the elimination of many legal barriers to trade, and the end of the Bretton Woods system states may have lost the ability to control capital by 1973 if not earlier.\(^{27}\) It is also possible that capital controls simply became less and less effective as time progressed from the late 1960’s. At some point, probably by the mid-1980’s, capital controls in industrialized countries became ineffective.

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\(^{25}\) Clark this volume and forthcoming and Clark and Hallerberg 2000.


\(^{27}\) Frieden 1991; Andrews 1994; for an overview see Hallerberg and Clark 1997.
One can also debate the degree to which the exchange rate regime was really a choice variable, but unlike the discussion of capital mobility the question is whether the exchange rate regime was a choice variable before the collapse of Bretton Woods. Through the early 1970’s most OECD states maintained fixed exchange rates as part of the Bretton Woods system. There were, of course, occasional realignments, but in general countries pledged to maintain fixed exchange rates. When the system collapsed, the type of exchange rate became a choice variable at roughly the same that the capital mobility ceased to be a choice variable. The Mundell-Fleming model tells us that the type of macroeconomic policy that is effective, monetary or fiscal policy, became a choice variable as well. Under capital mobility states can no longer enjoy the macro-economic benefits of manipulating both types of policy.  

Certain characteristics about how the two types of policy boost the economy, and, in turn, how parties can use them to influence groups in society, provide guidance about what types of governments prefer either monetary or fiscal policy. First, it is more difficult to target monetary policy than fiscal policy to different groups. Looser monetary policy makes borrowing cheaper, and cheaper money leads to more spending and to an increase in economic growth. It therefore helps an incumbent by raising all boats and making content voters more likely to support them. Looser monetary policy does have clear distributional implications—domestic holders of capital receive lower returns from their holdings, while borrowers have to spend less—but parties are not able to focus the effects of looser money on different constituencies over different elections.  

In contrast, fiscal policy boosts the economy when the state consciously worsens the balance of the budget, and, in most cases, borrows money to pay for the temporary boost. How the government distributes the cash is largely up to it. It can cut taxes on everyone in the population with an across-the-board tax cut, or it can appeal to particular constituencies by cutting just sales taxes (an appeal to

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28 The emphasis on choice is not uncontroversial. McNamara 1998, 10, argues, for example, that there were no options other than monetary orthodoxy after the end of Bretton Woods. She emphasizes that states “must be willing to rule out the use of monetary policy as a weapon against broader societal problems, such as unemployment or slow growth. Instead, governments must be willing to stake their credibility on walking the plank of rigorous orthodoxy—support for exchange rate stability and inflation control above all other macroeconomic goals.”

consumers) or cutting taxes to particular income groups (the middle class). The same is the case for increases in spending. When the exchange rate is fixed, the government can target benefits to specific groups in society while at the same time boosting the economy, which results in spending for particular groups leading to a concomitant general boost to the economy.

A second difference between the two policies is the legacy of their use. The nature of how these costs and benefits play out in the long run differs across the policy areas. Looser monetary policy leads to higher inflation, either just before the election or during some time period after it. Monetary contractions, with its concomitant reduction in economic growth, can correct the higher inflation. Higher budget deficits too can be corrected in a similar fashion, but there may be a temptation to allow the gross debt level to ratchet up. Presumably the effects of higher inflation are more painful than the comparatively low movement upward in the gross debt burden. The absolute level of the debt is crucial here—the higher it becomes, the greater the restriction on the use of fiscal policy even for non-political reasons.

Yet before moving on, a key assumption in much of the opportunistic political business cycle literature about costs must be stressed—the country is a net loser from such manipulation. That is, net costs in aggregate are higher than net benefits because of economic inefficiencies. On the monetary side inflation is higher than it would be in the absence of political cycles. Borrowers pay higher interest rates than they should and make decisions that lower overall economic growth. The spike in inflation, however, can be relatively short-lived and is correctable with tighter monetary policy, albeit with some economic pain. On the fiscal side, expansive budgets in election years lead to higher government borrowing than would be the case in the absence of fiscal political business cycles. Higher government borrowing can have similar costs, but the nature of those costs differs. Short-term borrowing is not that problematic if it is repaid

30 Standard models of opportunistic monetary cycles such as Nordhaus 1975 assume that inflation comes after the election. Alesina and Roubini 1997, however, express skepticism that inflation can be so easily delayed until after the election.

31 An important exception in the literature about the nature of costs and political business cycles is Clark Forthcoming. He argues that political business cycles could imply more economic expansions than elites may want, but that the expansions could benefit the average voter. The welfare implications of having political business cycles are then not straightforward.
immediately after elections. Borrowing over a longer period of time, however, can lead to a ratcheting up effect on the overall debt burden. This increase in debt can make fiscal policy less effective over time. A country like Belgium, for example, must now maintain primary budget surpluses to pay interest costs and to pay down its large debt burden.

A third dimension is jurisdiction. Monetary policy affects directly the economy where the money is circulated. A given currency has traditionally been restricted to national borders. There are, of course, important exceptions. Some countries adopt another country’s currency. So long as that country is small relative to the country whose currency it is adopting, the country does not serve as an effective veto player in its own right on the setting of monetary policy; examples would include Panama’s use of the U.S. dollar or Monaco’s adoption of the French Franc. In the case of the European Union, jurisdiction of the euro extends across twelve countries as of 2001. Both the practice, and the discussion of, such multi-lateral regimes are expanding. Yet the more general point is clear—monetary policy has traditionally been a national policy tool, albeit one that is rapidly becoming deterritorialized.32

Monetary policy is also usually national, and not local, in terms of decision-making. This is practically true by definition—if regional banks are allowed to circulate their own currencies, as banks indeed did under the Zollverein in pre-unification Germany, then one cannot speak of a common currency. Yet there is one way that sub-national governments can participate at least indirectly in the making of monetary policy. In some countries, such as in Germany, the state governments appoint a part of the governing council’s members. The relevant actors are therefore at the national level rather than the regional or state level, although it is possible that sub-national governments appoint some or most of the governing board.

In contrast, fiscal policy has different characteristics. Like monetary policy, it begins at the national level. The degree to which it is centralized, however, is in this case a variable. Some states centralize most spending and taxation decisions with the national government. Other states, and in particular those in a federation, decentralize fiscal policy. This suggests that the level of decision-
making on fiscal policy can also be a variable.\textsuperscript{33} The final difference is the ease of understanding of the two policies. Monetary policy can be rather arcane and requires much information to run effectively.\textsuperscript{34} Revenue and expenditure questions, in contrast, are less technical. Table 1 summarizes the key differences between fiscal and monetary policy.

These characteristics affect the relative efficiency of using a given policy tool for political means. A national government that wants to targets specific constituencies will generally find fiscal policy a more efficient tool than monetary policy. Similarly, a national government in a unitary system where sub-national government spending is negligible will find fiscal policy a more efficient tool than a state where sub-national governments have significant budgetary authority. The following example illustrates the point. Consider two states that each have general governments that control approximately 40% of the national economy. One state’s central government has complete control over government spending, and it chooses to run a 2% deficit before an election to boost the economy. The second state’s central government, in contrast, controls just one-third of general government spending.\textsuperscript{35} It must run a 6% budget deficit to get the same “bang” for the economy. If one assumes that the marginal costs to a policy are constant, the fiscal expansion is three times as costly politically in the second state than in the first one. I will return to these points in the next section after I discuss the relevant actors in the choice of monetary institutions.

[Table 1 about here]

b. Actors, Preferences, and Strategies

The relevant actor set includes on one end of the equation voters who elect governments. At the other end of the equation are actors who can veto changes in the two main policy instruments for manipulating the macro-economy, monetary

\textsuperscript{33} It is not simply the ratio of central government to total government spending that is crucial. In some states, spending may be decentralized while decision-making is centralized. An example is Denmark.
\textsuperscript{34} Bernhard 1998.
\textsuperscript{35} This argument assumes that the translation of fiscal policy expansions into economic growth is roughly equal across countries.
and fiscal policy. I focus on party veto players, and in particular party veto players at the national level. I also consider the absence or presence of sub-national veto players.

I begin with a discussion of voters. I take the standard assumption that voters are retrospective and that they reward the incumbent for good performance and punish the incumbent for poor performance. Following Tabellini, I add the assumption that voters differ in their reservation utilities. Some voters are fairly easy to please and are likely to support the incumbent. Others, however, are more difficult to please and are unlikely to support the incumbent. While the government does not know the reservation utility of an individual, it does know the general distribution of the reservation utilities. Moreover, direct government appeals to specific groups can affect their decisions to support or oppose the government. These assumptions suggest, therefore, that government manipulation of the economy can sway some voters.

The first assumption concerning party veto players is the common one that they are office-seeking. If they are in government, they want to stay in government. When the end of the Bretton Woods system forces them to choose between fixed and flexible exchange rates and, by implication, between effective fiscal or monetary policy, political parties are interested in the policy that is most likely to help them win elections. Similarly, parties will select a given level of central bank independence based on their assessment of how an independent central bank can further their election goals.

When they consider the adoption of certain monetary institutions parties want to maximize the net electorate benefits from using them. Two variables play an important role. First, ideally parties would have voters identify their party as responsible for any benefits while voters identify opponents as responsible for any costs. Party identifiability with outcomes is therefore crucial. Second, the parties care about their controllability of a given policy area.

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36 Tabellini 2000, 11.
37 Mayhew 1974.
38 See Whitten and Powell 1993. Note that this concept is related to accountability, but is not the same thing. Voters may be able to identify a party with a given outcome but not be able to hold that party accountable at the polls.
Differences in both variables can be traced directly to the type of electoral system in place. Proponents of plurality systems have stressed for decades that an important advantage of such systems over proportional representation is that they guarantee a defined government and a defined opposition. In other words, voters can identify who is responsible for a given policy under plurality systems. The reason for this is two-fold. First, plurality systems lead (more or less) to two competitive parties who compete with one another, and the presence of two major parties all but guarantees regular one-party majority governments. Second, voters cast votes for individuals, and they can defeat individuals whom they think perform poorly directly at the polls. In contrast, proportional representation systems often (but not always) have coalition governments composed of several parties. Voters have difficulty identifying which party is responsible for beneficial, and which party for costly, policies in a coalition government.

Second, the traditional literature argues that voters have an easier time punishing parties under plurality than under proportional representation. With a clearly identified government and a clearly identified opposition changes in voter support send clear messages. Because there are usually only around two parties that compete against one another, drops in seats below 50% usually translate into a change in government. In contrast, in coalition governments the election results merely provide the parties with potential “shares” towards a majority in parliament (or, in some cases, with enough of a minority plus enough opposition tolerance that assures a government). After the elections parties negotiate among themselves to determine what coalition of parties will become the next government. It is conceivable that all parties in a government could gain seats in an election, but that for whatever reason one of the parties is left out of the next government for one of the opposition parties. Conversely, the parties in government could all lose seats, but, by adding a new partner, remain in government.

Finally, electoral systems shape the electoral strategies of parties, and these strategies have a direct bearing on identifiability. Persson and Tabellini argue that parties under plurality need to win only a majority of districts across the

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39 See, for example, Independent Commission on the Voting System 1998.
40 Duverger 1954.
country. They therefore target marginal districts, and they provide narrowly focused goods to those districts. They hope to be identified with improving the economic conditions of marginal districts at election time. In contrast, under proportional representation parties have little to gain from being identified with the improvement of specific districts. They do, however, have reason to target broad constituencies that are distributed across the country that can deliver votes.

Focusing on the number of candidates per electoral district (or district magnitude), Milesi-Ferretti, Perotti, and Rastagno offer supporting empirical evidence in OECD countries. They find that transfer payments are higher in states with higher district magnitudes, while spending on goods that can easily be targeted to particularistic groups is higher in states with low district magnitudes.

The positive relationship between district magnitude and the number of political parties in the legislature is well-established. For the purposes of this paper, which is concerned about party veto players, the higher the number of effective parties, the lower the probability of one-veto player governments. Coalition governments become the norm. It should be noted that the crux of the broader debate between proponents of plurality and proportional representation usually focuses on the implications of the system for the voter. Yet the concern here is with how electoral systems structure party choices of monetary institutions. The logic becomes clear when we bring together below the variables identifiability and the second important variable, the controllability of either fiscal or monetary policy. The concept of controllability is the ability of an incumbent political party to manipulate the economy with a given policy.

The choice variables are as follows. With regard to the central bank, conceptually I rely upon the two types of independence discussed in Grilli, Masicandaro, and Tabellini. Political independence measures the extent to which the bank can make decisions that are counter to the government’s wishes. Their measure of political independence includes items like who appoints the governor and the board of directors, the length of their tenure, statutory provisions

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41 Duverger 1954,
43 Milesi-Ferretti, Perotti, and Rastagno 1999.
44 Taagapera and Shugart 1989.
that strengthen the power of the bank vs. the government, and the like. Deficit-financing independence considers the ability of the central bank to formulate its economic positions independently from the government. In the empirical section I include five measures of the extent to which the bank must finance the government’s budget deficit, and is an abridged version of Grilli, Masciandaro, and Tabellini’s economic independence index. It is possible that a government prefers a politically dependent, but a deficit-financing dependent, central bank. With regard to the exchange rate, I follow Clark and Hallerberg and assume the dichotomous choice of either flexible or fixed rates.46

There are four potential configurations of party and sub-national veto players, and I discuss their implications for monetary institutions in turn:

**One Party Player, Unitary System.** This combination of veto players is common in plurality countries like the United Kingdom.

Identifiability of economic outcomes with the government and controllability of the policy instrument suggest that such governments prefer monetary policy autonomy over fiscal policy autonomy. Voters can identify the party that does something, positive or negative, to the economy. Such states often have low district magnitudes, and monetary policy can be a useful tool to shift the location of the ideal marginal district. The fact that monetary policy cannot be targeted to specific groups is not problematic; so long as the economy is strong the incumbent is likely to win. One should keep in mind that flexible exchange rates do not rule out the use of fiscal policy to influence marginal districts with narrowly focused spending programs; flexible exchange rates only mean that spending on individual districts will not lead to an additional boost of the economy. Moreover, as Persson and Tabellini as well as Milesi-Ferretti, Perotti, and Rastagno suggest, the overall size of the public economy is smaller in countries with low district magnitudes for reasons discussed earlier.47 This suggests that monetary policy would be a more efficient means of boosting the economy than fiscal policy. In terms of controllability, the party that controls the government has unambiguous

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46 Clark and Hallerberg 2000.
control over monetary policy so long as the central bank is dependent upon the

government.

This discussion also has consequences for the independence of the central
bank. A politically independent central bank would take away the monetary policy
tool the government could use to manipulate the economy in the first place.
There is therefore no reason for the government to support a politically
independent central bank in such systems. Deficit-financing independence is less
relevant in this case so long as the government can control the timing of monetary
expansions.

**Multiple Party Players, Unitary System.** The classic example would be a
country like the Netherlands. It has had no one-party majority governments in the
post-war period.

Unlike in the one-party case, the expectation is that multi-party coalition
states will prefer fiscal policy over monetary policy. None of the electoral systems
in place in OECD countries allow the electorate to vote for the coalition as a
whole; instead, voters must decide which party, or candidate from a party, to
support in the election. A general increase in the economic welfare may lead to an
expectation that the coalition will benefit generally, but it is not at all clear that the
parties will benefit equally. Voters may overly compensate the party that controls
the finance minister; or the largest party; or whatever party has avoided recent
scandals. Similarly, the distribution of “punishments” for higher inflation may not
fall equally on all coalition partners. 48 Moreover, even the timing of the punishment
is more difficult to control—the withdrawal of a party from a coalition can cause
early elections and force elections during the expected monetary contraction after
the election. 49

A second problem with the use of monetary policy under multiple party
governments concerns controllability. Effective monetary policy requires
knowledge about the state of the economy, which can change fairly quickly, as

49 This argument takes a seemingly opposing view to Broz this volume. Broz argues that, where
transparency is high, states opt for independent central banks and flexible exchange rates. Yet the
arguments are not on their face incompatible—for Broz this volume transparency is important
because of the credibility of the institution for keeping low inflation, and in practice the key
difference between high and low transparency is between democracies and non-democracies.
well as an understanding of key economic fundamentals. It is therefore a difficult tool for any government to use based on regular cabinet decisions, and consequently, if the government sets monetary policy largely on its own, decisions are usually made in one ministry (usually the finance ministry). Disagreements about the course of monetary policy within a coalition government where one party has the most information and/or expertise about policy can cause the coalition’s fall.\textsuperscript{50}

Fiscal policy autonomy, in contrast, offers coalition parties a chance to target spending increases and tax cuts on specific constituencies. The expected, somewhat untargeted economic boost from a fiscal expansion will come too, but the focused tax cuts and/or increased spending can reduce the uncertainty about electoral consequences for political parties. Coalition governments should therefore prefer fixed exchange rates.

This discussion also has implications for the desirability of an independent central bank. On the one hand, coalition partners are unlikely to trust one party player in the government with the task of maintaining monetary policy.\textsuperscript{51} This will be the case if there is any difference in inflation preferences among the party actors even in the presence of fixed exchange rates. On the other hand, it may be useful for the bank to finance government budget deficits if larger deficits are expected. This suggests that political independence of the bank should be high, but deficit-financing independence should be low so that the bank supports the fiscal policy of the government.

\textbf{One Party Player, Federal System.} The combination of no effective upper chamber and a plurality electoral system in Canada leads to regular one party veto player governments in a federal system.

The move to a federalist system, which entails a significant loss of the total amount of fiscal policy the central government controls, should make governments even warier about choosing effective fiscal policy over monetary policy.

\textsuperscript{50} Bernhard 1998.
\textsuperscript{51} Bernhard 1998.
There are two reasons for this result. The first concerns the amount of extra spending/tax cuts needed to reach the same effect in a federal state. As the previous section indicated, the central government must spend proportionately more of its budget in a federalist country than in a unitary one to have the same effect on the economy. A second related problem is a possible substitution effect at the state and local level. Increased spending at the federal level could lead states and local governments to cut back their own spending. The costs of using fiscal policy to manipulate the economy would be even greater. In contrast, monetary policy is relatively effective across the country.

In terms of central bank independence, there are two countervailing pressures. Like their one-party colleagues in unitary governments, national governments want a politically dependent bank. The lower levels of government, however, will suffer from the inevitable economic costs from the manipulation of the money supply. Remaining in a strict opportunistic behavior model, one would expect state governments to tolerate dependent banks only if: a) voters do not punish state governments for economic conditions in the state but vote on the basis of non-economic criteria; or b) elections happen at the same time at all (relevant) levels of government. Our examples of federalism do not generally fit into these categories. In Canada, provincial elections are not timed to coincide with national elections. In Germany, Land elections are often seen as mandates for or against the federal government, and the economic conditions in a given Land are important. Most Land elections are not the same time as federal elections. In the United States, many gubernatorial elections do not coincide with presidential elections, and, while there is some reason to doubt that governors have much control over the economic conditions of their state, there is evidence that voters reward or punish governors based on the health of the economy.\(^{52}\)

When considering deficit-financing independence, it is hard to see why either lower levels of government or, for that matter, central governments with flexible exchange rates, would want dependent banks. Lower levels of government generally lose if the central government runs budget deficits. For the central government’s part, there is little reason to use fiscal policy to influence the

\(^{52}\) Hansen 1999.
economy, or to have the central bank support expansions through deficit financing.

In sum, to the extent state governments have any say in the design of the central bank, they will opt for a politically independent bank that controls the opportunistic behavior of the national government. Given that the principle actors in designing a federal constitution are states themselves, it is likely that the states will prevail in establishing an independent central bank. So long as the national government maintains a floating exchange rate regime, deficit-financing dependence makes little sense.

**Multiple Party Players, Federalist System.** The use of proportional representation makes multiple party players the norm in Germany even without an upper legislative chamber, while the election of the President, House of Representatives, and the Senate according to plurality but across different types of constituencies makes “divided government” in the American presidential system common.

The prospects for effective fiscal policy are likely to become even drearier for countries in this category. Multiple institutional veto players can expect to control relatively less fiscal policy than monetary policy. It is often the case that the power of a given player is asymmetric—it is easier for a player to block additional spending than to generate new spending.53

Once again, central banks are likely to be strongly independent in such countries. The same reasons for political independence given in the one-party player/federalism case remain. The increased discretion to maintain a given monetary policy in terms of deficit-financing independence should increase as well so long as elections are again not at the same time and the approval of different institutional veto players is required to pressure the bank to initiate pre-electoral monetary expansions.

Table 2 summarizes the predictions of the type of monetary institutions expected under the four possible combinations of party and institutional veto players. In sum, the expectation is that central banks will be most dependent in the one-party, unitary case and most independent in multiple-party, federal
system case. The remaining combinations should prefer intermediate levels of independence. In terms of exchange rate regimes the only types of states expected to fix are found in the multiple party, unitary system case.

[Table 2 about here]

Before continuing, it is important to discuss an alternative specification common in the political business cycle literature, which looks at the preferences of political parties themselves. The argument would be that right parties prefer lower inflation, and this difference with left parties would translate into different monetary institutions. As Simmons argues for the interwar years, it could be that right parties are more likely to defend exchange rate pegs than left parties. Similarly, central banks that right parties established should be more independent to fight inflation than those that the left established. As Clark argues, each of these arguments would presume that institutions constitute the “frozen” preferences of parties. Such an argument would have to assume that costs to changing the institution were high so that changes in the monetary institutions would not occur after every change in government. Determining the relevant party players at the time of the founding of the central bank is beyond the scope of this paper, but I will examine the partisan argument when considering exchange rate choice. At the same time, even finding confirmation of a partisanship effect does not necessarily invalidate the argument made here. The veto player approach may explain why some institutions are “stickier” than others.

Evidence

This section compares the institutional choices most OECD countries made in the post-war period. It addresses whether there is any empirical support for

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53 See Kiewiet and McCubbins 1988 for the US case.
54 Hibbs 1977.
55 Simmons 1994. See also Bearce 2002 for a similar argument about partisan effects under capital mobility.
56 On the connection between central bank independence and low inflation see Bernhard, Broz, and Clark this volume and the review in Berger, de Haan, and Eijffinger 2001.
57 Clark this volume.
58 Lack of consistent data on central bank independence makes it necessary to exclude Iceland, Luxembourg, Portugal, and Turkey. Spain is included only when it was a democracy.
the model developed in the paper. There are two crucial assumptions. First, costs to changing a given institution are non-trivial. It is difficult, and costly, to generate credibility either for fixed exchange rate regimes or for independent central banks. Changes in institutions therefore take place, but are fairly rare. Second, I assume that the creation and destruction of the Bretton Woods system are events exogenous to the model. The Bretton Woods arrangements were systematic; that is, they were imposed upon the industrialized world after World War II. This is not to say that states did not benefit from Bretton Woods, or that divergent preferences led to the system’s collapse. Rather, the key assumption is simply that there was not a clear choice of exchange rate regime for most countries until the Bretton Woods system was no longer present. In contrast, states chose a given level of central bank independence in the immediate post-war period or at some time before. That is, they chose central bank independence in a period where capital was generally immobile. Governments were therefore deciding whether to forego monetary policy or to keep it, but fiscal policy remained autonomous because of generally closed capital.

This situation changed with the collapse of the Bretton Woods system. As capital became mobile states had to make a choice between fixed exchange rates, and the fiscal policy autonomy that came with it, or flexible exchange rates and the monetary policy autonomy that could have accompanied it in the absence of an independent central bank. This discussion suggests that, as a first cut, one can compare the historical occurrence of party veto players and federalism after World War II and standard measures of central bank independence. Second, one can break down exchange rate regime choice into two periods—the initial years after the collapse of Bretton Woods, or 1974-79; and the later years when capital was becoming increasingly mobile, or 1980-91. The beginning and end points correspond to the first year after the clear end of the Bretton Woods System and the year of the Treaty of Maastricht signed by the twelve European countries that then belonged to the European Community.

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59 Clark, this volume.
60 The decision to move forward with Economic and Monetary Union for individual countries includes additional policy issues than the decision for a fixed or flexible exchange rate. The period after 1991 therefore does not represent a good test of the hypothesis developed here.
I divide the countries into the four possible veto player combinations and compare the monetary institutions states had in place. I then consider the robustness of the argument when compared to other explanations. I introduce the veto player variables as described here to the data sets and methodologies described in Bernhard for central bank independence and Bernhard and Leblang for exchange rate regime choice.61

**Central Bank Independence**

I begin with a discussion of central bank independence (CBI). I first consider general measures of CBI common in the literature. The argument developed here suggests that there should be differences between political and deficit-financing independence, and I also break down the measure of CBI in Grilli, Masciandaro, and Tabellini according to these two categories.62 Table 3 displays the average central bank independence of OECD countries according to the two dimensions of one or two plus party veto players and unitary or federal systems of government. The average central bank independence score is the one reported in Bernhard.63 He averages three popular indices developed in the early 1990s.64 The table indicates that increases in veto players generally increase central bank independence. The jump from unitary to federal systems, however, leads to greater independence than the change from one party veto player to many players. One surprise is that there is little apparent difference between multi-party and one-party unitary states in these aggregate indices—the average score of .42 is only slightly higher than .39. It would appear that the only difference in veto players comes from the move from unitary to federal forms of government.

61 Bernhard 1998 and Bernhard and Leblang 1999. I also considered the methodology provided in Moser. The correlation between his average measure of central bank independence and Bernhard’s 1998, however, is .95.  
64 Those indices appear in Grilli, Masciandaro, and Tabellini 1991, Alesina and Summers 1993, and Cukierman 1992. Bernhard 1998 made a minor error in rescaling the GMT data, which is on a 16 point scale but which he divided through by 15. This slightly inflates the independence of central banks according to GMT. As a consequence corrected figures for the average of the three indices used here are either .01 or .02 lower than Bernhard 1998, 312, reports.
Yet this conclusion would be too dismissive. The average scores reported in Bernhard factor in many ways of measuring central bank independence. Table 4 breaks down measures of independence according to the two dimensions of political and deficit-financing independence derived from Grilli, Masciandaro, and Tabellini.

Table 4a presents an ordinary least square (OLS) analysis of political independence and deficit financing independence on a 0 to 1 scale according to the number of veto players. Table 4b provides the averages for each possible configuration of veto players. Both theoretical expectations are confirmed. One-party unitary governments easily have the most dependent banks on the political scale with an average measure of .21. Moreover, for both unitary and federal states there is a clear jump when one moves from a one-party government to multi-party governments, and the party veto player variable is statistically significant at the p=.04 level. In contrast, for the deficit measure two-party unitary governments have the most dependent central banks. It is also the only case where one would expect fiscal political business cycles. The main difference in this case is the move from unitary to federal systems, however, where states uniformly free their central banks from financing the (central) government deficit. This finding is consistent with the argument presented earlier that federal states have little reason to pursue fiscal political business cycles.

[Table 4a and 4b about here]

A useful question to ask is how well this explanation compares with Bernhard. Unfortunately, however, it is not possible to include all of the relevant variables in a regression. There is a serious problem of multi-collinearity—the correlation between Bernhard’s strong bi-cameralism and the federalism measure here is .76, for example, and in fact the only difference between the two variables

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65 The political independence index is one a scale of 1 to 8, while the financing of the budget balance is on a scale of 1 to 5. It should be noted that I focus on the financing of the budget only for the economic independence measure. This is done for two reasons; first, it is unclear how bank supervision requirements affect the government’s ability to force the bank to finance its deficit; and second Grilli, Masciandaro, and Tabellini 1991 allow the bank supervision subindex to range from 0 to 2 instead of 0 to 1, which overemphasizes its importance. There is no substantive difference in results when the full index is used instead of the Independence from Financing the Deficit subindex.

66 Bernhard 1998.
is that I code Austria and Canada as a “1” as federal countries while Bernard codes those countries as not having a strong second chamber and consequently as a “0.” Similarly, the Spearman rank correlation between multiple party veto players and Bernhard’s punishment index is a fairly high .56. Such correlations indicate serious problems when there are only 18 countries in the dataset. It may be that strong bicameralism is a result of federalism, for example, but one cannot dismiss with so few cases that what matters with federalism is that most federalist states have strong second chambers.

Yet the results do allow one to answer a question posed earlier in the paper. The brief review of veto players and central banking indicated that there was not a consensus exactly on how veto players affected central bank independence. This section indicates that different veto players have different effects on the bank. Where there is just one party veto player, the bank is more likely to be politically dependent. Concerning the bank’s funding of the budget deficit, however, federal systems are most likely to be most independent.

**Exchange Rate Regime Choice**

I begin with simple bi-variate comparisons as in the previous section. I also, however, consider the usefulness of the argument in a multi-variate setting based upon a comparison with Bernhard and Leblang.

Table 5 compares 18 OECD countries according to the two dimensions of party veto players and unitary-federalist forms of general government during the period 1974-1979 and 1980-91 for exchange rate choice. States that the theory accurately predicts are printed in **bold**. For the time period 1974-79 sixteen of eighteen countries have exchange rate regimes consistent with the theory. The

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67 I did nonetheless perform the regression analyses. I included only Bernhard’s 1998 punishment index, which was not as correlated with the variables in the veto player regressions as the Strong Bicameral Variable. The punishment index had no effect on the Independence from Financing the Deficit index, but it was significant at the p<.08 level and it had the correct sign for the political independence index. This result is not surprising given the emphasis in Bernhard on concerns about delegating monetary policy to one player where the punishment index is high.

68 Bernhard and Leblang 1999. I am indebted to William Bernhard, David LeBlang, and Peter Moser for making their data sets available to me.

69 The categorization of fixed and flexible exchange rate regimes is from Clark and Hallerberg 2000.
errors were for small European states that we expected to have flexible exchange rates but that had fixed rates—Austria and Norway.

The results are similar for the period 1980-91. Capital mobility is presumably increasing during this time period, which would make the choice between fiscal and monetary policy especially stark. Once again, correct predictions are in bold, and fifteen of eighteen states have exchange rate regimes consistent with the argument. Two of the three misses are in the unitary one veto player box. They are also Scandinavian countries that had regular one-party 

minority governments in the 1980’s. It may be that one-party minority governments cannot survive well under flexible exchange rates for two reasons. First, opposition parties do not like giving an identifiable tool like monetary policy autonomy to a one-party minority government. Second, fiscal policy spending can both buy votes from the opposition while boosting the economy. Finally, the argument in the theoretical section focused especially on one-party states with low district magnitudes. Norway and Sweden had higher district magnitudes than the remaining states.

Yet the results at this stage can only be suggestive. While they generally conform to expectation, there may be rival explanations that do a better job of explaining the patterns in the data. Bernhard and Leblang argue that in political systems where the costs to electoral defeat are high and electoral timing is exogenous governments are less willing to lose monetary policy autonomy through a fixed exchange rate. They measure states according to dummy variables for whether they are majoritarian-low opposition influence, proportional-low opposition influence, or proportional-high opposition influence, and whether they have exogenous timing of elections. They provide a sophisticated test of their argument that uses a battery of control variables. One of the explanations they consider is the effect of partisanship, and including a measure for partisanship. Other variables include: economic openness; vulnerability to shocks; capital mobility; domestic macroeconomic conditions; and a set of political variables, election year, a legal definition of central bank independence, whether a
country is European, and whether a country was a member of the European Community. They use both constrained multinomial logit as well as binomial logit to investigate their hypotheses. Because they reach broadly similar results with both methods and I categorize exchange rate regimes dichotomously I investigate only their binominal logit. Their data set includes 21 OECD countries for the years 1974-95.

Table 6 presents the logit results with the veto player variables introduced into Bernhard and Leblang’s full model.

[Table 6 about here]

The logit provides supporting evidence for the theory developed here. The insignificant value for the variable “federalism” indicates that a move from a unitary system to a federal system under one party veto player has no effect, as one would expect from Table 2. The positive, and significant, value for “multiple party players” indicates that a move in unitary systems from one to multiple players increases the likelihood of a state adopting a fixed exchange rate. Finally, the conditional coefficient for party players in federal systems is significant and indicates that such systems are more likely to have flexible exchange rates.

The analysis also has implications for other arguments. The results for Bernhard and Leblang’s original political variables remain—exogenous electoral timing as well as the division of states according to whether they are majoritarian or proportional and whether they have low or high opposition parliaments are significant. In contrast, there is no support in the results for partisan arguments. This reinforces the non-finding of the effects of partisanship reported by Clark and Hallerberg and Clark for political business cycles in the post-Bretton Woods era. It may be that differences between the political left and the right on exchange rate

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70 For details about the expected effects of these variables see Bernhard and Leblang 1999, 84.
71 I make only one change to their data set. They code Italy as pegged in 1993. I change this to float; Italy was forced out of the EMS in Fall 1992.
72 Stata 7.0 was used to calculate the results. Dummy variables for years were included but are not reported.
73 Clark and Hallerberg 2000 and Clark forthcoming.
policy, and on macro-economic policy more generally, have diminished since the inter-war years that Simmons considers.\(^74\)

**Conclusion: Comparison with Other Approaches and Implications for Europe**

Cohen notes recently in his discussion of state preferences for different types of exchange rate regimes that “domestic politics obviously matters, but it is difficult to say just how.”\(^75\) This paper seeks to answer this question through the development of a veto player argument where politicians seek to remain in office. While it takes no issue with Keefer and Stasavage’s contention that there are no *functional* grounds for a link between veto players and exchange rate choice, it does provide a political rationale as well as empirical evidence to suggest that scholars should look at combinations of party and sub-national veto players in the future.\(^76\)

This research fits well with other recent work in the field, and indeed it provides a unified theoretical framework to bring together different strands of literature. It is consistent with Bernhard and Clark.\(^77\) Bernhard’s punishment index, which tracks the ability of parties in government to be punished through committee strength, the presence of coalition governments, and the level of polarization, is positively correlated with central bank independence. This index is also positively correlated with the number of party veto players. Clark finds that central bank independence usually accompanies fixed exchange rate regimes, and he finds three outliers—Australia, Canada, and the United States. While he does not focus only on the effects of veto players, his discussion focuses on party veto players only, not sub-national players. His three outliers are all federal states, and they fit the predictions of the model provided here. The discussion is also complementary to Bernhard and LeBlang.\(^78\) They find that coalition states that have both independent central banks and fixed exchange rates have coalitions that are less prone to break-down.

\(^{74}\) Simmons 1994.  
\(^{75}\) Cohen 2000, 20.  
\(^{76}\) Keefer and Stasavage this volume.  
\(^{77}\) Bernhard 1998 and Clark this volume.  
\(^{78}\) Bernhard and LeBlang this volume.
In another one of their articles, Bernhard and LeBlang argue that countries with committee systems that have high opposition influence tend to fix their exchange rate, while those that have low opposition influence fear having no impact on monetary policy and hence support flexible exchange rates. As I have argued elsewhere, committee strength in parliamentary committees is largely a function of the number of party veto players and how those veto players form coalitions. While the results presented here in no way invalidate their findings, the argument does provide a more complete explanation. Some states choose fixed exchange rates because they would like to use fiscal policy for electoral purposes, while they argue that the choice is between using monetary policy to manipulate the economy and using no policy. A useful future exercise would be to examine in greater detail why high opposition states are more likely to favor fiscal policy over monetary policy.

This study also has some interesting implications for the future of monetary institutions in Europe. To the extent that the European Union resembles a state with multiple institutional veto players and multiple party players, it should move to the lower right-hand corner of Table 1, or to an independent central bank and flexible exchange rates. Indeed, at the European Union level, this is exactly what has happened. In the case of the United Kingdom, the implication of this study is that if Tony Blair truly wants to increase support for a fixed exchange rate in the form of the introduction of the euro he should introduce proportional representation and, consequently, increase the number of domestic veto players. If he cares more about the maintaining his party’s position in government, however, the continuance of a plurality electoral system remains the rational course to continue, but the Euro may then remain only a dream for some British Europhiles.

79 Bernhard and LeBlang 1999.
80 Hallerberg 2000.
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Keefer, Philip, and David Stasavage. This volume. “Checks and Balances, Asymmetric Information, and the Credibility of Monetary Commitments.”


Milesi-Ferretti, Gian Maria, Roberto Perotti, and Massimo Rostagno. 1999. Electoral Systems and the Composition of Public Spending. Paper Presented at the Conference on the Impact of Increased Economic Integration on Italy and the Rest of Europe, Georgetown University, April 30-May 2.


Table 1: Key Differences Between Monetary and Fiscal Policy

<table>
<thead>
<tr>
<th></th>
<th>Monetary Policy</th>
<th>Fiscal Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targetability to Particular Groups</td>
<td>Difficult</td>
<td>Easy</td>
</tr>
<tr>
<td>Effective in Manipulating the Economy under Capital Mobility with</td>
<td>Flexible Exchange Rate</td>
<td>Fixed Exchange Rate</td>
</tr>
<tr>
<td>Costs</td>
<td>Higher inflation</td>
<td>Higher Deficits, Potentially Higher Debt Burden</td>
</tr>
<tr>
<td>Jurisdiction</td>
<td>National</td>
<td>National, State, and Local</td>
</tr>
<tr>
<td>Decision-making</td>
<td>National</td>
<td>National, State, and Local</td>
</tr>
<tr>
<td>Ease of Understanding, Policymakers</td>
<td>Difficult</td>
<td>Easy</td>
</tr>
</tbody>
</table>
### Table 2: Predictions from a Veto Player Approach

<table>
<thead>
<tr>
<th>Sub-national Players (Unitary vs. Federal Systems)</th>
<th>Party Veto Players (One Party vs. Multi-Party)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unitary</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Dependent Central Banks (Low Political, Low Deficit-financing), Flexible Exchange Rates (United Kingdom)</td>
</tr>
<tr>
<td></td>
<td>2+</td>
</tr>
<tr>
<td></td>
<td>Intermediate Independent Central Banks (High Political, low Deficit-financing), Fixed Exchange Rates (Netherlands)</td>
</tr>
<tr>
<td>Federal</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Intermediate Independent Central Banks (Low/High Political, High Deficit-financing), Flexible Exchange Rates (Canada)</td>
</tr>
<tr>
<td></td>
<td>2+</td>
</tr>
<tr>
<td></td>
<td>Highly Independent Central Banks (High Political, High Deficit-financing), Flexible Exchange Rates (Germany)</td>
</tr>
</tbody>
</table>

“Political” refers to the ability of the government to control the central bank directly, while “Deficit-financing” refers to whether the central bank is required to finance government policy, and specifically government debts.
Table 3: Independence: Average Central Bank Independence and the Number of Veto Players

<table>
<thead>
<tr>
<th>Sub-national Players (Unitary vs. Federal Systems)</th>
<th>Party Veto Players (One Party vs. Multi-Party)</th>
<th>1</th>
<th>2+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unitary</td>
<td>New Zealand (.24), Spain (.30), Japan (.39), Norway (.39), Sweden (.39), Britain (.4), Ireland (.48), and Denmark (.53) (.39)</td>
<td>Italy (.31), Belgium (.38), France (.41), the Netherlands (.56) (.42)</td>
</tr>
<tr>
<td></td>
<td>Federal</td>
<td>Australia (.46), Canada (.59) (.53)</td>
<td>Austria (.59), Germany (.82), Switzerland (.81), US (.71) (.73)</td>
</tr>
</tbody>
</table>

Data are averages of Grilli, Masciandaro, and Tabellini 1991, Alesina and Summers 1993, and Cukierman 1992, and are based on Bernhard 1998, 312. Higher figures indicate greater independence. Figures reported in parentheses are averages for the countries in the given cell. Countries that have a majority of one party governments during the period 1960-90 are coded as having one veto player, while countries with two or more veto players are coded as 2+. Opposing majorities are counted in second chambers where second chambers can block financial legislation according to Tsebelis and Money 1997.
Table 4a: Regression Analysis Using Political and Deficit Finance Independence as Measures of Central Bank Independence

<table>
<thead>
<tr>
<th>Dependent Variable: Political Independence</th>
<th>Dependent Variable: Independence from Financing Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient (standard error)</td>
<td>Coefficient (standard error)</td>
</tr>
<tr>
<td>2+ Party Players</td>
<td>.20* (.09)</td>
</tr>
<tr>
<td></td>
<td>.04 .46</td>
</tr>
<tr>
<td>Federalist country</td>
<td>.22 (.13)</td>
</tr>
<tr>
<td></td>
<td>.11 .02</td>
</tr>
<tr>
<td>Party*Federalism</td>
<td>-.04 (.17)</td>
</tr>
<tr>
<td></td>
<td>.80 .18</td>
</tr>
<tr>
<td>constant</td>
<td>.22** (.06)</td>
</tr>
<tr>
<td></td>
<td>.002 .002</td>
</tr>
<tr>
<td>N=20, F(3, 16)=4.92, p&gt;.01, r-squared=.48, Adj R-squared=.38</td>
<td>N=18, F(3, 14)=6.47, p&gt;.006, r-squared=.58, Adj R-squared=.49</td>
</tr>
</tbody>
</table>

Figures for political independence and financing the deficit are from Grilli, Masciandaro, and Tabellini 1991, 368-69. Grilli, Masciandaro, and Tabellini do not report figures for Norway and for Sweden. The comparison with Table 3 is therefore not exact. Moser 1999 provides data from Eijffinger and van Keulen 1995 for Finland and Norway that is not included in Grilli, Masciandaro, and Tabellini for the political independence regression that are included here.
Table 4b: Comparison of Veto Players with Central Bank Political Independence and Independence from Financing the Deficit

<table>
<thead>
<tr>
<th>Party Veto Players</th>
<th>1</th>
<th>2+</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unitary States</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Independence</td>
<td>.21</td>
<td>.42</td>
</tr>
<tr>
<td>Debt-Financing Independence</td>
<td>.49</td>
<td>.4</td>
</tr>
<tr>
<td><strong>Federal States</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Independence</td>
<td>.44</td>
<td>.59</td>
</tr>
<tr>
<td>Debt-Financing Independence</td>
<td>.9</td>
<td>.85</td>
</tr>
</tbody>
</table>

Note that the averages can be computed directly from the coefficients from the regression in Table 4a.
Table 5: Veto Players and Exchange Rate Regime Choice 1974-79 and 1980-91

<table>
<thead>
<tr>
<th>Sub-national Veto Players</th>
<th>Party Veto Players (One Party vs. Multi-Party)</th>
<th>1</th>
<th>2+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prediction: Flexible</td>
<td>1974-79</td>
<td>1980-91</td>
</tr>
<tr>
<td>Unitary</td>
<td>Predicted: Fixed</td>
<td>1974-79</td>
<td>1980-91</td>
</tr>
<tr>
<td>Britain, France, New Zealand, Italy, Japan, Norway</td>
<td>Belgium, Denmark, Finland, Ireland, Netherlands, Sweden</td>
<td>Belgium, Denmark, Finland, France, Ireland, Italy, Netherlands</td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>Australia, Canada</td>
<td>Australia, Canada</td>
<td>Austria, Germany, Switzerland, US</td>
</tr>
<tr>
<td></td>
<td>Prediction: Flexible</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Predicted: Flexible</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Countries that appear in **bold** match expectations. Spain is excluded from 1974-79 because it did not become a democracy until 1977.
### Table 6: Binomial Logit of Exchange Rate Choice (1=Fixed Exchange Rate)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient (Std Error)</th>
<th>probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal State</td>
<td>1.40 (1.75)</td>
<td>0.421</td>
</tr>
<tr>
<td>Multiple Party Veto Players</td>
<td>1.80 (.63)</td>
<td>0.004</td>
</tr>
<tr>
<td>Federal*Multiple Party</td>
<td>-5.90 (1.95)</td>
<td>0.003</td>
</tr>
<tr>
<td>Conditional Coefficient: Multiple Party when Federalism=1</td>
<td>-4.09 (1.80)</td>
<td>0.027</td>
</tr>
<tr>
<td>Majoritarian-Low Opposition</td>
<td>-5.00 (1.45)</td>
<td>0.000</td>
</tr>
<tr>
<td>Proportional-low Opposition</td>
<td>-5.22 (1.48)</td>
<td>0.000</td>
</tr>
<tr>
<td>Electoral timing</td>
<td>-4.98 (1.23)</td>
<td>0.000</td>
</tr>
<tr>
<td>Openness</td>
<td>6.70 (2.73)</td>
<td>0.014</td>
</tr>
<tr>
<td>Domestic Credit Shock</td>
<td>.00 (.001)</td>
<td>0.624</td>
</tr>
<tr>
<td>Capital Controls</td>
<td>1.77 (.70)</td>
<td>0.011</td>
</tr>
<tr>
<td>International Capital Mobility</td>
<td>6.93e-06 (3.88e-06)</td>
<td>0.074</td>
</tr>
<tr>
<td>Economic Growth</td>
<td>-99.42 (53.25)</td>
<td>0.062</td>
</tr>
<tr>
<td>Partisanship</td>
<td>.26 (.58)</td>
<td>0.652</td>
</tr>
<tr>
<td>Election Year</td>
<td>.20 (.47)</td>
<td>0.671</td>
</tr>
<tr>
<td>Europe</td>
<td>4.11 (.86)</td>
<td>0.000</td>
</tr>
<tr>
<td>EC Membership</td>
<td>1.92 (1.06)</td>
<td>0.069</td>
</tr>
</tbody>
</table>

N=432, Log Likelihood= -99.27 Probability=0.005