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Do Parties Matter? A Political Model of Monetary Policy in Open Economies

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DO PARTIES MATTER? A POLITICAL MODEL OF MONETARY POLICY
IN OPEN ECONOMIES

by

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DO PARTIES MATTER? A POLITICAL MODEL OF MONETARY POLICY
IN OPEN ECONOMIES

Hulya Unlusoy, Ph.D.

Western Michigan University, 2016

In this doctoral dissertation, I present an original political model of monetary policy in open economies that reframes the Mundell-Fleming model when party politics and long-term interest rates are examined with the three economic variables (monetary policy autonomy, capital mobility, fixed exchange rate) that form the basis of the Mundell-Fleming model. The Mundell-Fleming model explains that there is no monetary policy autonomy in the short term under high capital mobility and a fixed exchange rate system. To see whether I arrive at a different conclusion than the Mundell-Fleming model, I pose the following two research questions: 1. What explains variations in monetary policies? 2. What is the effect of political parties in power on monetary policies? These research questions are significant for political science because the questions further the debate in political science literature about whether political parties matter for monetary policies. I contribute to the debate by comparing the effect of political parties on monetary policies across a fixed exchange rate era versus a floating exchange rate era and test the three hypotheses of the dissertation with my political model of monetary policy in open economies.

In my contribution, first, I review political science and economic literature to detail the debate about whether differences in monetary policies exist in a country based on left or right party in power and to provide background insights about the three hypotheses of the doctoral dissertation (concerning the effects of political parties in power, increased capital mobility, and central bank independence on monetary policies). Second, using a sample of eighteen advanced industrial democracies, I conduct a quantitative analysis of monetary policy autonomy in a fixed exchange rate period versus in a floating exchange rate period to test my hypotheses with my model. Third, I use case study research to consider the qualitative reality of the United States, a country from among the eighteen. Finally, I compare the results of the quantitative and qualitative analyses and arrived at a different conclusion than the Mundell-Fleming model. I conclude that a country may have monetary policy autonomy under high capital mobility and a fixed exchange rate system.

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CHAPTER I

INTRODUCTION

Do Parties Matter? A Political Model of Monetary Policy in Open Economies

Introduction

The purpose of this dissertation is to present an original political model of

monetary policy in open economies that reframes the Mundell-Fleming model when

party politics and long-term interest rates are analyzed along with the three economic

variables that form the basis of the Mundell-Fleming model and other policy models

derived from Mundell-Fleming. The three economic variables that form the basis of

the Mundell-Fleming model, which may be called the Mundell-Fleming trilemma

variables, include a) capital mobility, b) fixed exchange rate, and c) autonomous

monetary policy. The Mundell-Fleming model suggests that there is no monetary

policy autonomy in the short term under high capital mobility and a fixed exchange

rate system (Fleming 1962; Mundell 1963).

In this dissertation the two questions guiding my research are as follows:

1. What explains variations in monetary policies? 2. What is the effect of political

parties in power on monetary policies? These two research questions are important for

the subject matter of democracy. Even though democracies face similar pressures of an international economy, such as increased capital mobility, they do not pursue similar monetary policies. Monetary policy autonomy in democracies ranges from more to less autonomous monetary policy. As seen in Table 1.1, monetary policy autonomy varies across democracies both in a fixed exchange rate era and in a floating exchange rate era.

The reason for this variation might be related to the view that democracies may set their national interest rate to be different from the world interest rate to respond to the policy preference of their constituents. I adopt Bearce's (2002) method to define the world interest rate by the average G-5 (the United States, the United Kingdom, Germany, France, and Japan) interest rate. For a G-5 country, I define the world interest rate without that country being included. When a democratic government sets national interest rates higher than the world interest rate, it will attract foreign investments and encourage national investments (e.g. educational) in the economy and thereby respond to the challenges of increased capital mobility. Increased investments will escalate the economy's competitiveness and aggregate demand and thus will increase economic growth, which would favor left parties' consumer constituents. When a democratic government sets a national interest rate closer to a low world interest rate, that low rate will stabilize the country's currency, which would increase cross-border capital investments that, in turn, would raise investors' returns on their assets and, hence, would favor right parties' investor constituents. Thus, I incorporate party politics into my political model of monetary policy in open economies that

reframes the Mundell-Fleming model to see whether changes in political parties in power affect monetary policies in a fixed exchange rate era and a floating exchange rate era.

These research questions of the dissertation are also important for political science because the questions further the debate in political science literature about whether political parties in power matter for monetary policies. Within that debate, Clark and Hallerberg (2000) argue, based on the Mundell-Fleming model, that when a country has strong central bank independence or a fixed exchange rate, there will be no left-right party differences in monetary policies in the country. Nevertheless, many scholars do not concur with Clark and Hallerberg (2000), and they argue that political parties in power will exert influence on a country's monetary policies (Hibbs 1977; 1987; Alesina 1987; Garrett 1995; 1998; Oatley 1997; 1999; Boix 2000; Bearce 2002; 2007). Bearce (2002; 2007) explains the influence of the left or right party in power on monetary policies by only examining a floating exchange rate period, 1973-1997, and reduces the Mundell-Fleming trilemma to a dilemma between monetary policy autonomy and exchange rate stability. I take the argument one step further by analyzing the effect of political parties in power on monetary policies both for a fixed exchange rate era, 1960-1972, and for a floating exchange rate era, 1973-2009, to see whether I arrive at a different conclusion for the Mundell-Fleming model.

In order to contribute to the debate, what I do differently from Bearce (2002; 2007) is I compare the effect of political parties in power on monetary policies in a

fixed exchange rate period versus in a floating exchange rate period to see whether or not an increase in monetary policy autonomy occurs when a country moves from fixed to floating exchange rates.

In this dissertation, I examine if and when political parties in power, capital mobility, and central bank independence influence monetary policy autonomy. First, I review the political science and economic literature to discuss the effects of increased capital mobility and central bank independence on monetary policy autonomy and to detail the debate about whether political parties in power matter for monetary policies. Second, using a sample of eighteen advanced industrial democracies, which can be seen in Table 1.1, I conduct a quantitative analysis of monetary policy autonomy during the fixed exchange rate era, 1960-1972, and the floating exchange rate era, 1973-2009, in order to test my hypotheses with a model. Third, though the model relied on data from eighteen economies, to shine a spotlight on the data, I use case study research to consider the qualitative reality of the United States, which is one of the eighteen economies I researched, because the United States offers national variations that provide salient points about the research questions. Finally, I compare the result of the quantitative analysis of monetary policy autonomy with the result of the qualitative analysis of monetary policy autonomy. Because Table 1.1 shows monetary policy autonomy varies across countries, I arrive at a different conclusion than the Mundell-Fleming model.

In this initial Chapter, first, I explain the Mundell-Fleming trilemma (Fleming 1962; Mundell 1963). Second, I define monetary policy and explain how it varies across countries. Third, I present a brief overview of the literature related to the research questions of the dissertation. Fourth, I present my hypotheses drawn from the literature and also explain how I test the hypotheses. Fifth and last, I present an outline of the dissertation by summarizing each of the chapters in the dissertation.

The Mundell-Fleming Trilemma

The Mundell-Fleming model is associated with a trilemma. The Mundell-Fleming trilemma is used in international political economy literature as the unholy trinity or impossible trinity. As can be seen in Figure 1.1, the Mundell-Fleming model suggests that a country can have only two of three specific economic variables at a given time: a fixed exchange rate, high capital mobility, and monetary policy autonomy. If a country had the three economic variables at a given time, as I detail in Chapter II, then that country would face an economic crisis, as increased capital mobility would cause investors to sell the national currency which, in turn, would decrease foreign investments in the country's economy and would lead to an imbalance between the national currency and foreign currency.

Bearce (2007) explains the following fixed exchange rate periods according to the Mundell-Fleming trilemma. During the Classic Gold Standard (1870-1914) and the Gold Exchange Standard (1922-1931), countries chose a fixed exchange rate along with capital mobility over national monetary policy autonomy. The implication of the

lack of national monetary policy autonomy for these countries during the Gold

Standard years is that governments in the countries could not determine monetary

policy instruments that would be needed to accomplish domestic economic targets.

The Classic Gold Standard was a system in which gold coins were a means of

exchange in an economy rather than the paper money we use today. The Gold

Exchange Standard referred to a mechanism by which a country fixed a national

currency to an external value of gold. Throughout the Bretton Woods fixed exchange

rate system, that was generated in 1944 and terminated in the early 1970s, countries

chose a fixed exchange rate in conjunction with monetary policy autonomy over

capital mobility. This means that during the Bretton Woods system, investors in these

countries could be subject to government regulations when they moved their assets

across international borders. The Bretton Woods system was an international

monetary system in which the national currency of countries was pegged to the value

of the United States dollar that was pegged to gold. The Bretton Woods fixed

exchange rate regime facilitated monetary policy autonomy from the world interest

rate and, thereby, facilitated interventionist practices by governments to set national

interest rates in order to achieve partisan objectives, such as employment and growth

(Bearce 2007).

In the framework of the Mundell-Fleming trilemma, the Bretton Woods system

allowed countries to have national monetary policy autonomy along with a fixed

exchange rate regime but not high capital mobility. The Bretton Woods international

agreement in 1944 accepted the provision that governments would impose restrictions

on cross-border capital movements if necessary (Bearce 2007).

Fixed Exchange Rate

Capital Mobility   Monetary Policy Autonomy
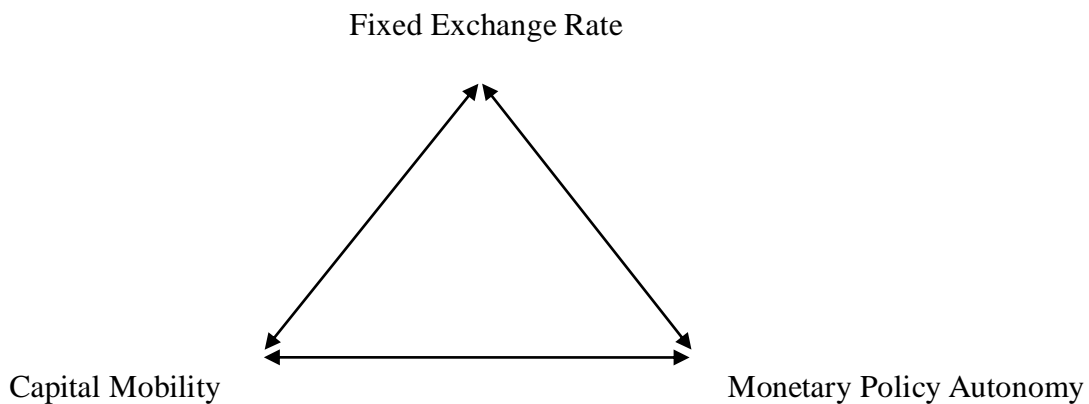
Figure 1.1 The Mundell-Fleming Trilemma
Source: Bearce, David. *Monetary Divergence: Domestic Policy Autonomy in the Post-Bretton Woods Era*. Ann Arbor, MI, USA:
University of Michigan Press, 2007, 17.

However, as Bearce (2007) notes, Quinn and Inclan (1997) argue that

throughout the 1960s and prior to the decline of the Bretton Woods international

monetary system in the early 1970s advanced industrial countries facilitated cross-

border capital movements. Given the increased capability of capital holders to move

their capital across international borders, governments chose monetary policy

autonomy over the Bretton Woods fixed exchange rate system in the early 1970s

(Bearce 2007). This implies that since the end of the Bretton Woods system

governments have used monetary policies either to increase interest rates that would

prevent high capital mobility or to decrease interest rates that would encourage capital

mobility.

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What is Monetary Policy?

I define monetary policy as a monetary strategy of a country to control the money supply in the economy in order to influence the economy's expansion or contraction by modifying monetary supply and credit growth as well as reserve requirement and interest rates. Raising money supply and credit growth along with lowering reserve requirement and interest rates will increase the money supply in a country's economy which would result in the economy's expansion. The opposite modifications of money supply and credit growth along with reserve requirement and interest rates will decrease the money supply in a country's economy which would give rise to the economy's contraction. For instance, when a country purchases public or private sector assets by means of quantitative easing strategies, this quantitative easing strategy will decrease interest rates and increase the money supply, which would expand that country's economy. Since the global economic crisis of 2008, advanced industrial countries, specifically the United States, have used quantitative easing as monetary policies to expand their economy in a response to the challenges of the crisis.

Corder (2012) says that to respond to the crisis of 2008, the US Federal Reserve used quantitative easing to increase the money supply and to lower interest rates, which stimulated mortgage lending and spurred economic growth, by purchasing agency mortgage-backed security (MBS) that permitted securitization of mortgage loans by Federal National Mortgage Association (Fannie Mae) and Federal Home Loan Mortgage Corporation (Freddie Mac). The Federal Reserve also purchased

private MBS to reduce capital costs for the secondary market after the breakdown of the private MBS market that allowed securitization of mortgages by Fannie Mae and Freddie Mac (Corder 2012). Corder (2012) also says that by extending the purchases of long-term assets (Treasury securities) into 2011, defined as "Quantitative Easing Two [QE2]", the Federal Reserve aimed at returning the economy to normal (Corder 2012, 117).

I use long-term interest rates on government bonds with a ten-year maturity drawn from Armingeon et al. (2011) Comparative Political Data Set I, 1960-2009, as an indicator of monetary policy in my model. I develop a measure of monetary policy autonomy by making use of long-term interest rates on government bonds pulled from Armingeon et al.'s (2011) Comparative Political Data Set I, 1960-2009, so that I can see if monetary policies vary across countries according to modification of their national long-term interest rates relative to the long-term world interest rate. Like Bearce (2002), I utilize the interest rate differential between the national and world interest rates as a measure of monetary policy autonomy.

I assume that the greater the national interest rate varies from the world interest rate, the greater national monetary policy autonomy will be from the world interest rate. Because I am interested in the size of the interest rate differential, not whether it is below or above the world interest rate, I interpret the data in Table 1.1 according to the absolute value of the interest rate differential.

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Table 1.1 displays a selection of cases and the average long-term nominal interest rate differentials of eighteen advanced industrial countries from the Organization for Economic Cooperation and Development (OECD) and the European Union (EU) for the Bretton Woods fixed exchange rate era, 1960-1972, and the post-Bretton Woods floating exchange rate era, 1973-2009. The exchange rate regime for Austria, Belgium, Finland, France, Germany, Ireland, Italy, Netherlands, which are EU countries from among the eighteen in Table 1.1, has changed radically since these countries came under the European Central Bank rule in 2002 during which the Euro was entered into circulation as a single European currency. The European Central Bank has determined monetary policy for these EU countries since 2002. The European Central Bank's control over monetary policy of these EU countries does not matter for my argument because I argue that, for instance, the price of long-term bonds Germany sells differs from the price of long-term bonds Belgium sells. As seen in the evidence in Table 1.1, the average long-term interest rate differential between the long-term national interest rate on government bonds and the long-term world interest rate on government bonds varies across countries both in a fixed exchange rate period and in a floating exchange rate period, which suggests that monetary policy autonomy from the world interest rate varies across countries.

Monetary policy autonomy from the world interest rate in the majority of the selected countries, such as, the United Kingdom, Australia, Belgium, Canada, France, Germany, and Italy, increases while monetary policy autonomy in the United States, Finland, the Netherlands, New Zealand, and Norway decreases when a country moves

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from fixed to floating exchange rates. For instance, Table1.1 displays that the average

interest rate differential between the national and world interest rates in Germany

increased from 0.75 points in the Bretton Woods fixed exchange rate era to -0.78

points in the post-Bretton Woods floating exchange rate era. This implies that

Germany's national interest rates varied slightly less from the world interest rates in

the Bretton Woods fixed exchange rate era than in the post-Bretton Woods exchange

rate era. Given its increased monetary policy autonomy when it moved to floating

exchange rates, Germany may have begun to allow the value of its currency to

increase against foreign currencies immediately prior to the end of the Bretton Woods

system in the early 1970s, which would attract capital from other countries' investors.

　　　As Eichengreen (2011) notes, in 1971 the Bundesbank in Germany allowed the

deutschmark to increase against the dollar. He also notes that in the 1971 investors

began to worry about the possible dollar devaluations, during which the value of the

dollar decreased against foreign currencies, and investors therefore shifted their funds

from American investments to German investments. On August 15 of that year

President Richard Nixon suspended the convertibility of the dollar into gold, and the

United States decided to devalue the dollar, which France supported (Eichengreen

2011). With the Smithsonian agreement in 1971, Germany also concurred with the

United States and France and revalued the deutschmark against the dollar; however,

decreased interest rates in 1972 in the United States led the dollar to lose its value,

which encouraged investors to move their assets to Germany once again (Eichengreen

2011) in order to search for higher returns on their capital. This means that, compared

to the United States, in 1972, Germany set its national interest rates higher than the world interest rate. This also means that in 1972 the interest rate in Germany was higher than the interest rate in the United States. The data sets I develop from long-term interest rates on government bonds pulled from Armingeon et al.'s (2011) Comparative Political Data Set I, 1960-2009, suggest that the interest rate of 8.22% in Germany was above the world average of 7.37% and also was higher than the interest rate of 6.21% in the United States.

Overall, Table 1.1 shows that as an indicator of monetary policy choice, the average interest rate differential between the long-term national rate and the long-term world rate varies across the selected OECD and EU countries both in the Bretton Woods fixed exchange rate era and in the post-Bretton Woods floating exchange rate era. This point leads me to arrive at a different conclusion for the Mundell-Fleming model. That is, I posit that countries may have national monetary policy autonomy from external factors, such as the world interest rate, when they have a fixed exchange rate regime given high capital mobility, which is what my political model of monetary policy suggests.

Table 1.1
Average Interest Differentials, Fixed Exchange Rate Era (1960-1972) vs. Average Interest Differentials,
Floating Exchange Rate Era (1973-2009) for the Selected OECD and EU Countries

Country	The Average of Interest Rate Differentials (1960-1972)	The Average of Interest Rate Differentials (1973-2009)
Australia	-1.28	2.03
Austria	0.31	-0.31
Belgium	0.09	0.48
Canada	-0.32	0.90
Denmark	2.45	2.92
Finland	1.48	0.93
France	0.39	1.44
Germany	0.75	-0.78
Ireland	1.62	2.20
Italy	-0.58	2.91
Japan	-0.41	-3.05
Netherlands	-0.40	-0.37
New Zealand	-2.16	1.99
Norway	-1.20	0.95
Sweden	0.06	1.42
Switzerland	-2.21	-2.98
United Kingdom	0.70	2.18
United States	-1.65	0.22

Source: Armingeon et al. 2011 Comparative Political Data Set I, 1960-2009
Note: Since I am interested in the size of the interest rate differential between the long-term national rate and the long-term world
rate, I interpret the data according to the absolute value of the interest rate differential of the selected countries.

Brief Overview of the Literature

In the political science and economic literature there is a debate about whether changes in political parties in power affect monetary policies. In that debate Clark and Hallerberg (2000) suppose that a country's central bank, not elected politicians, determines monetary policy instruments. They note that central banks in the United States and Germany have more policy autonomy from political concerns, whereas central banks in Norway and Britain have less autonomy to set monetary policy instruments such as interest rates. However, just because central banks ultimately determine national monetary policy instruments does not necessarily mean that elected officials do not exert influence on monetary policy. Instead, as Clark and Hallerberg (2000) speculated, the Federal Reserve in the United States can be considered relatively autonomous because elected officials appoint central bankers and are able to take away their autonomy if necessary.

Clark and Hallerberg (2000) also suppose central banks control a country's money supply. The authors suggest that the central bank is the most important variable that can explain variations in a country's monetary policies because a country's money supply will increase or decrease according to decisions made by those in charge of the central bank, which will influence the economy's expansion or contraction. The authors also suggest that when a strong central bank independency or a fixed exchange rate or both of those variables exist in an economy, the monetary policy efforts of political parties will be impossible to distinguish.

However, other scholars argue that left-right party differences in monetary policy exist in a country's economy (Hibbs 1977; 1987; Alesina 1987; Garrett 1995; 1998; Oatley 1997; 1999; Boix 2000; Bearce 2002; 2007). Based on a Phillips curve trade-off in which there is an inverse relationship between unemployment and inflation, Hibbs (1977) argues that in the United States the Democratic Party will choose higher inflation and lower unemployment than the Republican Party according to the preference of their constituents. Similar to Hibbs (1977; 1987), Alesina (1987) argues that right parties in power will choose price stability while left parties in power will allow high inflation.

Like Hibbs (1977; 1987) and Alesina (1987), Bearce (2007) argues that political parties in power matter for monetary policies. In Bearce's (2007) view, monetary policy differences exist among the Organization for Economic Cooperation and Development (OECD) countries in the post-Bretton Woods era based on political parties in power. Utilizing a sample of OECD countries over the period of 1973-1997, Bearce (2007) tests his model and finds that left parties in power may be associated with higher interest rate differentials, larger currency variability, and greater spending than right parties in power. Bearce (2007) argues that governments in advanced industrial countries have to choose either national monetary policy autonomy or currency stability when high capital mobility is a given. He uses Britain and France as case studies in order to show whether there are left-right party differences in terms of the monetary policy autonomy and currency stability trade-offs. During the years Bearce (2007) studied, 1973-1997, conservative governments in Britain preferred

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currency stability that facilitated them to get political supports from internationally oriented investors; however, Socialist governments in France preferred national monetary policy autonomy, which implied that the French franc was unstable in the European Economic and Monetary Union (EMU) (Bearce 2007). Bearce (2007) concludes that the post-Bretton Woods period, 1973-1997, may be viewed as an era of monetary policy divergence in which countries utilized national monetary policy instruments to achieve either domestic economic goals or external exchange rate stability. Bearce's (2007) case studies suggest that the French Socialists allowed currency volatility in the EMU while the British Conservatives achieved currency stability outside the EMU. Bearce (2007) speculates that monetary policy differences in a country's economy may not be explained simply according to governments' currency regime commitments.

Bearce (2002) also speculates that increased capital mobility may be associated with an increase in a country's monetary policy autonomy necessary for monetary policy differences. However, in the literature conventional wisdom, which is defended by Cohen (1993) and Peterson (1995), suggests that increased capital mobility coincides with decreased monetary policy autonomy. Bearce (2002) breaks with conventional wisdom by discussing the fiscal policy and monetary policy roles left and right parties in power may be motivated to adopt during times of high capital mobility. At the time of Bearce's (2002) article, he felt political parties in power could no longer afford to focus primarily on their country's fiscal policy by attempting to use government spending increases or decreases to impact the country's domestic

economy. Instead, he believed, that global economic forces were motivating both left

and right parties in power to manage national economies by carefully considering the

country's monetary policy to ensure the country's competitiveness in the global market

and by continuing to attend to the country's fiscal policy. Bearce (2002) backed up his

economic speculations, including his ideas about the influence of high capital mobility

on monetary policy autonomy, by using models with data from OECD countries for

the post-Bretton Woods period from 1973 to 1997. He finds that high capital mobility

may be associated with increased monetary policy autonomy.

Bearce's (2002) models examine each variable separately as he moves

conventional wisdom about the impact of capital mobility on monetary policy to the

political arena by mentioning the effect a party in power may have on monetary

policy. Garrett (1995) used data from industrial countries for the period from 1967 to

1990 to analyze the impact on monetary policy that results from the interactive effect

of capital mobility and of left parties in power collaborating with labor organizations.

Garrett (1995) refers to the left party-labor organization collaboration as "left-labor

power" (Garrett 1995, 659). He also offers his findings in terms of two common

hypotheses found in the literature, the efficiency hypothesis and the compensation

hypothesis. The efficiency hypothesis states that a weak relationship exists between

the economic expansion policies of left-labor parties and high capital mobility, while

the compensation hypothesis states that a strong relationship exists between the

economic expansion policies of left-labor parties and high capital mobility. Among

Garrett's (1995) findings are three statistically significant results related to government spending, budget deficit, and interest rate.

Garrett (1995) found that when capital mobility is high, left-labor parties are associated with increased government spending, with increased budget deficits, and with increased interest rates. These findings all support the compensation hypothesis and offer no support for the efficiency hypothesis. Garrett's (1995) discussion of his findings about interest rates relates to monetary policy because the interest rate is a tool political parties in power use as they develop monetary policy strategies and objectives.

In addition to the effect of capital mobility, the literature on monetary policy autonomy also focuses on the effect of central bank independence. Grilli et al. (1991) analyze the effect of central bank independence on inflation and find that central bank independence results in low inflation. Similar to Grilli et al. (1991), Cukeirman et al. (1992) and Alesina and Summers (1993) also examine the relation of central bank independence to inflation in a country's economy. Cukeirman et al.'s finding (1992) that a lower inflation rate is associated with a more politically independent central bank coincides with Alesina and Summers' (1993).

Cukierman et al. (1992) determine central bank independence according to legal institutions, such as, a) appointment terms of the governor in which the longer the legal term of appointment is, the more independent the central bank will be from

politics in a country's economy, or b) constraints on the central bank's public sector

lending in which the tighter constraints on its public lending is, the more independent

the central bank will be from political influence (Cukierman et al. 1992, 356-357).

Like Cukierman et al. (1992), Grilli et al. (1991) also determine political independence

of the central bank according to legal institutions, such as, a) whether the government

appoints the central bank governor, b) whether the appointment is a long period of

time, c) whether the government must approve the monetary policy choice of the

central bank, d) whether the government representative must take part in the central

bank board, and e) whether the central bank statute stipulates overtly the monetary

stability goal of the central bank (Grilli et al. 1991, 366-367).

However, in Corder's (1998) view, the United States postwar experience

suggests the inadequacy of Grilli et al. (1991) and Cukierman et al.'s (1992) legalistic

approach for specifying central bank independence. Grilli et al. (1991) and

Cukierman et al.'s (1992) legalistic approach suggests that regardless of whether

central bankers' procedural choices matter, formal legal institutions specify central

bank independence. Instead, the political strategy, adopted by the United States

central bank in a setting in which formal legal institutions remain unchanged, specifies

central bank independence, according to Corder (1998). Corder (1998) argues that

with no legal institutional change, the United States central bank (the Federal Reserve)

puts into effect the following political strategy to increase and sustain its independence

over time. If monetary policy rules influence such constituents as small business

owners or home buyers that Congress tends to protect, then decision makers of the US

central bank will not choose these rules; however, if sector-specific interferences are considered necessary, then central bankers will choose to utilize indirect tools to transmit monetary policy restraint by means of bank institutions (that is, the Federal Reserve uses bank institutions to impose constraints on lending covertly). With this political strategy, the Federal Reserve decision makers change monetary policy rules both to reduce explicit conflict stemming from the central bank's monetary policy choice related to the distribution of capital across markets and to reduce political conflict resulting from the allocation of monetary policy restraint across markets.

Corder (1998) argues that decision makers' procedural choices with regard to monetary policy tools are consistent with this strategy that decision makers change monetary policy tools to discourage Congress from looking to the US central bank to redistribute capital across markets. Restrictive monetary policy rules of the US central bank, which impose constraints on congressional proposals for permanent distribution of credit by the US central bank to specific sectors, lead Congress to initiate alternatives to these policy rules by directly helping specific sectors through subsidized credit (Corder 1998). He also argues that decision makers modify monetary policy tools to discourage the executive branch from direct interventions in the market to control over the US central bank monetary policy choice. To isolate its independence from legal limitations and political interferences as well as to prevent Congress from directing credit to specific sectors, the US central bank in the 1970s used differential required reserve tools to orchestrate bank liabilities in an effort to indirectly encourage lending to specific sectors and to discourage lending to others

(Corder 1998). To indirectly decrease home owners' capital costs and to increase big businesses' capital costs, the US central bank in 1970, for instance, used these differential required reserve tools by increasing reserve requirements on commercial papers and decreasing reserve requirements on time deposits which created incentives for banks to finance home mortgages; however, if types of bank assets, such as consumer debts or mortgage loans, were regulated, then this would have facilitated supervision of Congress (Corder 1998).

Hypotheses of the Dissertation

Based on the literature, I develop three hypotheses. The three hypotheses of the dissertation are as follows:

(H$_1$) The party in power hypothesis posits that differences in monetary policy exist in a country's economy based on left or right party in power.

(H$_2$) The capital mobility hypothesis postulates that an increase in capital mobility results in less monetary policy autonomy from the world interest rate.

(H$_3$) The central bank independence hypothesis suggests that the more independent the central bank, the lower the inflation rate is in industrial countries and more insulated the central bank is from political influence of left or right parties.

I test the three hypotheses of the dissertation by conducting a cross-national analysis of eighteen advanced industrial countries both for the Bretton Woods 1960-1972 period of fixed exchange rates and the post-Bretton Woods 1973-2009 period of floating exchange rates. In order to test the hypotheses, I estimate the Bretton Woods and post-Bretton Woods models by drawing on my political model of monetary policy in open economies. I look at the results of the Bretton Woods and post-Bretton Woods models together to see whether I arrive at a different conclusion than the Mundell-Fleming model.

I develop a measure of monetary policy autonomy from the world interest rate based on Armingeon et al.'s (2011) Comparative Political Data Sets I, 1960-2009, on long-term interest rates on government bonds for eighteen advanced industrial countries. I look at the nominal interest rate differential in the Bretton Woods and post-Bretton Woods models as the difference between the long-term national rate and the long-term world rate, which measures a country's monetary policy autonomy. Taking my measure of monetary policy autonomy as my dependent variable, I use fixed effects ordinary least squares (OLS) estimators for the Bretton Woods and post-Bretton Woods models to test the three hypotheses of the dissertation.

Based on the three economic trilemma variables (capital mobility, fixed exchange rate, and monetary policy autonomy) of the Mundell-Fleming model, I look at the relationship between the marginal effect of party in power on capital mobility and monetary policy autonomy for a fixed exchange rate era and for a floating

exchange rate era to see whether the three variables can co-exist in a country's economic policy formation. Thus, I test the party in power hypothesis (H_1) by relying on the prediction of the interaction term of party in power with capital mobility. If I find that the marginal effect of party in power given high capital mobility is associated with more monetary policy autonomy than the marginal effect of party in power given low capital mobility for the Bretton Woods and post-Bretton Woods models, then this finding will confirm the party in power hypothesis (H_1) and my political model of monetary policy in open economies but contradict the Mundell-Fleming model.

In order to test the capital mobility hypothesis (H_2), I also use the prediction of the interaction term of party in power with capital mobility. If I find that the marginal effect of party in power given high capital mobility is associated with less monetary policy autonomy than the marginal effect of party in power given low capital mobility for the Bretton Woods and post-Bretton Woods models, then this finding will confirm the capital mobility hypothesis (H_2).

Furthermore, I test the central bank independence hypothesis (H_3) by using the prediction of the coefficient on central bank independence. If I find that an increase in central bank independence is statistically significantly associated with a decrease in monetary policy autonomy from the world interest rate for the Bretton Woods and post-Bretton Woods models, then this finding will confirm the central bank independence hypothesis (H_3).

I also develop a measure of monetary policy based on data sets from votes by members of the Federal Open Market Committee (FOMC) of the Federal Reserve in the United States to test qualitatively the three hypotheses of the dissertation. I test the party in power hypothesis (H_1) by looking at votes by members of the FOMC according to whether they were appointed by a Democratic or a Republican president. If I find that Democratic (Left) and Republican (Right) appointees behave differently, then this finding will confirm the party in power hypothesis (H_1).

In order to test the capital mobility hypothesis (H_2), I take the absolute value of the interest rate differential (my measure of US monetary policy autonomy) and plot it against capital mobility. If I find that increased capital mobility is associated with decreased monetary policy autonomy, then this finding will confirm the capital mobility hypothesis (H_2).

I test the central bank independence hypothesis (H_3) by looking at presidential appointments. If I find that Democratic and Republican appointees behave the same way, then this will confirm the central bank independence hypothesis (H_3).

The Outline of the Dissertation

This dissertation covers five chapters. In the first chapter, I introduced an original political model of monetary policy in open economies. I presented my research questions and explained the reason why the questions are important for the

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topic of democracy in general and for political science in particular. I also presented a brief overview of the literature and hypotheses of the dissertation.

In the second chapter, I review the debate in the political science and economic literature on whether left-right party differences in monetary policies exist in a country's economy. I also review the literature on monetary policy autonomy that concentrates on the way capital mobility and central bank independence have an impact on monetary policies. Also, I formulate a political model of monetary policy.

In the third chapter, I present a cross-national analysis of eighteen advanced industrial countries. I test the hypotheses of the dissertation with a quantitative political model of monetary policy across countries for almost a fifty year period. I estimate the model for the Bretton Woods 1960-1972 period of fixed exchange rates and the post-Bretton Woods 1973-2009 period of floating exchange rates. I make use of ordinary least squares regressions for the estimation of the Bretton Woods and post-Bretton Woods models. I compare the result of the models according to whether the effect of political parties in power on interest rate differentials are different prior to and subsequent to the decline of the Bretton Woods system. I also present measures of variables of the models. I examine political parties in power as the key independent variable and monetary policy autonomy as the dependent variable. In addition, I analyze capital mobility and central bank independence as alternative independent variables. I present large-N statistical evidence on the variation in monetary policies.

In the fourth chapter, I choose the United States for a case study and present qualitative evidence on the monetary policies of political parties in power in the United States. I compare the monetary policies of President Lyndon Johnson's administration, 1965-1968, and President Richard Nixon's administration, 1969-1972 for a fixed exchange rate period. I also compare President Bill Clinton's administration, 1997-2000, and President George W. Bush's administration, 2001-2004 for a floating exchange rate period. I test the hypotheses of the dissertation for the United States case study to see whether the results support the expectations. In order to test my central hypothesis, the party in power hypothesis (H_1), I use data sets for policy votes drawn from official records of the Federal Open Market Committee (FOMC) Meeting Minutes and of Policy Action in the Annual Reports of the Board of Governors of the Federal Reserve.

In the final chapter, I compare the result of a cross-national examination of my model with the result of the United States case to see whether political parties in power matter for monetary policies.

Conclusion

Based on the evidence in Table1.1, I conclude that advanced industrial countries may have monetary policy autonomy from the world interest rate both in a fixed exchange rate period and in a floating exchange rate period.

In the next chapter, I will elaborate on the political science and economic literature I present here. I will also detail the limitations of the Mundell-Fleming model that provide important background insights about the value of the new model explained in this doctoral dissertation.

CHAPTER II

LITERATURE REVIEW AND A POLITICAL MODEL OF MONETARY POLICY
IN OPEN ECONOMIES

Introduction

In the previous chapter, I provided an overview of the Mundell-Fleming policy

model, my own political model of monetary policy in open economies, and literature

relevant to the two questions guiding my research:

1. What explains variations in monetary policies? and

2. What is the effect of political parties in power on monetary policies?

This chapter covers three major topics. First, I discuss the effects of capital

mobility and central bank independence on monetary policy. I expand the literature

review from Chapter I: Introduction to explain how the literature currently relates to

my two research questions. I do so by detailing a debate in political science and

economic literature about whether or not the monetary policies of left parties and the

monetary policies of right parties in a country are actually different. Specifically, in

that debate Clark and Hallerberg (2000) suggest that the left and right parties will have

no influence in an economy that has strong central bank independency. However a

number of scholars disagree with Clark and Hallerberg (2000) by arguing that

whatever party is in power will have an impact on a country's monetary policies (Hibbs 1977; 1987; Alesina 1987; Garrett 1995; 1998; Oatley 1997; 1999; Boix 2000; Bearce 2002; 2007). In fact, Bearce (2002) explains that impact by saying each party will attempt to create monetary policy based on the preferences of their constituencies.

In the second part of this chapter, I detail the Mundell-Fleming policy model, which is a fundamental part of any discussion of monetary policies in open economies. I critique the established model as being less comprehensive than it needs to be because it ignores the role of political parties and the impact of long-term interest rates.

Finally, in the third part of this chapter, I develop a political model of monetary policy in open economies, and I arrive at different conclusions for the Mundell-Fleming model.

Literature Review

I review the scholarship related to my project and explain how it addresses my research questions by summarizing the key arguments of the main scholars regarding whether policy autonomy exists and whether parties in power can have an impact on economic policies.

Increased Capital Mobility

One argument in the literature related to my research questions is that increased capital mobility may influence monetary policy (Cohen 1993; 1996; Peterson 1995). Conventional wisdom argues that increased capital mobility leads to reduced monetary policy autonomy. Cohen (1993) and Peterson (1995) both agree with the conventional wisdom.

Echoing Mundell-Fleming (1963; 1962), Cohen (1993) says that during periods of increased capital mobility, countries will either have to give up some degree of exchange rate stability if they want monetary autonomy or will have to lose some degree of monetary autonomy if they want a stable exchange rate. Cohen (1993) asserts that given a stable exchange rate and high capital mobility, the pursuit of an autonomous national monetary policy will lead to the imbalance between a country's national currency and foreign currency because more of a country's national currency will be moving to investments in other countries while less and less foreign currency will be invested in the country that has high capital mobility. High capital mobility is necessary in order to integrate markets across national borders; however, national economic policies allowing for capital mobility create an imbalance and potentially open the country's economic markets to capital flight.

Capital flight usually occurs when a country's national currency has been or is about to be devalued; this move makes a country's national currency worth less than foreign currency, which causes investors to move their capital to other countries that

will provide a higher return on their investments. The capital mobility that generates a devalued currency will stimulate potential speculation on the country's national currency and will increase exchange rate volatility (Cohen 1993). For Cohen (1993), in such moments of currency crises, governments have two options for stabilizing their exchange rates: (1) a government can maintain its autonomous monetary policy by imposing taxes to reduce the high flow of national capital out of the country or (2) a government can reduce the autonomy of its monetary policy by collaborating with other governments to continue capital mobility while also establishing a fixed exchange rate.

However, Cohen (1993) suggests that any monetary policy collaboration among countries will simply not stand the test of time. He provides a real world example of his theoretical economic speculations by noting that while the G7 countries (the United States, Japan, Canada, Britain, France, Germany, Italy) collaborated on the 1985 Plaza Agreement, which formalized commitments from each country to take action to stabilize world exchange rates, the agreement was inconsistently upheld by the supposedly cooperating partner countries. Cohen (1996) backs away and says governments may have some capacity for autonomous action.

Cohen (1996) cites the following scholars as demonstrating that a government has policy autonomy. He notes Kapstein's (1994) argument that international cooperation under the auspices of home country influence through the Bank for International Settlements (BIS) increases the effective response of governments to the

challenges of increased capital mobility. Kapstein's (1994) argument implies that governments can sustain national tasks for social demands in a way that governs international markets to suggest a common policy, which contradicts Kurzer's (1993) contention that governments no longer have policy autonomy. Cohen (1996) also notes Goodman's (1992) argument that while governments may still have policy autonomy, international cooperation under the auspices of home country influence may not be enough for governments to do the jobs unless governments collaborate collectively.

In addition to Cohen (1993), Peterson (1995), as a representative of the conventional wisdom, says that increased capital mobility is associated with reduced monetary policy autonomy. Peterson (1995) argued that, by the mid-1990s, a variety of economic forces had created a global market that encompassed all Western domestic markets. High capital mobility was a major force in the development of the global market, and other forces contributing to the establishment of the global market included (1) rapid development of technology that allowed major financial transactions within seconds, (2) continued deregulation in the domestic markets of Western countries that allowed trade growth, (3) increased privatization of former government-controlled assets that opened new markets to which capital could flow, (4) finessed sophistication of money managers who could take advantage of all the above (Peterson 1995, 103-106).

According to Peterson (1995), the integrated global market was so massive and changed so rapidly that it was able to exert more influence on the changes in the interest and exchange rate of countries than could individual government policy. The new global market reduced the monetary policy autonomy of individual governments (Peterson 1995). For Peterson (1995), if a government attempts to intervene in exchange rates to support the value of their currency, then other governments will attempt to do the same which would result in neutralization by the global market. He speculates that if advanced industrial economies have financial imbalances and increased deficits, then the global market will impose more pressures on them. He views the role of market forces, supply and demand, that determine prices in the market, as neutralizers, and he notes how changes in interest rates might be susceptible to the counterbalances stemming from international flows. Peterson (1995) uses data from the Central Bank Survey of Foreign Exchange Markets Active in April 1992, to support his claim that the individual foreign exchanges played a role in shifting the economic balance of power internationally. He argues that between 1983 and 1992, the market turnover[1] had expanded to double the size of all reserve combined. According to Peterson (1995), the reserves-to market turnover ratio dropped dramatically from 3.5:1 to 0.45:1. This decrease in ratio means that international markets are more integrated and thus play a more prominent financial role in the global economy. Peterson (1995) also speculates that international financial integration decreased countries' policy autonomy to control economic performance

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[1] Market turnover refers to the total trading volume of government and foreign bonds in a day in the market (Peterson 1995).

nationwide, and he reasons that rapid international financial integration caused barriers to capital flows and the trade of goods and services to be costly to those countries that continued such barriers.

Central Bank Independence

Another argument in the literature focuses on the role that central bank independence from political pressures may take in a country's economy (Alesina and Summers 1993; Cukeirman et al. 1992). Most scholars agree that the more independent a central bank is from a country's political debates, the less inflation will exist in a country's economy (Alesina and Summers 1993; Cukeirman et al. 1992). Alesina and Summers (1993) argue that a politically independent central bank in a country's economy may be able to achieve price stability as a goal by keeping inflation in check; such a bank can affect real interest rates through a monetary policy that encourages low inflation and predictability, which will make investing in the country less risky. Yet, the researchers' data suggests that an independent central bank may not exert a measurable influence on a country's real economic performance, including real interest rates.

Utilizing central bank independence and economic activity data from advanced industrial countries for the period 1955 to 1988, Alesina and Summers (1993) analyzed the relationship between the inflation rate level and the extent of central bank independence; they find that a lower inflation rate was associated with a more politically independent central bank. Alesina and Summers' (1993) finding suggested

that central bank independence was higher in the United States than in the United Kingdom and the average inflation rate in the United States was lower than the average inflation rate in the United Kingdom for the period from 1955 to 1988. The implication for their finding suggests that a more independent central bank is better able to control inflation because a country's central bank may not be influenced by political pressures (Alesina and Summers 1993). Alesina and Summers (1993) also analyzed the relationship between the real interest rate level and the extent of central bank independence; they found no clear link between a more independent central bank and economic activity, such as real interest rates. Alesina and Summers' (1993) finding implies that although central bank independence will decrease inflation in a country's economy, the benefits or costs of central bank independence based on economic activity are not substantial.

With regard to central bank independence, Cukeirman et al. (1992) formulated a measure for central bank independence and found that the more independent the central bank was, the lower the inflation rate was in industrial countries over the period from 1950 to 1989. They argue that a country's government may delegate authority to a politically independent central bank to benefit from the central bank's goal to achieve price stability by keeping inflation in check in the economy. This would develop a national capital market that would allow a government to borrow easily and economically.

For Cukeirman et al. (1992), to achieve price stability goal in a country's economy, the central bank would have to pit the goal of price stability against its other tasks, including financing government deficits or bailing out a country's insolvent enterprises. The authors speculated that if the central bank was obligated to do these tasks, then they would not be able to achieve a country's price stability goal.

Party Does Not Matter

One argument in the literature is that neither the left party nor the right party enjoys policy autonomy (Clark and Hallerberg 2000). Clark and Hallerberg (2000) compare left and right party actions to determine whether the parties could influence monetary policy under specific conditions. These scholars, whose work is partially based on the Mundell-Fleming model, investigate a multi-part hypothesis that includes the following three points related to monetary policy: 1) given strong central bank independence, left parties in power will be able to increase the money supply when capital is mobile with fixed exchange rates; 2) given strong bank independence but low capital mobility, left parties in power will tighten the money supply; and 3) given capital mobility, flexible exchange rates but weak central bank independence, left parties in power will increase the money supply.

Clark and Hallerberg (2000) test their hypotheses with a statistical model by making use of data on the money supply, left-right parties, structural conditions, exchange rate regimes, and central bank independence. In their model, they take the money supply as a dependent variable and left-right parties as a key independent

variable. Their statistical model explains the effect of left-right parties on the money supply or monetary policy as being conditional on both the extent of central bank independence and the exchange rate regime in a country's economy. First, they calculate the conditional coefficients for political parties in different structural conditions by utilizing the results of the predicted coefficients on political parties and central bank independence and the exchange rate regime drawn from their statistical model. Next, they compare the effect of left parties on monetary policy with the effect of right parties on monetary policy under different structural conditions. Finally, Clark and Hallerberg (2000) calculate the level of the effect of political parties by making use of left-right party data that explains party differences with five unit differences in a way that takes a value of one for right parties and five for left parties.

Based on money supply data from the Organization for Economic Cooperation and Development (OECD) countries for a sample period from 1973 to 1989, Clark and Hallerberg (2000) find no support for the hypothesis that left parties can increase the money supply if a country has a fixed exchange rate and capital mobility. For the hypothesis that left parties can tighten the money supply if a country has strong central bank independence and low capital mobility, they find a slight effect of left parties on monetary policy but not a robust effect. For the hypothesis that left parties can increase the money supply if a country has weak central bank independence and a flexible exchange rate, they find a slight effect of left parties on monetary policy. In short, the evidence provides weak support for the second and third hypotheses, at best,

but in general no strong evidence of party effect on monetary policies is produced

(Clark and Hallerberg 2000, 337-338).

The implication for Clark and Hallerberg's (2000) results is as follows. There

might be a shift from monetary policy instruments to fiscal policy instruments when a

government has a fixed exchange rate along with capital mobility. For example, Clark

and Hallerberg (2000) state that in the case of Britain, the government could introduce

fiscal expansion policy if they grant the Bank of England greater independence. The

implications are that governments that have fixed exchange rates when capital is

mobile do not give up the ability to manipulate their monetary goals.

Party Matters

The literature also includes many scholars who argue that policy autonomy

exists and that political parties have an effect on policies (Hibbs 1977; 1987; Alesina

1987; Garrett 1995; 1998; Oatley 1997; 1999; Boix 2000; Bearce 2002; 2007). These

scholars support my research in two ways. First, they all offer arguments that differ

from the approach of the Mundell-Fleming model, which does not consider a role for

political parties in monetary policies. Second, they offer evidence that differs from the

Mundell-Fleming conclusion that only two of the following variables can exist at a

given time: capital mobility, autonomous monetary policy, and fixed exchange rate.

My research, as I have already stated in the introduction, argues that all three of these

variables can co-exist, especially when party politics is included, as I do in my

research.

Party Matters for Monetary Policies

Hibbs' (1977) partisan model suggests that left parties in power will be associated with high inflation and low unemployment while right parties in power will be associated with low inflation and high unemployment. Using a sample of twelve advanced industrial countries for the period from 1960 to 1969, Hibbs (1977) tests his model and finds evidence for his partisan model. Making use of data on inflation, unemployment, and the income distribution from the United States for the period from 1947 to 1980, Hibbs (1987) analyzes that an increase in the unemployment rate in a year, such as an increase from 6 percent to 10 percent over one year, causes roughly 0.95 percentage point of income to shift from the less wealthy to the more wealthy. In addition, he finds that one-half of a percentage point decrease in the income of the less wealthy occurs while a 0.84 percentage point increase in the income of the more wealthy takes place. Hibbs (1987) determines that the effect of inflation on income distribution is neutral, but inflation causes increases in the proportional income stance of the less wealthy. Hibbs (1977) reasons that right parties are usually less willing to support monetary policies that lead to inflation because their major constituents are most often business professionals who would suffer from inflation, while left parties are usually less willing to tolerate increased unemployment because their constituents are workers.

Hibbs' (1977; 1987) partisan model suggests that left-right party differences in policy outcomes will exist; similarly, Alesina's (1987) rational partisan model suggests that left-right party differences in policy outcomes will exist immediately following an

election in a country's economy. Alesina (1987) develops his rational partisan model in the context of the two parties by relying on a game model that Kydland-Prescott (1977) developed and Barro and Gordon (1983) extended. Alesina's (1987) rational partisan model is based on the game model's assumption that private actors are rational and informed wage-setters, and policymakers influence unemployment rates based on increases or decreases in inflation. This game model is important because it directly relates to Alesina's (1987) rational partisan argument that inflation rates and wages are correlated to left-right party differences and dependent on which party is in power. Alesina's (1987) model indicates that left parties care more about unemployment and growth than about inflation while right parties are more concerned with inflation than with unemployment. Alesina (1987) proposes that political parties in power will exert different influences on policy outcomes immediately following elections in the short term. The empirical implications from his proposition are as follows: (1) there will be unexpected inflation and higher economic growth than the natural level when left parties are in power; and the opposite policy outcomes occur when right parties are in power; (2) inflation will always be higher throughout the time when left parties are in power than throughout the time when right parties are in power (Alesina 1987, 658; 659).

Garrett (1998) examines the effect of political parties in conjunction with labor organization on monetary policy and uses a sample of fourteen OECD countries for the period from 1966 to 1990 to test his model. Garrett (1998) finds that left parties tied to strong labor organization allowed increases in interest rates. He also finds that

with high capital mobility, left parties tied to strong labor organization allowed increases in government deficits. Garrett's (1998) finding does not mean that left parties in association with labor organization will decrease the money supply to compensate for government spending. Instead, his finding means that the capital markets expect that governments will finance their borrowing with high inflation, so the capital markets will charge high interest rates on government borrowing to compensate for their potential inflation losses in the future. Because social democratic corporatism[2] expects a monetary expansionary policy with low interest rates and a loose fiscal policy with government spending, Garrett's (1998) finding is consistent with the expectation for social democratic corporatism in terms of government spending but not in terms of interest rates. However, Garrett (1998) determines that with high capital mobility, the effect of social democratic corporatism will increase in a country's economy because left parties tied to labor organization will play an active role in protecting groups that are susceptible to the risk of increased capital mobility.

Garrett (1998) counters Scharpf (1991) and Kurzer (1993), who argue that social democratic corporatism can no longer play an effective, active role in monetary policies because high capital mobility in the global economy since the 1980s has nullified the former powerful influence of the left party-labor organizations. In contrast, Garrett (1998) argues that high capital mobility has not eliminated the power of left parties to influence monetary policies; instead, he suggests that high capital

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[2] The political-economic development of social democratic corporatism occurs when a partnership exists between a left part in power and influential labor market organizations that can motivate economic policy (Garrett 1998, 155).

mobility encourages cooperation among left party-labor organizations to work toward

economic stability. Ultimately, then, it is possible to extend Garrett's (1998)

suggestions to the idea that even with high capital mobility, political parties may affect

monetary policies differently.

Consistent with Garrett's (1998) finding that left parties in conjunction with

labor organizations will pursue a loose fiscal policy and a high interest rate (a tight

monetary policy), using a sample of twenty-three OECD countries for the period from

1973 to 1997, Bearce (2002) finds that given high capital mobility, left parties in

power will be associated with a loose fiscal policy and a tight monetary policy that

will generate currency volatility, while right parties in power will be associated with a

tight fiscal policy and a loose monetary policy[3] that will lead to currency stability.

Bearce's (2002) finding suggests that given increased capital mobility, the left party

will choose monetary policy autonomy over currency stability while the right party

will choose currency stability over monetary policy autonomy. The reason why left

parties tolerate currency volatility is connected to the Mundell-Fleming policy

trilemma (there is no national monetary policy autonomy in a fixed exchange rate and

capital mobility).

Bearce (2002) develops his model based on the Mundell-Fleming policy

trilemma; however, Bearce (2002) suggests that the trilemma is ultimately a "political

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[3] By a loose monetary policy, I mean a monetary policy in which interest rates in a country's economy are low.

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dilemma" (Bearce 2002, 194). Bearce (2002) argues that the political party in power

in the post-Bretton Woods period, 1973-1997, will face a trade-off between monetary

policy autonomy and currency stability. If the right party is in power, it will choose

currency stability and monetary convergence that will make the national interest rate

and world interest rate match, which will allow the right party supporters, such as

business, to benefit from cross-border investments (Bearce 2002). However, if the left

party is in power, it will choose higher government spending which will generate

benefits for its interest group, such as workers (Bearce 2002). The cost of higher

government spending is currency volatility. That is, left parties are more willing to

pay the price of currency volatility in order to provide benefits of higher spending to

their worker constituents. The left party's higher government spending such as

spending on education increases opportunities for workers to find better jobs and

decreases unemployment and thereby meets the need of income redistribution (Bearce

2002). Given a choice between currency stability and volatility, workers, as a less

mobile component of production compared with the physical capital in the short-term,

care more about policy autonomy than about stable exchange rates that are beneficial

to cross-border capital investments (Bearce 2002). The left party cares more about

policy autonomy than about currency stability because pursuing a loose fiscal policy

(government spending for public goods) along with a tight monetary policy will

enable the left party to redistribute income to their constituents (Bearce 2002).

Bearce (2002) suggests that if a government sought a loose fiscal policy through

high domestic infrastructure spending, it would most likely need to balance the

inflation such spending would generate by having a tight monetary policy through high interest rates. This would encourage domestic capital investment and existing foreign capital investment to stay in the country while also attracting new domestic and foreign capital investments, which would result in high capital mobility (Bearce 2002). The increased capital mobility may create a higher interest differential between the country's interest rate and the world interest rate, which would mean that the country's monetary policy would be more autonomous from the world interest rate (Bearce 2002). The increased interest differential between the country's and world's interest rates would cause the country to experience currency volatility. The country's high interest rates would lead to currency appreciation and therefore would prevent the country from experiencing currency depreciation. Currency depreciation occurs when a currency begins to lose value. A devalued currency would open the country to investment from speculators seeking to turn quick profits. Thus, if a country wants monetary policy autonomy, it may have to pay for that autonomy by having an unstable exchange rate. Therefore, because high capital mobility is a given part of the world economy after the post-Bretton Woods era, Bearce (2002) reduces the Mundell-Fleming trilemma to a dilemma, and Bearce also suggests that the dilemma will be political in nature, which gives party politics an important role in monetary policy.

With regard to such a dilemma, Bearce (2002) references the economic theory of Cohen (1993; 1996), Peterson (1995), and others who discuss capital mobility in terms of the conventional wisdom that in a given open economy, capital mobility will coincide with a decrease in that economy's monetary policy autonomy. Bearce (2002)

argues against this conventional wisdom so that he can show how that wisdom differs from the results of his statistical models.

Bearce's (2002) modifications to the conventional wisdom include that while monetary policy autonomy may be possible given high capital mobility, it is also possible that a decrease in monetary policy autonomy will occur with high capital mobility. For Bearce (2002), given high capital mobility, monetary policy depends on which party is in power. He argues that given increased capital mobility, left parties will choose monetary policy autonomy over exchange rate stability, while right parties will choose exchange rate stability over monetary policy autonomy.

Bearce (2002) suggests that increased capital mobility would force governments to adopt the following policies that would prevent investors from moving their capital to other countries: left parties would be motivated to adopt a loose fiscal-tight monetary approach[4], while right parties would be motivated to adopt a tight fiscal-loose monetary approach[5]. According to Bearce (2002), the former approach that increases monetary policy autonomy might be referred to as "new growth," whereas

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[4] Bearce (2002) reasoned that left parties in power would choose a loose fiscal policy by increasing government domestic spending on public goods as a means of strengthening the country's infrastructure and stimulating the domestic economy. Along with the loose fiscal policy, Bearce (2002) speculated that the left party in power would seek a tight monetary policy to reduce inflation or inflation expectations.

[5] Right parties in power would adopt a tight fiscal policy by decreasing government spending and investment in the domestic infrastructure as a means of decreasing inflation pressures on the economy (Bearce 2002). As Bearce (2002) noted, the right parties in power would also adopt a loose monetary policy in an effort to expand the country's economy.

the latter approach that raises exchange rate stability might be defined as "neoliberal" (Bearce 2002, 203-204).

For Bearce (2002), currency stability happens in an open economy when, in an effort to achieve national interest rate parity with the world interest rate, a political party would like to decrease the national interest rate so that rate is as close as possible to the world interest rate. This policy choice, which is an option that right parties will adopt, leads to less monetary policy autonomy given that the national policy will be highly influenced by economic factors outside of the nation, specifically the world interest rate (Bearce 2002). Currency volatility occurs in an open economy when a political party chooses to increase the national interest rate so that rate is higher than the world interest rate. This policy, which Bearce (2002) says is associated with left parties, will lead to an interest rate imbalance between a national interest rate and the world interest rate, or to what is known as an interest rate disparity. In such cases, the national monetary policy will be more autonomous because the national monetary policy will be less influenced by outside economic factors, such as the world interest rate (Bearce 2002). Using data from the Organization for Economic Cooperation and Development (OECD) countries for the post-Bretton Woods period, 1973-1997, Bearce (2002) tested his models and found statistically significant evidence that (1) high capital mobility may be associated with higher interest rate differences between the national and the world interest rates, (2) high capital mobility may be associated with currency volatility, and (3) high capital mobility may be associated with a loose

fiscal policy. Thus, if a country wants monetary policy autonomy, it may have to pay for that autonomy by having an unstable exchange rate (Bearce 2002).

Party Matters but under Certain Conditions

Oatley (1999) finds that parties matter for monetary policy when exchange rates are floating and when capital controls exist in a country's economy. Oatley (1999) uses a sample of fourteen OECD countries for the period from 1970 to 1994 and tests his hypotheses about the effect of left-right parties in power on monetary policies. Oatley (1999) finds that given floating exchange rates with low capital mobility, real interest rates will be lower in a country's economy when left parties are in power than when right parties are in power. Oatley's (1999) finding suggests that given floating exchange rates with low capital mobility, left-right party differences in monetary policy existed prior to the year 1989.

The reason why left-right party differences in monetary policy did not exist in the early 1990s relates to the early 1990s' recession or to the European Union's institutional change (Oatley 1999). The 1990s recession that led to large deficits in European countries or the Maastricht Treaty that imposed constraints on European countries' annual deficits could have eradicated left-right party differences in monetary policy (Oatley 1999).

Oatley (1999) also finds that given fixed exchange rates and capital mobility, left parties in power in a country will not be able to decrease interest rates in a country's

economy. Oatley's (1999) finding implies that given a fixed exchange rate, capital mobility will prevent left parties in power from reducing interest rates and thereby exerting influence on monetary policy. Since the introduction of the European Currency Unit (the ECU) in 1979, the implication of Oatley's (1999) finding in some of his sampled countries that had a fixed exchange rate in his sampled period, 1970-1994, would be the following: in Belgium, France, Germany, the Netherlands, and Denmark, which each had a fixed exchange rate by membership in the ECU, neither the left party nor the right party enjoyed monetary policy autonomy.

Like Oatley (1999), Boix (2000) also finds that parties matter for monetary policy when floating exchange rates exist and when capital controls exist in a country's economy. Using data on short-term real interest rates from OECD countries for the period from 1960 to 1993, Boix (2000) tested his model and found a statistically significant result for the effect of Social Democratic parties in power in conjunction with corporatist institutions on monetary policy for the periods from 1973 to 1982. Boix's (2000) finding implies that the transformation from the Bretton Woods fixed exchange rate system to the post-Bretton Woods floating exchange rate system since 1973 has enabled policymakers to enjoy national policy autonomy.

In OECD countries Social Democratic parties in power during the 1970s enjoyed national monetary policy autonomy more than Conservative parties in power because Social Democratic parties in power responded to the international condition by reducing short-term real interest rates more than their conservative counterparts in

power (Boix 2000). This finding implies that to expand economic growth in response to international condition, such as the 1970s economic crises that decreased economic performance, Social Democratic parties in power pursued slightly looser monetary policies than conservative parties in power during the same decade (Boix 2000).

Boix (2000) also argues that while left-right party differences in monetary policies existed in the 1970s, those differences disappeared in the 1980s. The reason why left-right party differences in monetary policies did not exist in the 1980s relates to the Mundell-Fleming policy trilemma (Boix 2000). Given high capital mobility, there was no national policy autonomy because the national interest rates matched the world interest rate, which, in turn, gave rise to international capital markets and to the decline of Keynesian policies (Boix 2000). Policymakers had their national monetary policy autonomy until the beginning of 1980s because capital control policies had become less applicable in increasing international capital markets and the introduction of the euro, which, in turn, resulted in the decline of the 1970s' Keynesian policies by the mid-1980s (Boix 2000).

I combine the Mundell-Fleming trilemma and the party politics literature to suggest a political or partisan model of macroeconomic policy. The next section of this chapter details the application of the Mundell-Fleming model and a political model of monetary policy developed in this dissertation.

The Mundell-Fleming Trilemma

The trilemma in the Mundell-Fleming model suggests that there is no national monetary policy autonomy in the short term under high capital mobility and a fixed exchange rate system because a fixed exchange rate and high capital mobility prevent an open economy from using its national interest rate as an instrument to exert influence on monetary policy (Fleming 1962; Mundell 1963). Monetary policy autonomy is defined as a monetary policy in which national governments can determine their monetary policy tools to achieve national economic targets (Bearce 2007). Capital mobility is defined as the capability of investors to move their capital anywhere in the world market independent of government regulations (Bearce 2007). A fixed exchange rate is defined as a currency regime in which governments concur to keep the value of the national currency in a certain currency range (Bearce 2007). Monetary policy autonomy, capital mobility, and a fixed exchange rate form the basis for the Mundell-Fleming model. The Mundell-Fleming model is as follows:

(1) Given a fixed exchange rate with low capital mobility, a country can enjoy national monetary policy autonomy from the world monetary policy in the short term (Fleming 1962; Mundell 1963).

(2) Given a fixed exchange rate with high capital mobility, a country cannot enjoy national monetary policy autonomy from the world interest rate in the short term (Fleming 1962; Mundell 1963). Thus, the premise is that a country cannot sustain

differences between the national and world interest rates when a country has a fixed exchange rate and high capital mobility (Mundell 1963).

The Mundell-Fleming model suggests that a country cannot influence the national interest rates when it has a fixed exchange rate and capital mobility in the short term. The application of the Mundell-Fleming trilemma that forms the basis of the Mundell-Fleming model suggests that when a country has a fixed exchange rate, high capital mobility in which investors move their capital to the world market will prevent a country's central bank from decreasing the national interest rate (Mundell 1963). Mundell's (1963) argument is as follows. If a country fails to decrease the national interest rates or if a country fails to use the national interest rate as its monetary policy instrument due to high capital mobility, then the country will not be able to stimulate the economy to reduce unemployment. Given high capital mobility, the central bank's efforts to increase the money supply by buying financial assets, such as government bonds, on the open market will not decrease the national interest rates when a country has a fixed exchange rate. This will lead to a crisis of a balance of payments that will occur when there is a deficit in the foreign reserve in a country's economy. To halt decreases in the value of the national currency and to stabilize the national currency, the central bank will need to buy the national currency as it will sell the foreign currency in the exchange rate market. The central bank will stop doing so when there is a balance between the central bank open market buying and the deficit in the foreign reserve.

The reason why a country cannot enjoy national monetary policy autonomy when it has a fixed exchange rate and high capital mobility is that the monetary effect of open market operations cancels out the monetary effect of currency stabilization operations in a country's economy in the short term. This means that given high capital mobility and a fixed exchange rate, monetary policy is not able to exert influence on the level of income in a country in the short term (Mundell 1963). This also means that monetary policy is not able to exert influence on economic performance, such as unemployment (Mundell 1963).

Mundell-Fleming (1963; 1962) explains the relationship between high capital mobility and a fixed exchange rate and monetary policy autonomy along with the other economic variables in the short term. However, Mundell-Fleming (1963; 1962) ignores long-term interest rates because Mundell-Fleming assumes that monetary policy, specifically buying financial assets, such as bonds, is being exercised as open market operations (Mundell 1963). An open market operation occurs when a country's central bank purchases financial assets or securities to increase bank reserves and decrease interest rates (Mundell 1963). Through open market operations, a country's central bank attempts to adjust short-term interest rates.

Mundell-Fleming (1963; 1962) also ignores long-term interest rates because Mundell-Fleming supposes that spot exchange rates are the same as forward exchange rates (Mundell 1963). This implies that a bank will be able to charge interest rates on government bonds only in the short term. Forward exchange rates are being used

when a national currency is being exchanged for a foreign currency in the long term, whereas spot exchange rates are being utilized when a national currency is being exchanged for a foreign currency in the short term.

Political Model of Mundell-Fleming

Ignoring long-term interest rates might be viewed as the theoretical and empirical weakness of the Mundell-Fleming model because ignoring long-term interest rates implies that investors and consumers cannot act on their preferences when it comes to different interest rates in a country's economy. Ignoring party politics might also be seen as the theoretical and empirical weakness of the Mundell-Fleming model because ignoring party politics implies that left parties in power and right parties in power cannot act on different interest rates or different monetary policies in a country's economy.

The Mundell-Fleming model is not as empirically and theoretically comprehensive as it needs to be because Mundell-Fleming (1963; 1962) ignores the role of party and long-term interest rates. I contribute to this literature by offering new analyses of monetary policies in open economies because I incorporate party politics and long-term interest rates.

This dissertation discusses an original political model of monetary policy in open economies and seeks to reframe the Mundell-Fleming policy trilemma, which is a fundamental part of the Mundell-Fleming model.

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The Mundell-Fleming model suggests that the following three economic variables cannot co-exist in a country's economy without causing many economic crises: 1) autonomous monetary policy, 2) capital mobility, and 3) a fixed exchange rate (Fleming 1962; Mundell 1963). Thus, economic policies shaped by a reliance on the Mundell-Fleming model will stress two of the above variable but not all three. Furthermore the model does not include a political variable, and so does not take into consideration any role party politics may take in economic realities. However, economic policies that are developed by use of the Mundell-Fleming model are actually very political in nature because those policies favor investors over others. For example, if economic policies only simultaneously consider two of the three factors, such as autonomous monetary policy and capital mobility, then a country might use monetary policy to work toward lower interest rate differences that would stabilize its currency and increase cross-border investments. These economic outcomes would, in turn, favor investors.

However, if the third factor, a fixed exchange rate, is also included in the formation of policy, a country may use high capital mobility to obtain higher interest rate differences that would not stabilize its currency, which favors consumers. This currency instability with the use of the third factor would not be as worse as that with the use of the two of the three factors because investors might not sell the currency as much as they might sell it when the country uses only two of the three factors. Investors can benefit from economic growth when the first two of the three economic variables can co-exist in a country's economy, which is what the Mundell-Fleming

model suggests. However, consumers can benefit from economic growth when the three economic variables can co-exist in a country's economy, which is what the original political model of monetary policy in open economies suggests. Therefore, consumers cannot reach optimal economic benefit when countries rely on the Mundell-Fleming model.

I include party politics into my model because I examine that, given high capital mobility with a fixed exchange rate, left parties in power will likely have high interest rate differences that would not stabilize a country's currency, which is conducive to the interest groups, consumers, of left parties in power. I also examine that given high capital mobility with a fixed exchange rate, right parties in power will likely have low interest rate differences that would stabilize a country's currency, which is beneficial to the political supporters, investors, of right parties in power. What we miss when we leave out party politics is the link between political parties in power and their political supporters that explains left-right party differences in monetary policies in open economies. What we gain by considering party in power is that we will be able to explain the reason why we see different monetary policies in a country's economy.

I contribute to this literature by examining the effect of party on monetary policy autonomy both for the Bretton Woods period, 1960-1972 (fixed exchange rates), and for the post-Bretton Woods period, 1973-2009 (floating exchange rates). I expect the party in power to matter in the Bretton Woods era and in the post-Bretton Woods era.

Conclusion

In this chapter I summarize the literature on monetary policy autonomy. This literature focuses on the effect of capital mobility and central bank independence. I also reviewed the debate on whether political parties matter. I draw upon this literature to reframe Mundell-Fleming and to incorporate party politics and long-term interest rates into my model of monetary policy autonomy.

Some scholars argue that neither a left party nor a right party can exert influence on monetary policy in an economy when strong central bank independency exists. Nevertheless, many scholars argue that both left party and right party can affect monetary policy.

I develop a political model of monetary policy that helps understand if and when parties matter.

In the next chapter, I will formulate a quantitative political model of monetary policy in open economies and will test it to see whether party matters for monetary policies.

CHAPTER III

CROSS-NATIONAL EXAMINATION OF A POLITICAL MODEL OF MONETARY
POLICY IN OPEN ECONOMIES

Introduction

In the previous chapter, I reviewed the economic and political science literature

on monetary policy autonomy. I then drew upon this literature to reframe Mundell-

Fleming and to incorporate party politics and long-term interest rates into my political

model of monetary policy. In this chapter, I test three hypotheses I derive from the

literature by utilizing a cross-national examination of my model. Using a sample of

eighteen advanced industrial countries, as seen in Table 1.1, over the period from 1960

to 2009, I test quantitatively the party in power hypothesis (H_1) and the capital

mobility hypothesis (H_2) and the central bank independence hypothesis (H_3). Drawing

on my model, I estimate the Bretton Woods and post-Bretton Woods models across the

Bretton Woods 1960-1972 period of fixed exchange rates versus the post-Bretton

Woods 1973-2009 period of floating exchange rates. I compare the results of the

Bretton Woods and post-Bretton Woods models to see whether I arrive at a different

conclusion for the Mundell-Fleming model.

In order to develop a measure of monetary policy autonomy that is the key variable of my model and the Mundell-Fleming model, I utilize Armingeon et al.'s (2011) Comparative Political Data Sets I, 1960-2009, for long-term interest rates on government bonds for eighteen advanced industrial countries. I look at nominal interest rate differentials in the Bretton Woods and post-Bretton Woods models as the difference between the long-term national rate and the long-term world rate, which is a measure of monetary policy autonomy. Using monetary policy autonomy as the dependent variable, I run the fixed effects ordinary least squares (OLS) and the random effects generalized least squares (GLS) regressions for the Bretton Woods and post-Bretton Woods models and report the results of the regressions that are appropriate for the models.

I expect party in power to matter both in the Bretton Woods period and in the post-Bretton Woods period because, as I explained thoroughly in Chapter II, the policies that simultaneously consider the three factors (monetary policy autonomy, capital mobility, fixed exchange rate), as in the Bretton Woods era, favor left parties' consumer constituents, while the policies that consider only the first two of the three factors, as in the post-Bretton Woods era, favor right parties' investor constituents. Since high interest rate differentials will increase investments in a country's economy, which would enable left parties' consumer constituents to reach optimal economic growth, left parties may exert an extra influence on capital mobility more than right parties to reduce exchange rate fluctuations that will keep high interest rate differentials in check. In order to explain this extra influence of the party in power on

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capital mobility, I look at the marginal effect of the party given high capital mobility and the marginal effect of the party given low capital mobility and calculate the marginal effect of the party according to the prediction of the interaction term between party in power with capital mobility. For the Bretton Woods and post-Bretton Woods models, I expect that the marginal effect of left party in power given high capital mobility should be higher than the marginal effect of right party in power given high capital mobility. Since fixed exchange rates reduce the effect of exchange rate fluctuations on interest rate differentials in the Bretton Woods period of fixed exchange rates, I also expect that the size of interest rate differentials should increase in the post-Bretton Woods period of floating exchange rates. Compared to the Bretton Woods period, in the post-Bretton Woods period, huge exchange rate fluctuations may prevent a country from keeping high interest rate differentials in check, so left parties may prefer a fixed exchange rate regime to a floating exchange rate regime in order to stabilize a country's currency and capital investments in a country's economy. Since I am interested in the size of the interest rate differential, not whether it is below or above the world interest rate, I take the absolute value of the interest rate differential when I compare the results of the marginal effect of political parties in power across a fixed exchange rate period versus a floating exchange rate period. For the Bretton Woods and post-Bretton Woods models, I expect that the monetary policy choice of the left party in power should systematically differ from the monetary policy choice of the right party in power during both the fixed exchange rate period and the floating exchange rate period.

I also expect that the marginal effect of political parties in power given high capital mobility should be associated with higher interest rate differentials between the long-term national rate and the long-term world rate (more monetary policy autonomy from the world interest rate) in the post-Bretton Woods period of floating exchange rates than in the Bretton Woods period of fixed exchange rates. If the results of the Bretton Woods and post-Bretton Woods models are as expected, then the results will confirm my political model of monetary policy but contradict the Mundell-Fleming model. I assert that long-term interest rates are the rates that political parties in power take into account.

In this chapter, first, I explain the reason why I incorporate party politics and long-term interest rates into my model. I then test the hypotheses of the dissertation by examining variations in monetary policy autonomy across countries according to whether a statistically significant relationship exists between the dependent and independent variables in the Bretton Woods and post-Bretton Woods models. Finally, I present the empirical results of the Bretton Woods and post-Bretton Woods models that are different from the results of the Mundell-Fleming model.

Examining Long-Term Interest Rates

The Mundell-Fleming model only applies to the short-term and thereby only explains short-term monetary instruments and their effects, whereas I examine long-term interest rates. Short-term interest rates or overnight interest rates are the rates

that banks charge to borrow money from each other with one day maturity. Long-term interest rates are the rates that governments apply to their bonds for one year or longer.

I incorporate long-term interest rates because both the left party constituencies' (consumers) and the right party constituencies' (investors) economic choice is influenced by long-term interest rates and effects. However, consumption and investment choice is not influenced by short-term interest rates. As McGough et al. (2005) put it plainly, the vast majority of consumers and business economic choice is not influenced by the overnight rates. Because short-term interest rates and effects are in operation among banks, long-term interest rates for government bonds are the rates that the political party in power prefers to have an impact on their constituencies' consumption and investment choice.

If political parties care more about long-term interest rates than about short-term interest rates, then they may not face the Mundell-Fleming policy trilemma. That is, parties in power will be able to ignore short-term interest rates and thus some monetary policy autonomy to look to monetary authorities to use different long-term instruments since the time horizon is longer. To support the mortgage market in 1966, President Lyndon Johnson looked to the United States Federal Reserve to broaden the purchases of federal agency securities, such as the securities of the Federal Home Loan Bank Board, other than the Treasury securities (Corder 1998). The United States Federal Reserve purchased agency securities in 1967 and also purchased the securities

of the Federal National Mortgage Association (FNMA) in the early 1970s in the form of active trading (Corder 1998).

A second reason to examine long-term interest rates is that short-term interest rates are associated with the zero bound problem. McGough et al. (2005) explain that the problem of the zero bound arises when inflation decreases and the short-term nominal interest rate approaches zero. For instance, in 1999 Japan faced the problem of a liquidity trap, or the zero bound problem, when its central bank tried to lower its interest rate to zero but failed to stimulate the economy (McGough et al. 2005). Although the zero bound problem first occurred in Japan in 1999, today it has become much more spread in other countries. Short-term interest rates of the Sweden central bank and short-term interest rates of the Switzerland central bank as well as short-term interest rates of the European Central Bank have recently reached a record low.

Not only does the zero bound problem prevent the central bank from employing a short-rate policy to further stimulate the economy, but it also causes markets to mistake the intentions of the central bank unless the central bank conveys its intentions to markets through long-term bond rates to signal its future interest rate policy (McGough et al. 2005). This means that a long-term interest rate monetary policy instrument is a natural alternative monetary policy instrument to a short-term interest rate monetary policy instrument (McGough et al. 2005). Hence, I expect that political parties in power should look to monetary authorities to utilize long-term instruments to lower long-term interest rates in order to stimulate the economy, for instance, when

facing a liquidity trap. However, parties in power can look to monetary authorities to utilize long-term instruments anytime when they face recessions.

Since the global recession of 2008, for instance, the European Central Bank has used quantitative easing as long-term instruments to respond to the recession by purchasing private or public sector long-term assets in order to lower long-term interest rates and to increase the money supply of the economy and lending facilities of financial institutions, which would stimulate the economy. Or alternatively, monetary authorities have purchased long-term government securities in an effort to facilitate government spending on public goods investments such as infrastructural or educational investments which, in turn, would increase aggregate demand of the economy and would spur economic growth. This is known as the Keynesian fiscal stimulus model; in it, governments will be able to manipulate monetary policy goals such as economic growth by means of the business cycle (that is, a business cycle is determined across the time span of an economic growth cycle versus the time span of a recession cycle).

Third, a short-term interest rate policy can also lead to the problem of indeterminacy (McGough et al. 2005). The problem of indeterminacy arises when the central bank fails to signal its future interest rate policy (McGough et al. 2005). The problem of indeterminacy might be solved if the central bank coordinates short-term and long-term rates (McGough et al. 2005).

Quantitative Model

I estimate my political model of monetary policy in the following equation by breaking the full 1960-2009 period down into the Bretton Woods 1960-1972 period of fixed exchange rates versus the post-Bretton Woods 1973-2009 period of floating exchange rates.

$$INTERESTDIF_{it} = \beta_0 + \beta_1\,GOVPARTY + \beta_2\,OPENNESS + \beta_3\,GOVPARTY\,*$$
$$OPENNESS + \beta_4\,CBI + \beta_5\,CPI + \beta_6\,GDPGR + \beta_7\,UNEMP +$$
$$\beta_8\,XRAT + \varepsilon_{it}.$$

In the framework of the three economic trilemma variables (capital mobility, fixed exchange rate, and monetary policy autonomy) of the Mundell-Fleming model, I look at the joint effect of party in power and capital mobility on monetary policy autonomy measured by the interest rate differential between long-term national rate and long-term world rate. I use the equation of my model to estimate the Bretton Woods and post-Bretton Woods models.

In Table 3.1, I summarize the different variables and how they are measured.

Table 3.1
List of Variables, Measures, and Data Sources

Variable Name	Explanation for Measure	Data Source
	Dependent Variable	
INTERESTDIF	Interest rate difference between long-term national and long-term world rate is a measure of monetary policy autonomy. The nominal national interest rate represents government bonds' long-term interest rates. I calculate the world interest rate as Bearce (2002) does, using the average interest rate of the G-5 countries (the United States, the United Kingdom, Germany, France, and Japan). I use a different measure for G-5 countries in a way that calculates world interest rate without that country and subsequently subtracts the national interest rate from the customized world interest rate.	Armingeon et al. (2011)
	Independent Variables	
GOVPARTY	Government composition is a measure of political party in power. Cabinet composition index score, which measures government composition, ranges from 1 (hegemony of right-wing party), 2 (dominance of right-wing party), 3 (balance between left-wing and right-wing party), 4 (dominance of left-wing party), to 5 (hegemony of left-wing party). For instance, in Denmark, balance between left party and right party in government in 1960-1963 is coded as 3, dominance of left party in government in 1964 is coded as 4, hegemony of left party in government in 1965-1967 is coded as 5, dominance of right party in 1968 is coded as 2, and hegemony of right party in 1969-1970 is coded as 1.	Armingeon et al. (2011)

Table 3.1—Continued

Variable Name	Explanation for Measure	Data Source
	Independent Variables	
OPENNESS	Financial openness, which is a measure of capital mobility, is measured by an index score of 0-14, where 0 is a closed economy (no cross-border capital investments) and 14 is an open economy (highest cross-border capital investments).	Armingeon et al. (2008)
GOVPARTY*OPENNESS	The interaction term between party in power and capital mobility measures the joint effect of party in power and capital mobility.	Armingeon et al. (2008; 2011)
CBI	Central bank independence index measures the isolation of central bank from politics. Central bank independence index is the aggregation of legal variables, some of which are the central bank governors' office appointment, policy formulation such as only policy suggestion of the central bank to government (Cukeirman et al. 1992). Central bank independence is measured by an index score of 0-1. The score of 0 represents the least isolated central bank from politics, whereas the score of 1 is the most isolated central bank from politics (Cukeirman et al. 1992).	Cukeirman et al. (1992) and Polillo and Guillen (2005)
	Control Variables	
CPI	Index of consumer price is measured as a percentage change from previous year.	International Financial Statistics (IFS) of International Monetary Fund and Huber et al. (2004)

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Table 3.1—Continued

Variable Name	Explanation for Measure	Data Source
	Control Variables	
GDPGR	Real GDP (Gross Domestic Product) growth is measured as a percentage change from prior year.	Armingeon et al. (2011)
UNEMP	Unemployment rate is measured as a percentage of civilian labor.	Armingeon et al. (2011)
XRAT	Exchange rate is measured by domestic currency units for each United States dollar.	Huber et al. (2004)
Total	9	

As can be seen in the equation, my political model of monetary policy in open economies suggests a country's monetary policy autonomy as a function of party in power, capital mobility, and the joint effect of the party in power and capital mobility as well as central bank independence. In order to explain this joint effect, I eliminate the effect of macroeconomic outcomes (inflation, economic growth, and unemployment) and of exchange rates on monetary policy autonomy by controlling them in the equation. Thus, I do not interpret and report the result of the estimated coefficients on these control variables.

I include the interaction term between party in power and capital mobility to see whether the effect of party in power is conditional on capital mobility because, as Andrews (1994) argues, capital mobility is a structural condition for world politics.

Since the constitutive components of an interaction term cannot be interpreted as unconditional (Brambor et al. 2006), I look at the interaction term to interpret the effect of capital mobility according to whether party in power and capital mobility depend on one another. I also look at central bank independence to explain its effect on monetary policy autonomy. I include increased capital mobility and central bank independence as alternative explanations to party in power in the equation.

Using the same equation, I estimate the Bretton Woods and post-Bretton Woods models to compare the results of the models across a fixed exchange rate period versus a floating exchange rate period. A comparison of the results of the models is useful because if I find that the models are significant across time, then I will be able to say my model stands the test of time. It is important to point out that a cross-national examination of my model contributes to scholarship by introducing an original political model of monetary policy in open economies, which is explained in this dissertation.

I also incorporate an interaction term between the party in power variable and the capital mobility variable into the equation to see whether I arrive at a different conclusion for the Mundell-Fleming model. Since the Mundell-Fleming model suggests that a country cannot have monetary policy autonomy and capital mobility and a fixed exchange rate at the same time, in order to capture the simultaneous effect of party in power and capital mobility on monetary policy autonomy in the Bretton Woods period of fixed exchange rates, I look at the interaction term. If I find that an

interaction effect exists, that finding will confirm my hypothesis that, given high capital mobility, differences in monetary policy based on left or right party in power exist in a country's economy both in a fixed exchange rate period and in a floating exchange rate period. If I find no interaction effect exists in a country's economy during these periods, that finding will confirm the Mundell-Fleming model. Using the interaction term, I consider whether party in power might exert an additional influence on capital mobility in a way that increases the effect of capital mobility, which is what the marginal effect of party in power suggests. This means that the marginal effect of party in power is conditional on capital mobility because, an interaction term, as Brambor et al. (2006) note, captures whether or not the marginal effect of one variable is conditional on another variable.

I calculate the marginal effect of party in power given high capital mobility by substituting the highest value of capital mobility and the values of the coefficients on other variables from the Bretton Woods model in the equation. I then do the same with coefficients from the post-Bretton Woods model. I calculate the marginal effect of party in power given low capital mobility by substituting the lowest value of capital mobility and the values of the other variables coefficients from the Bretton Woods model for a fixed exchange rate period of 1960-1972 and from the post-Bretton Woods model for a floating exchange rate period of 1973-2009. To test the party in power hypothesis (H_1) that differences in monetary policy based on left or right party in power exist in a country's economy, I compare the marginal effect of left party in

power given high capital mobility on monetary policy autonomy with the marginal effect of right party in power given high capital mobility for each period.

In order to see whether or not change in political parties in power affects a country's monetary policy autonomy from the world interest rate, I look at a unit change in the difference between right party in power and left party in power, just as Bearce (2002) does. Based on Armingeon et al. (2011) Comparative Political Data Set I, 1960-2009, since the difference between right party in power, which is coded as 1, and left party in power, which is coded as 5, is a five-unit change, I expect that the marginal effect of left party in power given high capital mobility should be five times higher than the marginal effect of right party in power given high capital mobility on monetary policy autonomy.

If I find that the marginal effect of left party in power given high capital mobility is associated with higher interest rate differential (more monetary policy autonomy) than the marginal effect of right party in power given high capital mobility for the Bretton Woods 1960-1972 period of fixed exchange rates, then this finding will confirm the party in power hypothesis (H_1). This finding will confirm my political model of monetary policy but disconfirm the Mundell-Fleming model. This finding will also disconfirm Clark and Hallerberg's (2000) prediction that there is no difference in monetary policy based on left or right party in power when exchange rates are fixed.

If I find that the marginal effect of left party in power given high capital mobility on interest rate differential is higher than the marginal effect of right party in power given high capital mobility for the Bretton Woods 1973-2009 period of floating exchange rates, then this finding will confirm the party in power hypothesis (H_1) and my political model of monetary policy but disconfirm the Mundell-Fleming model. It will also provide strong support for Bearce's (2002) prediction for the post-Bretton Woods period of floating exchange rates that left parties in power are correlated with higher positive interest rate differential than right parties in power. Bearce (2002) analyzes the effect of party in power on monetary policy autonomy only for the post-Bretton Woods 1973-1997 period of floating exchange rates.

What I do differently from Bearce (2002) is that I analyze the effect of party in power on monetary policy autonomy from the world interest rate both for the Bretton Woods 1960-1972 period of fixed exchange rates and for the post-Bretton Woods 1973-2009 period of floating exchange rates as I compare the results of the Bretton Woods and post-Bretton Woods models to see whether I arrive at a different conclusion than the Mundell-Fleming model. Comparison with the Bretton Woods period of fixed exchange rates is useful because the Bretton Woods period of fixed exchange rates and the post-Bretton Woods period of floating exchange rates represent variations in monetary policy autonomy from more monetary policy autonomy to less monetary policy autonomy. Because the exchange rate regime radically switched from a fixed exchange rate regime to a floating exchange rate regime in the early 1970s, I expect that the sign of the coefficient on the interaction term of party in power

with capital mobility should shift from negative in the Bretton Woods model (1960-1972) to positive in the post-Bretton Woods model (1973-2009). If I find there is a shift, then this finding will suggest that national interest rates vary more from the world interest rate in the post-Bretton Woods 1973-2009 period of floating exchange rates than in the Bretton Woods 1960-1972 period of fixed exchange rates because compared to a fixed exchange rate regime, a floating exchange rate regime results in greater fluctuations in exchange rates. Bearce (2002) also analyzes independent predictions of the effects of party in power and capital mobility on monetary policy autonomy and explains their independent effects on monetary policy autonomy for only the Bretton Woods 1973-1997 period of floating exchange rates.

What I also do differently from Bearce (2002) is that I analyze interaction term predictions between party in power and capital mobility and explain the marginal effect of party in power given high capital mobility on monetary policy autonomy both for the Bretton Woods 1960-1972 period of fixed exchange rates and for the post-Bretton Woods 1973-2009 period of floating exchange rates. Looking at interaction term predictions is useful in seeing whether or not there is a marginal effect of party in power given high capital mobility in order to explain the link between political parties in power and their constituents both in the Bretton Woods period of fixed exchange rates and in the post-Bretton Woods period of floating exchange rates. If I find there is a marginal effect, then I will be able to say that I arrive at a different conclusion for the Mundell-Fleming model because the Mundell-Fleming model ignores party politics.

To test the capital mobility hypothesis (H_2) that an increase in capital mobility is associated with a decrease in a country's monetary policy autonomy from the world interest rate, I compare the marginal effect of party in power given high capital mobility on monetary policy autonomy with the marginal effect of party in power given low capital mobility on monetary policy autonomy.

If I find that the marginal effect of party in power given high capital mobility on monetary policy autonomy is lower than the marginal effect of party in power given low capital mobility on monetary policy autonomy for the Bretton Woods and post-Bretton Woods periods, then this finding will support Cohen (1993) and Peterson's (1995) prediction that increased capital mobility coincides with less monetary policy autonomy in a country's economy and thereby confirm the capital mobility hypothesis (H_2). If so, then I expect that there should not be much left or right party differences in monetary policy in a country's economy. However, if I find that the marginal effect of party in power given high capital mobility on monetary policy autonomy is higher than the marginal effect of party in power given low capital mobility on monetary policy autonomy, then this finding will support Bearce's (2002) prediction for a floating exchange rate period that increased capital mobility may be associated with more monetary policy autonomy. Furthermore, this finding will support Cohen (1996) and Kapstein (1994) and Goodman's (1992) expectation that the government has policy autonomy, because, as I said in my theory Chapter II, Cohen (1996) breaks away with his (1993) expectation about the relationship of increased capital mobility

to decreased monetary policy autonomy and says the government has some capacity for autonomous actions.

Drawing on interaction term predictions of party in power and capital mobility from the Bretton Woods and post-Bretton Woods models, I calculate the marginal effect of party in power given high capital mobility and the marginal effect of party in power given low capital mobility to test the party in power hypothesis (H_1) and the capital mobility hypothesis (H_2). I utilize central bank independence predictions from the Bretton Woods and post-Bretton Woods models to test the central bank independence hypothesis (H_3) that the more independent the central bank, the lower the inflation rate is in industrial countries and more insulated the central bank is from political influence of left or right parties.

For the Bretton Woods and post-Bretton Woods models, if I find that central bank independence is associated with decreased monetary policy autonomy and if the estimated coefficient on central bank independence is negative and statistically significant at $p<0.001$, or $p<0.01$, or $p<0.05$, then this finding will confirm the central bank independence hypothesis (H_3). If so, then I expect to see little or no differences in policy based on left or right party in power.

In order to test the three hypotheses of the dissertation, first, I specify my model by running regressions without robust standard errors for the Bretton Woods and post-Bretton Woods models. I then run regressions with robust standard errors for the

models, as Kennedy (2008) notes, to address the problem of heteroskedasticity and

thereby to make ordinary least squares (OLS) estimators efficient. The

heteroskedasticity problem arises when there is no constant variance for the error term

across observations (Kennedy 2008). Since I use panel data in which countries are

observed across times, I make use of the xtreg commands in STATA. Using the xtreg

commands, I run fixed effects ordinary least squares (OLS) regressions and random

effects generalized least squares (GLS) regressions for the Bretton Woods and post-

Bretton Woods models[6].

The Bretton Woods Model

I use a cross-national examination of eighteen advanced industrial countries in

the Bretton Woods model to test the hypotheses of the dissertation for a fixed

exchange rate period of 1960-1972. Since the model has large samples of countries, I

might be able to see, as Kennedy (2008) notes, whether the regression with robust

standard errors makes the problem of heteroskedasticity inconsequential. Because

heteroskedasticity affects the t-test that is defined as the ratio of the predicted

coefficients of variables to the standard error (Kennedy 2008), I compare the t-test

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[6] Finally, I apply the Hausman test to the Bretton Woods and post-Bretton Woods models in order to determine whether the fixed effects OLS estimator or the random effects GLS estimator is appropriate. If the Hausman test is significant for the Bretton Woods and post-Bretton Woods models, then the fixed effects OLS estimator will be appropriate for the models. If this is the case, then I will report and interpret the results of the Bretton Woods and post-Bretton Woods models with fixed effects OLS estimator.

results of a regression without robust standard errors and a regression with robust standard errors.

A comparison of the results of these regressions shows that heteroskedasticity influences t-tests in the Bretton Woods model without robust standard errors in a way that fluctuates greatly the t-test values. This suggests that the result of the model without robust standard errors is influenced by heteroskedasticity but the result of the model with robust standard errors is exempt from heteroskedasticity.

Thus, drawing upon the regression with robust standard errors, I ran a fixed effects ordinary least squares (OLS) regression and a random effects generalized least squares (GLS) regression. I ran the Hausman test to see whether a fixed effects or random effects model is appropriate and the test was not significant. That is, the coefficients in the fixed effects and random effects models were not significantly different. The random effects model would be used for the fixed exchange rate period. However, since I cannot do a random effects model for the floating exchange rate period, I do fixed effects model both for the fixed exchange rate period (Table 3.2) and for the floating exchange rate period (Table 3.3).

Table 3.2
Monetary Policy Autonomy in the Bretton Woods (1960-1972)

Variable Name	Model
	Independent Variables
GOVPARTY	0.771*
	(0.303)
OPENNESS	0.070
	(0.117)
GOVPARTY*OPENNESS	-0.103**
	(0.038)
CBI	-0.354
	(4.595)
	Control Variables
CPI	0.103**
	(0.032)
GDPGR	-0.048
	(0.031)
UNEMP	-0.224*
	(0.089)
XRAT	0.005
	(0.017)
Prob > F	0.0000
N	126

*p < 0.05, **p < 0.01, ***p < 0.001

Robust standard errors are in parentheses.

Table 3.3
Monetary Policy Autonomy in the Post-Bretton Woods (1973-2009)

Variable Name	Model
	Independent Variables
GOVPARTY	-1.248**
	(0.407)
OPENNESS	-0.046
	(0.150)
GOVPARTY*OPENNESS	0.147***
	(0.037)
CBI	-1.512
	(2.340)
	Control Variables
CPI	0.149***
	(0.037)
GDPGR	-0.035
	(0.051)
UNEMP	0.259***
	(0.055)
XRAT	0.017**
	(0.007)
Prob > F	0.0000
N	292

*p < 0.05, **p < 0.01, ***p < 0.001

Robust standard errors are in parentheses.

Table 3.4
The Marginal Effect of Party Given High Capital Mobility and Given Low Capital Mobility for the
Bretton Woods period (1960-1972) and the Post-Bretton Woods period (1973-2009)

Monetary Policy Autonomy	
Fixed Exchange Rate Period	
The Marginal Effect of Party Given Low Capital Mobility	The Marginal Effect of Party Given High Capital Mobility
0.31	-0.67
Floating Exchange Rate Period	
The Marginal Effect of Party Given Low Capital Mobility	The Marginal Effect of Party Given High Capital Mobility
-0.37	0.81

The results based on predictions of the fixed effects OLS model (Table 3.2) for
the Bretton Woods 1960-1972 period of fixed exchange rates, as can be seen in Table
3.4, show that the marginal effect of party in power given high capital mobility is
double (0.67 compared to 0.31) than the marginal effect of party in power given low
capital mobility on monetary policy autonomy. The coefficient on the interaction term
of party in power with capital mobility in Table 3.2 is statistically significant at
$p<0.01$, so the marginal effect of party in power is conditional on capital mobility.
The result listed both in Table 3.2 and in Table 3.4, which is what I predicted, seems to
confirm my political model of monetary policy but disconfirms the Mundell-Fleming

model for a fixed exchange rate period. The results provide strong empirical support for my political model of monetary policy because the results suggest that a country can have monetary policy autonomy and high capital mobility and a fixed exchange rate at the same time when the model includes party politics. However, the results contradict the Mundell-Fleming (1963; 1962) model because the Mundell-Fleming model, which ignores party politics, suggests that a country cannot have monetary policy autonomy and high capital mobility and a fixed exchange rate at the same time.

According to Armingeon et al. (2011) Comparative Political Data Set I, 1960-2009, since a five-unit change is the difference between right party and left party, and since the marginal effect of party given high capital mobility of 0.67, as can be seen in Table 3.4, measures a one-unit increase in party in power, the marginal effect of left party given high capital mobility is five times higher (3.35 compared to 0.67) than the marginal effect of right party given high capital mobility on interest rate differential. This finding appears to confirm the party in power hypothesis (H_1) and thereby my political model of monetary policy for a fixed exchange rate period but disconfirms Clark and Hallerberg's (2000) prediction that there is no left or right party difference in monetary policy when exchange rates are fixed. The implication of this finding for political parties' constituents is that left party's monetary policy choice of a higher interest differential as a sign of exchange rate instability will discourage cross-border capital investments that would enable the consumer constituents of left parties to benefit from economic growth as a result of increases in national investments. However, the right party monetary policy choice of a lower interest differential as a

sign of exchange rate stability will encourage cross-border capital investments that would favor the investor constituents of right parties because of increases in returns on the investor constituents' capital assets. Besides that, given a choice between currency stability and currency volatility, consumers care more about policy autonomy than about currency stability because consumers might not move their capital asserts across international borders as readily and often as investors might move their capital assets across international borders.

The finding in Table 3.4 displays, once again, that the marginal effect of party in power given high capital mobility is double (0.67 compared to 0.31) than the marginal effect of party in power given low capital mobility on monetary policy autonomy, so this finding does not appear to support Cohen (1993) and Peterson's (1995) expectation that increased capital mobility gives rise to less monetary policy autonomy. This finding thereby disconfirms the capital mobility hypothesis (H_2). However, this finding seems to provide support for Cohen (1996) and Kapstein (1994) and Goodman's (1992) expectation that the government has policy autonomy.

The result from the Bretton Woods period of fixed exchange rates, as can be seen in Table 3.2, shows that the coefficient on central bank independence is not statistically significant.

In short, the finding in Table 3.2 is not supportive of the central bank independence hypothesis (H_3). The finding in Table 3.2 and in Table 3.4 is not

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supportive of the capital mobility hypothesis (H_2) either. However, the finding in Table 3.2 and Table 3.4 seems to provide strong empirical support for the party in power hypothesis (H_1) and my political model of monetary policy in open economies but contradicts the Mundell-Fleming model in the Bretton Woods 1960-1972 period of fixed exchange rates.

The Post-Bretton Woods Model

In order to test the hypotheses of the dissertation for a floating exchange rate period of 1973-2009, I use a cross-national examination of eighteen advanced industrial countries for the post-Bretton Woods model, just as I do for the Bretton Woods model. A comparison of the t-test results of a regression without robust standard errors and a regression with robust standard errors suggests that heteroskedasticity affects the t-test result in the regression without robust standard errors but it does not influence the t-test result in the regression with robust standard errors.

Therefore, based on the regression with robust standard errors, I ran a regression with a fixed effects OLS estimator, a regression with a random effects GLS estimator, and the Hausman test for the post-Bretton Woods model to see whether a fixed effects estimator or a random effects estimator is appropriate. Because the Hausman test is significant at $p<0.001$, the fixed effects OLS estimator is appropriate for the post-Bretton Woods model.

The findings based on predictions of the fixed effects OLS model (Table 3.3) for the post-Bretton Woods 1973-2009 period of floating exchange rates, as can be seen in Table 3.4, display that the marginal effect of party in power given high capital mobility is double (0.81 compared to 0.37) than the marginal effect of party in power given low capital mobility on monetary policy autonomy. The coefficient on the interaction term of party in power with capital mobility in Table 3.3 is statistically significant at $p<0.001$, so the marginal effect of party is conditional on capital mobility. The result, both in Table 3.3 and in Table 3.4, which is what I expected, seems to be consistent with my political model of monetary policy but is inconsistent with the Mundell-Fleming model for a floating exchange rate period.

According to Armingeon et al. (2011) Comparative Political Data Set I, 1960-2009, a five-unit change is the difference between right party in power and left party in power and the marginal effect of party given high capital mobility of 0.81, as can be seen in Table 3.4, measures a one-unit increase in party in power. That is to say, the marginal effect of left party in power given high capital mobility is five times higher (4.05 compared to 0.81) than the marginal effect of right party in power given high capital mobility on monetary policy autonomy. This finding appears to provide support for Bearce's (2002) prediction for the post-Bretton Woods era of floating exchange rates that left parties in power will be associated with higher interest rate differentials than right parties in power. It seems to confirm the party in power hypothesis (H_1) and thereby my political model of monetary policy but contradicts the Mundell-Fleming model.

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The finding in Table 3.4 shows, once again, that the marginal effect of party in power given high capital mobility is double (0.81 compared to 0.37) than the marginal effect of party in power given low capital mobility on monetary policy autonomy. The finding in Table 3.4 does not appear to be supportive of Cohen (1993) and Peterson's (1995) expectation that increased capital mobility brings about less monetary policy autonomy and therefore disconfirms the capital mobility hypothesis (H_2). However, the finding provides strong support for Bearce's (2002) prediction for the post-Bretton Woods period of floating exchange rates that increased capital mobility may be associated with more monetary policy autonomy from the world interest rate. Since Cohen (1996) breaks away from his earlier (Cohen 1993) prediction about decreased monetary policy autonomy and says the government has some capacity for autonomous actions, this finding seems to provide strong support for Cohen (1996) and Kapstein (1994) and Goodman's (1992) prediction that the government has policy autonomy as well.

The large and negative but insignificant coefficient on central bank independence in Table 3.3 from the post-Bretton Woods model with the fixed effects OLS estimator shows that central bank independence is not statistically significant. It is not supportive of the central bank independence hypothesis (H_3). What this means for my results is that the introduction of the euro on January 1, 1999, as a European common currency, along with the transfer of national monetary policy power to the European Central Bank, which then had the power to produce a common monetary policy for the EU, has no impact on my results.

In short, a comparison of the results of the Bretton Woods and post-Bretton

Woods models in Table 3.4 shows that the marginal effect of party in power given high

capital mobility in a fixed exchange rate period is lower (0.67 compared to 0.81) when

I include multiple effect (3.35 compared to 4.05) than the marginal effect of party in

power given high capital mobility on monetary policy autonomy in a floating

exchange rate period.

This empirical finding suggests that political parties in power will be able to

have more monetary policy autonomy from external factors such as the world interest

rate to influence capital mobility when a country adheres to a floating exchange rate

regime than when a country has a fixed exchange rate regime. The finding from the

Bretton Woods and post-Bretton Woods models contradicts the Mundell-Fleming

model but confirms my political model of monetary policy in open economies.

This result is important because, as I say in Chapter II, the right party's investor

constituents can benefit from economic growth when only two of the three economic

variables co-exist in a country's economy, which is what the Mundell-Fleming model

suggests; however, the left party's consumer constituents can benefit from economic

growth when the three economic variables co-exist in a country's economy, which is

what my original political model of monetary policy in open economies suggests.

Since I find my model is statistically significant across a fixed exchange rate

period (1960-1972) versus a floating exchange rate period (1973-2009), I can say that

my model stands the test of time. That is, a cross-national examination of my model contributes to scholarship by introducing an original political model of monetary policy in open economies as explained in this dissertation.

Conclusion

In this chapter, I use a cross-national examination of eighteen advanced industrial countries over the period from 1960 to 2009 in order to test the hypotheses of the dissertation. The empirical result seems to be very supportive of the party in power hypothesis (H_1) for the Bretton Woods and post-Bretton Woods models but not supportive of the capital mobility hypothesis (H_2) and the central bank independence hypothesis (H_3).

In the next chapter, since the United States might not be an outlier, as seen in the evidence in Table 1.1, and since the United States offers national variations that provide salient points about the research questions, I will use the United States as a case study in order to test qualitatively the hypotheses of the dissertation.

CHAPTER IV

A POLITICAL MODEL OF MONETARY POLICY IN OPEN ECONOMIES:
THE CASE OF THE UNITED STATES

Introduction

In Chapter III, I used a cross-national analysis of eighteen advanced industrial

countries to test the three hypotheses of the dissertation. Drawing on an original

political model of monetary policy, I tested my central hypothesis that monetary policy

autonomy is affected by changes in the political party in power (H_1) as well as the

capital mobility hypothesis (H_2) and the central bank independence hypothesis (H_3).

The political party in power hypothesis (H_1) is confirmed. The capital mobility

hypothesis (H_2) is disconfirmed. The central bank independence hypothesis (H_3) is

disconfirmed either. In this chapter, I use a case study of the United States to test the

hypotheses that were laid out in the previous chapter. This chapter explores my case

study of the US monetary policy by comparing the monetary policies of President

Lyndon Johnson's administration, 1965-1968, with President Richard Nixon's

administration, 1969-1972, and President Bill Clinton's administration, 1997-2000,

with President George W. Bush's administration, 2001-2004. The Johnson and Nixon

years in the case study occur during the Bretton Woods fixed exchange rate period, a

time in which other countries fixed their exchange rates to the US dollar until the early

1970s, and the Clinton-Bush years occur in the post-Bretton Woods era during which a floating exchange rate existed.

I chose to use the United States for this case study because the United States after 1945 has been the dominant economic power in the world. The monetary policy of the United States has not been influenced by such external forces as other countries' interest rates and monetary policies; instead, the other countries have been influenced by the interest rates and monetary policies of the United States. As Table 1.1 in Chapter I posits, the United States represents variations in monetary policy autonomy that shows with more monetary policy autonomy in the Bretton Woods period of fixed exchange rates and less monetary policy autonomy in the post-Bretton Woods period of floating exchange rates. As Figure 4.1 in this chapter also shows, the United States monetary policy autonomy varies across times.

I develop data sets from votes by members of the Federal Open Market Committee (FOMC) of the Federal Reserve. These votes are drawn from official records of FOMC Meeting Minutes and Policy Actions in the Annual Report of the Board of Governors of the Federal Reserve, which appear on the Federal Reserve website. In order to test the party in power hypothesis (H_1), I look at votes by members of the FOMC according to whether they were appointed by a Democratic or a Republican president. Unlike Woolley (1984), who looks at only dissenting votes, I look at all votes of the FOMC on monetary policy directives in its meetings because looking at all these votes is useful for tracking variations in monetary policy. Looking

at all votes is also advantageous because both minority votes (dissenting votes) and majority votes expose wider variations in monetary policy. I use Armingeon et al. (2008; 2011) Comparative Political Data Sets I, 1960-2006 and 1960-2009, to test the capital mobility hypothesis (H_2) about whether the United States is autonomous from the world interest rate.

This US case study I develop contributes to scholarship because it examines the same years, 1965-1972, as Woolley (1984) used for his work, but includes additional data from different years, 1997-2004, that correspond to a floating exchange period. The second contribution of the case study to scholarship is that this study analyzes both quantitative and qualitative evidence. This chapter covers three major topics. First, I briefly review the literature on the Federal Reserve; next, I test the hypotheses of the dissertation; finally, I present conclusions that differ from the Mundell-Fleming model.

Brief Review of the Literature about Political Influence on the Federal Reserve

I review the literature on the Federal Reserve briefly according to the relationship between the Federal Reserve and other governmental branches, especially the President and Congress.

The Political Relation of the Federal Reserve to the President and Congress

In order to examine the effects of political parties on the US Federal Reserve, it is necessary to analyze the Federal Reserve as a financial institution and more importantly, how political relationships and individual actors influence monetary decisions.

Woolley (1984) inquires about the outcome of the political relationships between the Federal Reserve and the President, between the Federal Reserve and Congress, and between the Federal Reserve and bankers and economists.

With regard to the relation of the Federal Reserve to the President, Woolley (1984) argues that the party of the President who appointed the Federal Reserve members is important to the policy vote of those members. To support his argument, Woolley (1984) focuses on one key hypothesis, which is that if ideology matters, then the dissenter on a vote will reflect the policy preference of the party of the president who appointed him. Using data from dissenting votes of FOMC Meetings over the period, 1965-1981, Woolley (1984) tests his hypothesis by examining dissenting votes. He finds that the Board members appointed by Democratic presidents are more likely to favor looser monetary policy than the members appointed by Republican presidents. Woolley's (1984) presidential appointment hypothesis leads him to determine that a modest relationship exists between the appointing party and the voting position of the member of the Board of Governors of the Federal Reserve.

For Woolley (1984), the President seems to have more power and methods of influence than Congress. Woolley (1984) writes that the president has the legal power to appoint top officials to the Federal Reserve. He refers to this power as a significant political resource that the President controls to influence the Federal Reserve. The goal of having Federal Reserve Board members serve fourteen-year appointments is to impose constraints on the capability of one president to have a chance to appoint a majority of the Board; however, the most significant appointment presidents make is the appointment of the Board Chairman who represents the administration's opinion in FOMC meetings. In addition, based on the 1913 Federal Reserve Act, the President is in charge of macroeconomic policies, so the role of the Federal Reserve as a financial institution in this area is crucial. This law also stipulates the need for the compatibility of monetary policy with the economic plan of the president in power. Woolley (1984) also writes that, according to the law, Congress is the final power on the existence of the Federal Reserve, and the Federal Reserve is legally responsible to Congress. While both Congress and the President have certain powers over the Federal Reserve given to them by this law, the President appears to have more power than Congress.

With regard to the relation of the Federal Reserve to Congress, Woolley looks at the frequency of various legislative actions that Congress took in the period 1970-1980 to confront the Federal Reserve directly. He defines legislative actions according to hearings, congressional committee approval, the House of Representatives and the Senate approvals, and joint House of Representatives and Senate approvals. Woolley (1984) finds that the frequency of the actions listed above increased in 1975 because

the economy began to recover from a recession. According to Woolley's (1984) findings, the first action is reforming the system structure. One example of this is having the General Accounting Office conduct audits. Woolley (1984) also notes that structural reform is by far the most preferred method of shaping the behavior of the Federal Reserve. The second action Congress can perform, according to Woolley (1984), is allocating credit to sectors in danger of being effected by a tight monetary policy. This approach is moderately popular. The final legislative action Woolley (1984) focuses on is that Congress can give instructions directly to the Federal Reserve about monetary targets and interest rates. This method is the least popular congressional action. What this means for central bank independence is that the Federal Reserve generally conducts monetary policy independently of Congress.

Woolley (1984) also argues that monetary policies in the 1972 election era showed how effectively the FOMC defended the autonomy of the Federal Reserve by predicting the potential political pressures. The FOMC signaled that the Federal Reserve would pursue a loose monetary policy during the 1972 election period, especially from November 1, 1971 to March 31, 1972, by taking into account political pressures from the government branches[7], Congress and the President. In addition, the FOMC avoided increases in interest rates during the period from April 1972 to January 1973 because interest rate increases would stimulate political controversy. For the members of Congress, high interest rates would damage their local constituents while

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[7] During the 1972 election in the United States the Democratic majority controlled Congress and Republican President Richard Nixon was in power.

they would provide benefits to financial institutions. Therefore, if the FOMC decided

to increase interest rates, then the autonomy of the Federal Reserve would have been

exposed to political pressures, especially from Congress.

Political Influence of Congress and the President on the Federal Reserve

In order to scrutinize political influence of Congress and the President on the

United States Federal Reserve, it is necessary to examine the inclination of Congress

and the Federal Reserve to reduce the influence of the President on monetary policy

and more importantly, how the Federal Reserve's administrative actions in conjunction

with the tolerance of Congress to these actions increase the autonomy of the Federal

Reserve.

Corder (1998) describes the autonomy of the Federal Reserve (Fed) as "a joint

product of the strategic actions of Fed decision makers and the desire of members of

Congress to frustrate executive control over monetary policy outcomes" (Corder 1998,

4). Corder (1998) argues that to isolate the Federal Reserve from the political

influence of the President, which increases the autonomy of the Federal Reserve,

Federal Reserve decision makers act strategically by updating monetary policy rules

(i.e. changes in open market operation rules) and by introducing rule changes as

technical modifications to changing market conditions. Corder (1998) also argues that

the members of Congress accept these administrative updates because the autonomy of

the Federal Reserve provides benefits to the members of Congress by halting the

President's political influence and by ensuring Congress can formulate new credit

institutions that enable Congress to distribute subsidized credit to constituents such as home buyers or small business owners who appear not to benefit from the Federal Reserve's choice.

Changes in the Federal Reserve's open market operation rules are consistent with Corder's (1998) argument about how monetary policy rule changes make possible increases in the autonomy of the Federal Reserve. Using eclectic data sets primarily from Quarterly Report to the President, memos to the President and to the Council of Economic Advisers (CEA), letters from presidents' libraries and Annual Reports of the Board of Governors of the Federal Reserve System, Corder (1998) analyzes changes in open market operation institutions and finds that the three rule updates of (1) the 1951 Treasury Accord, (2) the 1953 Bills Only Policy, and (3) the 1960s Extension of Open Market Operation to Long-Term Bonds helped increase the autonomy of the Federal Reserve and reduced the President's ability to influence monetary policy. Formerly, the Treasury, under executive control, set long-term government security yields, but this power was eliminated with the 1951 Accord. The 1953 and 1960s extension increased the tools that the Federal Reserve could use including purchasing long-term securities.

In order to analyze the political effects of Congress and the President on the US Federal Reserve, it is also necessary to examine the interactions of the Federal Reserve with government branches and more significantly, how the Federal Reserve conducts monetary policy under strains.

Kettl (1986) puzzles over what autonomy means and the way an autonomous agency may be rendered accountable in the broader structure of the United States government. Kettle (1986) argues that the Federal Reserve chairmen guide the Federal Reserve under pressures. In 1972 the White House and Congress persistently pressured the Federal Reserve for a loose monetary policy. The members of the FOMC desired to ensure that inflation would not come back through a loose monetary policy. According to Kettle (1986), the Federal Reserve Chairman Arthur Burns did not support either side, and he was not a collaborator in the President's in power reelection campaign. As Kettl (1986) puts it plainly, "Burns did not align himself with either camp, and thus was not an accomplice in Nixon's reelection campaign" (Kettl 1986, 128). Instead, Burns directed the Federal Reserve in a way that favored a loose monetary policy in conjunction with wage-price controls to keep inflation in check.

Kettl (1986) notes that political pressures stemming from interest rate increases on the members of Congress[8] led Congress to increase oversight of the Federal Reserve in 1975. In 1975, the House of Representatives passed the Resolution 133, which stipulated consultations of the Federal Reserve with Congress four times annually, with the banking committees of Congress two times annually. Resolution 133 also required the Federal Reserve Chair to testify regularly and publicly on both previous and future monetary policy plans (Kettl 1986). However, under the Resolution, at the first hearing, Burns acted strategically to make the Federal Reserve

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[8] In 1975, a Democratic majority controlled Congress in the United States.

objectives uncertain and presented five measures (or five targets) of money supply for the monetary plans. This strategy, laid out in the Federal Reserve staff memorandum, would imply that the more money targets the Federal Reserve reported throughout testimony, the harder it would be for the House Democrats in power to restrain Burns (Kettl 1986). At the first hearing, Burns guided the Federal Reserve in a way that avoided committing it to anything (Kettl 1986). At the hearing, Burns also warned that the money supply was less significant than the velocity, which means that economic growth rates would be higher if a consumer would spend a given dollar faster in the economy. However, during testimony Burns deliberately did not discuss the velocity projections as a way to give himself the flexibility to blame other elements in achieving the Congressional demand for growth (Kettl 1986). While avoiding a discussing of velocity, Burns also managed to make uncertain the link between economic growth and the money supply. In addition, Burns discussed his personal projections rather than the Federal Reserve's intentions when the Democrats, who were in the majority of Congress at the time, asked him to explain the implications of the money target for the economy (Kettl 1986).

The members of the House and the Senate banking committees wanted the Federal Reserve to explain monetary policy plans explicitly (Kettl 1986). Thus, in 1977, Congress had the Resolution's requirements passed into the Federal Reserve Reform Act. The Act required regular hearings that gave members of Congress opportunities to lobby the Federal Reserve for their desired monetary policy. Besides that, the Humphrey-Hawkins Full Employment Act in 1978 required the Federal

Reserve to send Congress monetary policy goals, thirty days after the President sent

his Economic Report to Congress, along with an explanation of the way the monetary

goals fit the President's economic policy goals. Furthermore, the Federal Reserve was

required to present FOMC's projections (not the Chairman's personal opinion) for

economic growth and inflation and unemployment for the next year in semiannual

reports. This means that the Federal Reserve officials were subjected to permanent

and regular oversights of Congress on the essence of monetary policy (Kettl 1986).

Using data from the United States Congress, Library of Congress, Index of

Digest of Public General Bills, and time series analysis for the period from 1951 to

1983, Kettl (1986) analyzes whether congressional interest in the Federal Reserve has

increased since the 1951 Accord between the Federal Reserve and the Treasury. In his

analysis, he takes congressional interest in the Federal Reserve as his dependent

variable. This variable is measured by the number of the bills that are related to the

Federal Reserve and introduced by the members of Congress. His examinations

suggest that greater congressional interests in the Federal Reserve correspond to three

tight money periods. The first was during the Federal Reserve campaign for reducing

inflation stemming from the Vietnam War. The second period was when the Federal

Reserve imposed constraints on the economy during the Gerald Ford presidency. The

third was when the Federal Reserve pursued monetarism, a monetary policy that is

exercised to stabilize inflation, for the period 1979-1982. Kettl (1986) finds that

Congressional interest increases in the Federal Reserve over the time period from

1951 to 1983. In short, Kettl (1986) provides a historical analysis of the Federal Reserve to explain political pressures from government branches.

Corder (2012) also provides a historical analysis of the Federal Reserve to explain pressures from the federal government. Using an array of sources, mostly, from market reporting and the public statements of the decision makers of the Federal Reserve on the 2008 credit crisis, the Chairman Arthur Burns' papers from Gerald Ford's library, official reports from banking regulators on bank supervision, Corder (2012) analyzes the strategic actions of the Federal Reserve pre, during, and post 2008 credit crisis[9] under political strains and provides the following historical examination of the Federal Reserve. If the Federal Reserve increased the federal funds rate to offset home price increases in 2003-2004, then the Federal Reserve would have contradicted the federal government's policy. The federal government enlarged homeownership with an extension of credit to low-income borrowers. Consistent with this homeownership enlargement, loans by banks and lenders to risky borrowers who are known as subprime borrowers (that is, borrowers with unreliable income) increased over the period, 2000-2005. Subprime borrowers became part of new mortgages markets, but the Federal Reserve was not willing to exercise assertively its regulatory power to impose constraints on the growth of subprime mortgage lending. It is not surprising given the antipathy of the Federal Reserve to selective credit

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[9] An increase in home prices at rates more than household incomes in the long term is the source of the 2008 crisis in the financial system (Corder 2012). When a decrease in home prices started in 2008 sellers were in a situation where outstanding mortgage increased at rates higher than home prices; such a situation, in turn, resulted in foreclosures (that is, the borrower gives the property to the creditor as a result of the failure of the borrower to pay back money owed) and the 2008 crisis (Corder 2012).

practices (that is, limiting the availability of credit to specific borrowers) since the 1950s. Instead, the Federal Reserve has been sympathetic to constraints on credit across all borrowers by altering the federal funds rate to make credit cheaper or dearer to all borrowers. The Federal Reserve would not limit mortgage lending growth caused by its opposition of selective credit practices and the federal government's attempts to expand homeownership along with financial deregulations (Corder 2012). During the 2008 crisis, Congress tried to give the Federal Reserve the task of examining mortgage lending transactions, but, because the Federal Reserve was not willing to supervise mortgage lending transactions, Congress developed the Consumer Financial Protection Bureau to isolate consumer protection tasks from the Board of Governors (Corder 2012). To halt Congress' demands to direct credit to specific economic sectors and to protect its independence[10] from political strains, the Federal Reserve has generally resisted buying mortgage-backed security (MBS)[11], but in 2009

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[10] Specifically, during the years of Alan Greenspan's Federal Reserve chairmanship, 1987-2006, the Federal Reserve exerted a high level of independence because during this period the Federal Reserve pursued apolitical monetary policy by adjusting interest rates (Corder 2012).

[11] For instance, in the late 1960s, the Federal Reserve Chairman William Martin was reluctant to buy agency MBS through open market transactions because he believed that if the Federal Reserve bought these agency issues, then this would have encouraged Congress to use the Federal Reserve to direct credit to other susceptible economic sectors; and, at that time the suggestion of the key decision makers of the Federal Reserve was that Congress should provide benefits such as mortgage subsidies directly to housing markets through the budget (Corder 2012).

the Federal Reserve purchased agency MBS to handle the 2008 credit crisis[12] (Corder 2012).

Qualitative Model

In this section, I test the party in power hypothesis (H_1) and the capital mobility hypothesis (H_2) and the central bank independence hypothesis (H_3). I test the party in power hypothesis (H_1) and the central bank independence hypothesis (H_3) by looking at presidential appointment. If central bank independence is high, then I expect to see little or no differences in policy based on left or right party in power. The party in power hypothesis (H_1) suggests that left-right party differences in monetary policies exist in a country's economy. The capital mobility hypothesis (H_2) proposes that an increase in capital mobility might be associated with reduced monetary policy autonomy. The central bank independence hypothesis (H_3) puts forward that the more independent the central bank, the lower the inflation rate is in industrial countries and more insulated the Federal Reserve is from political influence of left or right parties. The United States has high central bank independence, so this theory predicts that we should not see much differences in policy based on left or right party in power. Thus, if we observe that party does seem to matter for monetary policy, this would disconfirm the CBI hypothesis.

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[12] To address mortgage market disruptions in the 1970s during which the Federal Reserve faced political pressures similar to pressures in the 2008 credit crisis, the Federal Reserve under the Chairman Arthur Burns provided support for housing finance (Corder 2012).

I use Lijphart's (1999) index of central bank independence to say that central bank independence was high in the United States over the fixed exchange rate period, 1960-1972, and the floating exchange rate period, 1973-1996. The Lijphart (1999) index measures central bank independence by utilizing the mean of the indices of Cukierman et al. and Grilli et al. and Governors' turnover rate. Lijphart's (1999) index[13], like the indices, is coded from 0, which represents the lowest central bank independence, to 1, which is the highest central bank independence. Central bank independence is high in the United States. Lijphart's (1999) index of central bank independence is 0.56 for the United States compared with 0.31 for the United Kingdom. This means that the Federal Reserve in the United States is more independent from political pressures than the Bank of England in the United Kingdom. A range of central bank independence from a high rate of 0.69 for Germany to a low rate of 0.17 for Norway implies that the central bank in Germany is far more

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[13] Lijphart's (1999) index is based on the combination of Cukierman et al.'s (1994) index of legal independence of central banks and Cukierman et al.'s index of governors' turnover rate and Grilli et al.'s (1991) index of political and economic independence of central banks that is analogous to Cukierman et al.'s (1994) index by focusing on formal rules. Cukierman et al. (1994) developed the index of legal independence of central banks in a way that broke sixteen legal independence variables down by four variables (Governors' appointment and office terms; constraints on government lending; policy structures; central bank targets). For instance, if a governor's office term is eight years or more than eight years, then this is coded as 1 (the highest independence score); and, if a governor's term is less than four years, then this is coded as 0 (the lowest independence score) (Lijphart 1999). Likewise, if the charter defines price stability as a major target or if the central bank is the last resort to resolve the conflict of price stability target with other government targets, then this is coded as 1; and, if price stability is not defined as a target in the charter, then this is coded as 0 (Lijphart 1999). Similarly, if lending only to the central government is in the charter and if the central bank by itself sets lending terms, then this is coded as 1; and, if lending to federal and state level governments and to public and private sectors is in the charter and if the executive branch sets lending terms, then this is coded 0 (Lijphart 1999).

politically independent than the central bank in Norway (Lijphart 1999). Where

central bank independence is high, I expect to see less influence of political parties.

In order to test the party in power hypothesis (H_1) and the central bank

independence hypothesis (H_3), I use data on presidential appointments. If party

matters, then votes by Federal Reserve members appointed by Democratic presidents

will differ systematically from votes by members appointed by Republican presidents.

I look at votes by FOMC members according to whether they were appointed by a

Democratic or a Republican president, just as Woolley (1984) does. Unlike Woolley

(1984), who examines dissenting votes, I analyze all votes[14] by the members of the

Board of Governors of the Federal Reserve. I develop a method for measuring the

type of monetary policy from votes by FOMC members drawn from the Federal

Reserve website[15]. I define a loose monetary policy by FOMC decisions on money

market conditions that are associated with increases in money supply and credit

growth along with decreases in short-term interest rates, which requires high bank

reserve availability. I define a tight monetary policy by FOMC choices on money

market conditions that are related to the opposite of money market conditions for a

loose monetary policy. I measure the policy preference of appointees by a

dichotomous variable, loose monetary policy versus tight monetary policy. I compare

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[14] I analyze the votes of the FOMC for economic policy directives in its meetings but not for the other votes of the FOMC such as votes on authority directives. The FOMC's authority directives are administrative budgetary directives that authorize certain amounts of money to the New York Federal Reserve Bank to operate currencies according to the economic policy directives.

[15] This data appears on the Federal Reserve website (See Transcripts and Other Historical Materials): www.federalreserve.gov/monetarypolicy/fomc_historical.htm

votes for loose versus votes for tight policy across administrations. I also compare

votes for loose versus votes for tight policy across fixed and floating exchange rates to

see whether differences in policy based on left or right party in power get smaller or

bigger when the United States moves from fixed to floating exchange rates. If I find

that Democratic and Republican appointees behave the same way, then this finding

will confirm the central bank independence hypothesis (H_3). However, if I find that

Democratic and Republican appointees behave differently, then this finding will

confirm the party in power hypothesis (H_1).

Bearce's (2002) prediction for a floating exchange rate period is that left parties

will favor looser fiscal policy and then favor tighter monetary policy than right parties.

The reason why Democratic (Left) and Republican (Right) parties behave differently

is that left parties uses a Keynesian policy in a way that spends more money on public

goods such as education and infrastructure and then facilitates tighter monetary policy

in order to make up for it. If I find that the percent of Democratic appointees who vote

for a tight monetary policy is higher than the percent of Republican appointees who do

so for a floating exchange rate period, then that finding will confirm Bearce (2002).

I use Table 4.5 for long-term interest rates in the US versus the world interest

rates by administrations and interest rate differences between the US and world

interest rates to see whether I arrive at a different conclusion for the Mundell-Fleming

model. I also compare the US average interest differential for a fixed exchange rate

era, 1960-1972, with the US average interest differential for a floating exchange rate

era, 1973-2009, to see if an increase in monetary policy autonomy occurs when the US moves from fixed to floating exchange rates. To analyze this point, I use data drawn from Armingeon et al.'s (2011) Comparative Political Data Set I, 1960-2009, for long-term interest rates on government bonds. In 18 countries I measure monetary policy autonomy by subtracting the world interest rate from a country's national interest rate, just as Bearce (2002) does. I calculate the nominal world interest rate as Bearce (2002) does, using the G-5[16] interest rate average. The world interest rate is equal to G-5 except when I calculate interest rate differential for countries in the G-5. I calculate the world interest rate without that country and then subtract the world interest rate from the national interest rate. For example, for the US, in 1960, the G-5 average interest rate is equal to 5.49%, without the US it is 5.94% and the US national interest rate is 4.12%. Therefore the US interest rate differential in 1960 is 1.83%. I use the G-5 average because, as Bearce (2002) notes, the G-5 countries are the largest capital-centric economies in the world and determine the world interest rate.

As Table 1.1 in Chapter I shows, the US average interest rate differential is -1.65 for a fixed exchange rate period and 0.22 for a floating exchange rate period. What this means is that the US national interest rate varies less from the world interest rate during the floating exchange rate period than during the fixed exchange rate period. This suggests that the US has less monetary policy autonomy when exchange rates are floating, but it is more likely that the large US economy greatly influences world

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[16] The groups of five advanced industrial countries (G-5) include the United States, the United Kingdom, Germany, France, and Japan.

interest rates and thus the interest rate differential is smaller in the US during the floating exchange rate period.

In order to test the capital mobility hypothesis (H_2), I take the absolute value of the interest rate differential (my measure of US monetary policy autonomy) and plot it against capital mobility. The scatter plot in Figure 4.1 shows the link between capital mobility and interest rate differentials[17] in the US. I use data drawn from Comparative Political Data Set I 1960-2006 (Armingeon et al. 2008) for the financial openness index, which is a measure of the extent of capital mobility. The financial openness of a country's economy is measured by an index score of 0-14[18]. The index is coded from 0, which represents a closed economy in which there is no cross-border capital investment, to 14, which is an open economy where the highest cross-border capital investment exists. I compare the effect of capital mobility for a fixed exchange rate period with the effect of capital mobility for a floating exchange rate period. If I find that increased capital mobility is associated with decreased monetary policy autonomy when the United States moves from fixed to floating exchange rates, then that finding will confirm the capital mobility hypothesis (H_2).

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[17] According to the data set that I develop based on long-term interest rates on government bonds pulled from Armingeon et al.'s (2011) Comparative Political Data Set I, 1960-2009, for interest rate differentials, the United States' nominal long-term interest differential ranges from -3.43 points to 0.01 points.

[18] As Figure 4.1 shows, the United States has a range of financial openness index scores from a maximum score of 14 to a minimum score of 12.5. This implies that capital mobility is high in the United States.

Party in Power and Central Bank Independence

In order to test the party in power hypothesis (H_1) and the central bank independence hypothesis (H_3), I use data on presidential appointments. I develop data sets for the annual number of president-appointed governors' votes. The data set is drawn from official records of FOMC Meeting[19] Minutes and of Policy Actions in the Annual Report of the Board of Governors on the Federal Reserve website[20]. The data set covers both a fixed exchange rate period, 1965-1972, and a floating exchange rate period, 1997-2004. In order to explain left-right party differences in monetary policy within different exchange rate periods, I choose Johnson and Nixon's presidency terms for a fixed exchange rate period, and Clinton and Bush's terms for a floating exchange rate period. These periods also cover wide variations in monetary policy from loose to tight. To analyze contemporary variations in monetary policy directives in FOMC meetings over my time periods, I include Clinton and Bush's presidency periods. To test the party in power hypothesis (H_1) and the central bank independence hypothesis (H_3), I would look at presidential appointments.

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[19] The Federal Open Market Committee (FOMC) meets eight times regularly per year and holds other meetings if necessary. The FOMC votes for monetary policy directives in FOMC meetings and applies the directive during the inter-meeting period. FOMC meeting minutes are made public. The seven members of the Federal Reserve Board of Governors along with five of the presidents of the district banks are voting members of the FOMC and make decisions about interest rates and money supply. The president of the New York Federal Reserve Bank, as the vice-chairman of the FOMC, is a permanent voting member of the FOMC, and four of the presidents of the other district banks rotate annually (Woolley 1984).

[20] This data appears on the Federal Reserve website (See Transcripts and Other Historical Materials): www.federalreserve.gov/monetarypolicy/fomc_historical.htm

I use the votes of all the members on the Board of Governors regarding monetary policy directives in FOMC meetings to test the party in power hypothesis (H_1) and the central bank independence hypothesis (H_3). However, I do not look at the votes by five district bank presidents on the FOMC. The reason for excluding the votes of the bank presidents relates to the fact that those members are not appointed by the President. The seven members of the Board[21] of Governors are appointed by the President for fourteen-year terms and approved by the Senate, but the president of each district bank[22] is nominated by the Board of Directors of the district banks and approved by the Board of Governors (Woolley 1984). I am only looking at votes by the Board members who are appointed by the President to see if the political view of the party of the President affects how the Board members vote on monetary policy. Furthermore, there is no link between votes by bank presidents and the party of the President in terms of appointments. Table 4.1 and Table 4.2 show the members of the Board of Governors of the Federal Reserve who were appointed by a Democratic or a Republican president over the time periods in my analyses.

I analyze all votes of the Board of Governors of the FOMC, including those who cast with the majority and those who dissent with the majority. As Woolley (1984) notes, some evidence suggested that 86 percent of the time FOMC decisions on the monetary policy directive were unanimous during a seventeen-year period. As Woolley (1984) also reports, there is not a large number of dissenting votes of the

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[21] The Board of Governors of the Federal Reserve is located in Washington D.C.

[22] There are twelve district banks located in different cities in the United States.

FOMC to examine. Therefore, I include both the majority and the minority

(dissenting) votes so that I can test the party in power hypothesis (H_1) and the central

bank independence hypothesis (H_3) in wider variations in monetary policy. I calculate

vote percentages by looking at Democratic or Republican appointees' votes for loose

versus votes for tight policy in a year. I take loose or tight policy divided by total

votes to compare how many times Democratic or Republican appointees vote for a

loose monetary policy with the number of times Democratic or Republican appointees

vote for a tight monetary policy in a fixed exchange rate era and in a floating exchange

rate era. I then compare the average vote percentages for loose versus the average

vote percentages for tight policy across administrations during the fixed exchange rate

era and during the floating exchange rate era. Finally I find the average for each era

and compare them across fixed versus floating exchange rate eras so I can test the

party in power hypothesis (H_1) and the central bank independence hypothesis (H_3).

Table 4.1
The Members of the Board of Governors of the Federal Reserve Appointed by the President in a Fixed Exchange Rate Period, 1965-1972

Members of the Board of Governors	Appointed by the President		Source
William McC. Martin, 1951-1970	H. S. Truman		The Federal Reserve
J.L. Robertson, 1952-1966	H. S. Truman		Meltzer (2009) and
			The Federal Reserve
Chas N. Shepardson, 1955-1967	D. D. Eisenhower (1953-1961)		Arthur (2014)
A.L. Mills, 1958-1965	D. D. Eisenhower		Arthur (2014)
George W. Mitchell , 1961-1976	J. F. Kennedy	(1961-1963)	Arthur (2014)
J. Dewey Daane, 1963-1974	L. B. Johnson	(1963-1969)	Arthur (2014)
Sherman J. Maisel , 1965-1972	L. B. Johnson		Arthur (2014)
Andrew F. Brimmer, 1966-1974	L. B. Johnson		Arthur (2014)
William W. Sherrill, 1967-1971	L. B. Johnson		Arthur (2014)
Arthur Burns, 1970-1978	R. M. Nixon	(1969-1974)	Arthur (2014)
John E. Sheehan, 1972-1975	R. M. Nixon		Arthur (2014)
Jeffrey M. Bucher, 1972-1976	R. M. Nixon		Arthur (2014)

Source: The Membership of the Board of Governors of the Federal Reserve System from the following website: www.federalreserve.gov/aboutthefed/bios/board/boardmembership.htm; and, Meltzer, Allan H. *A History of the Federal Reserve*. Chicago: University of Chicago Press, 2009; and, Arthur, C. Damien. *Economic Actors, Economic Behaviors, and Presidential Leadership*. Lanham, Boulder, New York, London: Lexington Books, 2014.

Table 4.2

The Members of the Board of Governors of the Federal Reserve Appointed by the President in a Floating Exchange Rate Period, 1997-2004

Members of the Board of Governors	Appointed by the President	Source
Alan Greenspan, 1987-2006	R. W. Reagan (1981-1989)	Arthur (2014)
Edward W. Kelley, 1987-2001	R. W. Reagan	Arthur (2014)
Susan M. Phillips, 1991-1998	G. H. W. Bush (1989-1993)	Arthur (2014)
Laurence H. Meyer, 1996-2002	W. J. Clinton (1993-2001)	Arthur (2014)
Edward M. Gramlich, 1997-2005	W. J. Clinton	Arthur (2014)
Roger W. Ferguson, 1997-1999	W. J. Clinton	Arthur (2014) and the Federal Reserve
Mark W. Olson, 2001-2006	G. W. Bush (2001-2009)	Arthur (2014)
Susan S. Bies, 2001-2007	G. W. Bush	Arthur (2014)
Ben S. Bernanke, 2002-2006	G. W. Bush	Arthur (2014)
Donald L. Kohn, 2002-2010	G. W. Bush	Arthur (2014)

Source: The Membership of the Board of Governors of the Federal Reserve System from the following website: www.federalreserve.gov/aboutthefed/bios/board/boardmembership.htm; and, Arthur, C. Damien. *Economic Actors, Economic Behaviors, and Presidential Leadership*. Lanham, Boulder, New York, London: Lexington Books, 2014.

Woolley (1984) tests the party in power hypothesis (H_1) by looking at appointees and their dissenting votes and finds that the Board members appointed by a Democratic president are more likely to favor looser monetary policy than the members appointed by a Republican president. If Woolley (1984) is right, then I expect that the percent of Democratic appointees who vote for loose policy should be higher than the percent of Republican appointees who do so for a fixed exchange rate period, 1965-1972. Table 4.3 shows that Democratic appointees voted for loose policy 55% of the time versus tight policy 45% in a fixed exchange rate period. Table 4.3 also displays that Republican appointees voted for loose policy 64.2% of the time versus tight policy 35.8% during the fixed exchange rate period. Democratic appointees actually voted for tight policy more often than Republican appointees which is inconsistent with Woolley's (1984) expectations. The data in Table 4.3 gives me a different result from Woolley's (1984) expectations because what I did differently from Woolley is that I looked at all votes of the Board of Governors of the FOMC while Woolley (1984) looked at only dissenting votes of the Board of Governors. The data in Table 4.3 confirms the party in power hypothesis (H_1) because the parties are still voting differently. What the data in Table 4.3 tells us is that Democratic-appointed members are much less likely to vote for loose monetary policy than Republican appointees during the fixed exchange rate period even though Democratic appointees voted for loose policy more often than they voted for tight policy. Therefore, the result seems to confirm my political model of monetary policy but disconfirms Clark and Hallerberg's (2000) hypothesis that when a country has a fixed exchange rate system there is no left-right party difference in monetary policy.

The parties do not seem to behave the same way so the data in Table 4.3 suggests that the Federal Reserve is not perfectly insulated from party in power/politics. In the end, the differences in policy are not huge and there are lots of unanimous votes so it does not disconfirm the central bank independence hypothesis (H_3) but it suggests that while the US has high central bank independence, it is not completely insulated from party in power.

If Woolley (1984) is right, then I also expect that the percent of Democratic appointees who vote for a loose monetary policy should be higher than the percent of Republican appointees during the floating exchange rate period, 1997-2004. Table 4.4 shows that Democratic appointees voted for loose policy 52.2% of the time versus tight policy 47.8% in a floating exchange rate period. Table 4.4 also displays that Republican-appointed members voted for loose policy 50.8% of the time versus tight policy 49.2% during the floating exchange rate period. 52.2% versus 50.8% is a slight difference so this finding provides pretty weak support for Woolley (1984). This result is consistent with the central bank independence hypothesis (H_3)—Central Bank is insulated and party does not matter as much during the floating exchange rate period. This result provides strong support for Corder's (2012) argument that the US Federal Reserve pursued systematically apolitical monetary policy by adjusting interest rates to stabilize inflation along with long-term economic growth and thus exerted a high level of independence for the period from 1987 to 2006. Corder (2012) notes that elected officials were very satisfied with the monetary policy choice of the decision makers of the Federal Reserve during this period.

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Bearce (2002) is only predicting tight monetary policy preference for Democrats when exchange rates are floating. If Bearce (2002) is right, then I expect that the percent of Democratic appointees who vote for a tight monetary policy should be higher than the percent of Republican appointees who do so in a floating exchange rate period. This data also contradicts Bearce's (2002) predictions about Democrats' tight monetary policy preference. 47.8% versus 49.2% is a minor difference so this finding provides pretty weak support for Bearce (2002).

While Bearce (2002) hypothesizes that left (Democratic) parties in power will vote for tight monetary policy, this has not been the experience in the United States. Chappell et al. (2005) display that in the United States Democratic appointees do not vote more often for tight monetary policy. Chappell et al. (2005) test the party in power hypothesis (H_1) over the period from 1966 to 1996 by looking at appointees and their dissenting votes and find that Democratic appointees are inclined to favor looser monetary policy than Republican appointees. The data in Table 4.3 is inconsistent with Chappell et al. (2005) for a fixed exchange rate period but the data in Table 4.4 seems to provide weak support for Chappell et al. (2005) for a floating exchange rate era. Puckett (1984) and Havrilesky and Gildea (1992) have also found that Democratic appointees tend to vote for loose monetary policy.

I also take into account the hypothesis that party differences in policy may manifest themselves by presidential administration (as opposed to presidential appointment). That is to say, with a Republican president in office, a trend toward

tight monetary policy may be expected, and, with a Democratic president in power, a tendency to loose monetary policy may be predicted. Actually, the data in Table 4.3 displays that the opposite is true—most votes were for tight monetary policy when Johnson was in president's office, whereas most votes were for loose monetary policy when Nixon was in president's office. As the data in Table 4.3 displays, in a fixed exchange rate period, Democratic appointees voted for loose policy 42.2% of the time versus tight policy 57.8%, while Republican appointees voted for loose policy 36.1% versus tight policy 63.9% during the Johnson administration. As the data in Table 4.3 also shows, Democratic appointees voted for loose policy 67.8% of the time versus tight policy 32.2%, whereas Republican appointees voted for loose policy 92.3% versus tight policy 7.7% during the Nixon administration. There is similar pattern during the floating exchange rate period. Table 4.4 shows that Democratic appointees voted for loose policy 20.1% of the time versus tight policy 79.9%, while Republican appointees voted for loose policy 17.3% versus tight policy 82.7% during the Clinton administration. Table 4.4 also indicates that both Democratic-appointed members and Republican appointees voted for loose policy 84.4% of the time versus tight policy 15.6% during the Bush administration. These results may reflect the monetary policy preferences of presidents in power rather than reflecting the preferences of the parties of presidents in power.

According to the findings in Table 4.3 and Table 4.4, I might be able to argue that differences in policy based on left-right party in power appear to be smaller or even indistinguishable when the United States moves from fixed to floating exchange

rates. This implies less monetary policy autonomy from the world interest rate. I look at interest rate differentials to further examine what happens to monetary policy autonomy when the United States moves from fixed to floating exchange rates. If the differential becomes smaller in a floating exchange rate period, then I expect a decrease in monetary policy autonomy when the United States moves from fixed to floating exchange rates. For this expectation to be supported, interest differentials should be higher in a fixed exchange rate period than in a floating exchange rate period. As can be seen in Table 1.1 in Chapter I, since the range of difference between the US long-term interest rate and world interest rate is larger for fixed rate period, 1.65 points versus 0.22 points, that implies there is less policy autonomy with the floating exchange rate (as expected). It is important to note how I reach the conclusion that the large US economy influences the world interest rates in the floating exchange rate period more than in the fixed exchange rate period in a way that makes the national interest rates and the world interest rates almost match in the floating exchange rates.

I use Armingeon et al.'s (2011) Comparative Political Data Set I, 1960-2009, to calculate the average US long-term interest rate for each period. The average interest rate in a fixed exchange rate era in the United States is lower at 5.11 compared to 7.36 for a floating exchange rate period. As can also be seen in Table 4.5, the United States set the national interest rate lower than the world interest rate during the 1960s and in the early 1970s that coincided with Johnson and Nixon's administrations, and higher than the world interest rate during the late 1990s and the 2000s that corresponded to

Clinton and Bush's administrations. There are also times when smaller interest differences in a floating exchange rate period make the US far less autonomous from the world interest rate to set national interest rates to achieve domestic goals. For instance, as Table 4.5 indicates, in 1995 the size of the interest rate differential between the US long-term national interest rate (6.58%) and the long-term world rate (6.51%) was small (0.07%). In short, Table 4.5 shows the US interest rates differ from the world interest rates across times. Therefore, I can say that the US exerts some degree of monetary policy autonomy from the world interest rate across times. To explain policy autonomy, I examine long-term interest rate differences in a fixed exchange rate era and in a floating exchange rate era while Bearce (2002) analyzes central bank interest differences only during a floating exchange rate period, 1973-1997.

What I do differently from Bearce (2002) is I compare the average interest differential for a fixed exchange rate era, 1960-1972, with the average interest differential for a floating exchange rate era, 1973-2009, to say whether I arrive at a different conclusion for the Mundell-Fleming model. Mundell-Fleming says that a country cannot have fixed exchange rates, high capital mobility, and policy autonomy at the same time, so my finding seems to contradict Mundell-Fleming because it appears given high capital mobility the US had some degree of monetary policy autonomy both in a fixed exchange rate era and in a floating exchange rate era. It seems there had been more autonomy during the fixed exchange rate era than in the floating exchange rate era, but the US could be special. Since other countries pegged

their currency to the US dollar in the Bretton Woods period of fixed exchange rates, the US may have had more autonomy to exert influence on the world interest rate in the Bretton Woods period of fixed exchange rates than in the post-Bretton Woods period of floating exchange rates. The Mundell-Fleming model[23] expects that Canada can sustain different interest rates from the US when exchange rates are fixed and when high capital mobility does not exist (Mundell 1963, 485). According to Table 1.1 in Chapter I, the average long-term interest rate difference is -1.65 for the US compared to -0.32 for Canada in a fixed exchange rate era, which suggests that both the US and Canada had some degree of monetary policy autonomy during a fixed exchange rate period. Table 1.1 also displays that, in a floating exchange rate period, the average interest rate difference is 0.22 for the US compared to 0.90 for Canada. What the data in Table 1.1 tells us is that since the range of difference in Canada is a little larger for a floating rate period, 0.90 points versus 0.32 points, this implies that there is slightly less autonomy with the fixed exchange rate in Canada. However, the range of difference in the US is considerably smaller for a floating exchange rate period, 0.22 points versus 1.65 points, so this means that there is much more autonomy with the fixed rate in the US.

Table 4.5 shows that during Johnson's presidency term, 1965-1968, the United States kept national interest rates lower than the world interest rates. Financing Vietnam War could have been the reason for low interest rates in the US economy but

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[23] The Mundell-Fleming model also supposes small countries are too small to exert influence on the world interest rate (Mundell 1963, 476).

at the same time it is likely that the Democratic Party's consumer constituents benefited from low interest rates because low interest rates spur economic growth. Since Democratic appointees of the FOMC tend to favor a loose monetary policy for a fixed exchange rate era, the FOMC might have decided to purchase large quantities of long-term government bonds to exert influence on long-term interest rates. This may have stimulated the US economy and provided the benefits to Democratic Party's consumer constituents. As Kettl (1986) notes, purchasing government securities, such as bonds, in the open market, increases the amount of money that consumers can spend. The Minutes of the FOMC Meeting that coincided with Johnson's administration, 1965-1968, reported that frequent and large open market operations to purchase government securities occurred over the period from December 13, 1966 to January 4, 1967 (FOMC Minute January 10, 1967). The Minute also reported that consumption increased rapidly in a way that exceeded 1966's increase (FOMC Minute February 7, 1967). In addition, according to the Minutes, consumer spending for services increased swiftly (FOMC Minute March 7, 1967).

Overall, the data in Table 4.3 and Table 4.4 does not appear to disconfirm the party in power hypothesis (H_1). It confirms the party in power hypothesis (H_1) for a fixed exchange rate period but suggests that the Central Bank was not as politically insulated as one may predict. The finding in Table 4.3 contradicts Woolley's (1984) and Chappell et al.'s (2005) expectations because the finding shows that Democratic appointees voted for loose policy more often than they voted for tight policy (as expected) but Republican appointees voted for loose policy more than Democratic

appointees which was not expected. The finding in Table 4.4 does not seem to confirm any of the party politics hypotheses (neither Woolley (1984) nor Bearce (2002)) because there is almost no difference between Republican and Democratic appointees for a floating exchange rate period. As far as central bank independence is concerned, there is no change that can account for the decrease in monetary policy autonomy from the world interest rate but since there is no difference between left and right appointees, the finding here is consistent with the argument that central bank independence means the Federal Reserve is insulated from domestic (or party) politics. It appears that increased capital mobility and the market forces associated with floating exchange rates may really matter here to account for the decrease in monetary policy autonomy. The decline of the Bretton Woods international monetary system in the early 1970s may have increased capital mobility in a way that decreased the purchasing power of the US dollar and interest rate differential and thereby encouraged investors to move their capital across international borders which, in turn, diminished economic growth and caused the US to experience stagflation in the 1970s. Thus, increased capital mobility and the market forces in the post-Bretton Woods period of floating exchange rates may have prevented political parties in power from exercising as much influence as they did in the Bretton Woods period of fixed exchange rates. Table 4.3 and Table 4.4 suggest that political parties enjoy more autonomy during the fixed exchange rate period than during the floating exchange rate period, which contradicts the Mundell-Fleming model but is consistent with my political model of monetary policy.

Table 4.3
Loose vs. Tight Monetary Policy by Party in Power, Annual Number of Votes of the Board of Governors Appointed by the President's Party, 1965-1972 (Fixed Exchange Rate)

Appointees of President's Party		Loose	%of Time	Tight	%of Time	Presidency Year
						Johnson
(D) Democratic Appointee (5 Members)		12	17.4	57	82.6	1965
(R) Republican Appointee (2 Members)		2	11.8	15	88.2	
(D) (6)		14	20	56	80	1966
(R) (1)		3	21.4	11	78.6	
(D) (6)		68	88.3	9	11.7	1967
(R) (1)		3	75	1	25	
(D) (6)		34	43	45	57	1968
(R) (0)		0	0	0	0	
Average-Johnson Administration-Percentages	*(D)*		*42.2*		*57.8*	
	(R)		*36.1*		*63.9*	
						Nixon
(D) Democratic Appointee (6 Members)		5	6.5	72	93.5	1969
(R) Republican Appointee (0 Member)		0	0	0	0	
(D) (6)		56	88.9	7	11.1	1970
(R) (1)		12	100	0	0	
(D) (5)		47	75.8	15	24.2	1971
(R) (1)		10	77	3	23	
(D) (4)		38	100	0	0	1972
(R) (3)		31	100	0	0	
Average-Nixon Administration-Percentages	*(D)*		*67.8*		*32.2*	
	(R)		*92.3*		*7.7*	
Average-Fixed Exchange Rate-Percentages	*(D)*		*55*		*45*	
	(R)		*64.2*		*35.8*	

Source: Official Records of the Federal Open Market Committee (FOMC) Meeting Minutes and of Policy Actions in the Annual Report of the Board of Governors of the Federal Reserve System are available from the Board of Governors of the Federal Reserve (Transcripts and Other Historical Materials) website: www.federalreserve.gov/monetarypolicy/fomc_historical.htm
Note: Republicans' votes are not equal to Democrats' votes because the Board Members missed votes.

Table 4.4
Loose vs. Tight Monetary Policy by Party in Power, Annual Number of Votes of the Board of
Governors Appointed by the President's Party, 1997-2004 (Floating Exchange Rate)

Appointees of President's Party	Loose	%of Time	Tight	%of Time	Presidency Year
					Clinton
(D) Democratic Appointee (3 Members)	0	0	12	100	1997
(R) Republican Appointee (3 Members)	0	0	24	100	
(D) (3)	9	37.5	15	62.5	1998
(R) (3)	6	31.6	13	68.4	
(D) (3)	9	42.9	12	57.1	1999
(R) (2)	6	37.5	10	62.5	
(D) (2)	0	0	15	100	2000
(R) (2)	0	0	16	100	
Average-Clinton Administration- *(D)*		*20.1*		*79.9*	
Percentages *(R)*		*17.3*		*82.7*	
					Bush
(D) Democratic Appointee (2 Members)	16	100	0	0	2001
(R) Republican Appointee (4 Members)	17	100	0	0	
(D) (1)	8	100	0	0	2002
(R) (5)	32	100	0	0	
(D) (1)	8	100	0	0	2003
(R) (5)	40	100	0	0	
(D) (1)	3	37.5	5	62.5	2004
(R) (5)	15	37.5	25	62.5	
Average-Bush Administration- *(D)*		*84.4*		*15.6*	
Percentages *(R)*		*84.4*		*15.6*	
Average-Floating Exchange Rate- *(D)*		*52.2*		*47.8*	
Percentages *(R)*		*50.8*		*49.2*	

Source: Official Records of the Federal Open Market Committee (FOMC) Meeting Minutes and of Policy Actions in the Annual
Report of the Board of Governors of the Federal Reserve System are available from the Board of Governors of the Federal Reserve
(Transcripts and Other Historical Materials) website: www.federalreserve.gov/monetarypolicy/fomc_historical.htm

Table 4.5
US Interest Rates vs. World Interest Rates by Administration and Interest Rate Difference, Fixed
Exchange Rate Era (1965-1972) and Floating Exchange Rate Era (1973-1974; 1993-2008)

Administration	The US Interest Rates	World Interest Rates	Interest Rate Difference
Fixed Exchange Rate Era			
Johnson			
1965	4.28%	6.53%	-2.25%
1966	4.92%	7.07%	-2.14%
1967	5.07%	6.83%	-1.76%
1968	5.65%	7.04%	-1.39%
Nixon			average= -1.89%
1969	6.67%	7.74%	-1.06%
1970	7.35%	8.11%	-0.76%
1971	6.16%	7.88%	-1.72%
1972	6.21%	7.87%	-1.66%
			average= -1.30%
Floating Exchange Rate Era			
Nixon			
Second Term			
1973	6.84%	9.03%	-2.19%
1974	7.56%	10.99%	-3.43%
Clinton			average= -2.81%
1993	5.87%	6.27%	-0.40%
1994	7.08%	6.64%	0.44%
1995	6.58%	6.51%	0.07%
1996	6.44%	5.86%	0.58%
Second Term			average= 0.17%
1997	6.35%	5.17%	1.19%
1998	5.27%	4.08%	1.19%
1999	5.64%	3.99%	1.65%
2000	6.03%	4.43%	1.60%
Bush			average= 1.41%
2001	5.02%	4.00%	1.02%
2002	4.61%	3.95%	0.66%
2003	4.02%	3.43%	0.58%
2004	4.27%	3.63%	0.65%
Second Term			average= 0.73%
2005	4.29%	3.13%	1.16%
2006	4.79%	3.45%	1.34%
2007	4.63%	3.80%	0.83%
2008	3.67%	3.57%	0.10%
			average= 0.86%

Capital Mobility

In order to test the capital mobility hypothesis (H_2), I use data sets that I develop

from long-term interest rates on government bonds[24] drawn from Comparative

Political Data Set I, 1960-2009 (Armingeon et al. 2011) for interest rate differences

that measure monetary policy autonomy. I am using the same measure for monetary

policy autonomy as Bearce (2002).

What I do differently from Bearce (2002) is I include additional data of different

years from 1960-1972 that correspond to a fixed exchange rate era and analyze the

years 1973-2009 by adding observations to the years 1973-1997 that Bearce (2002)

used for his work. This study is a contribution to scholarship because it improves on

previous research by providing a comparison of the effect of capital mobility on

monetary policy autonomy in a fixed exchange rate era versus in a floating exchange

rate era. The second contribution is that this study furthers the debate in political

science and economic literature about whether or not increased capital mobility

coincides with reduced monetary policy autonomy. In that debate, Cohen (1993) and

Peterson (1995) suggest that increased capital mobility decreases a country's monetary

policy autonomy. However, Bearce (2002) argues against Cohen (1993) and Peterson

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[24] According to Armingeon et al.'s (2011) Comparative Political Data Set I, 1960-2009, government bonds' maturity is to be ten years or more. The yield of long-term interest rate instruments are utilized as the representative interest rates. The yield is usually measured at the pre-tax level as well as prior to deductions necessary for brokerage fees stemming from transaction costs. The yield is drawn from the link between the bond's current values in the market and the bond's values at maturity associated with interest payments from the time the bond being purchased to maturity.

(1995) by stating that capital mobility may be associated with increased monetary policy autonomy.

If Bearce (2002) is right, then I expect that an increase in capital mobility should be associated with an increase in monetary policy autonomy in a floating exchange rate era. In order to test the capital mobility hypothesis (H_2), I take the absolute value of the interest rate differential (my measure of US monetary policy autonomy) and plot it against capital mobility in Figure 4.1. The finding in Figure 4.1 seems to disconfirm Bearce (2002) but confirms Cohen (1993) and Peterson (1995) who argue that increased capital mobility coincides with decreased monetary policy autonomy.

Figure 4.1 and Figure 4.2, that is, by both measures of increased capital mobility (financial openness and trade openness of US economy), show that an increase in capital mobility is associated with a decrease in monetary policy autonomy (interest rate difference). The negative relationship suggests that as capital mobility in the US increases, monetary policy autonomy from the world interest rate decreases. Figure 4.1 indicates that as the average financial openness index score went up from a score of 12.5 (1966-1972) to 13 (1978-1984) to 13.86 (1987-1993), the average differential between the US and world interest rates did shrink from about 1.50% (1966-1972) to 1% or less 0.75% (1978-1984) to 0.04% (1987-1993). This suggests that the US was able to exert some monetary policy autonomy during the fixed exchange rate period that the US exerted an influence on cross-border capital investments through Voluntary Foreign Credit Restraint program that kept capital mobility in check in the

Bretton Woods[25] fixed exchange rate period. This also suggests that cross-border

capital investments have increased in the US since the end of the program as well as

the decline of the Bretton Woods system in the early 1970s.
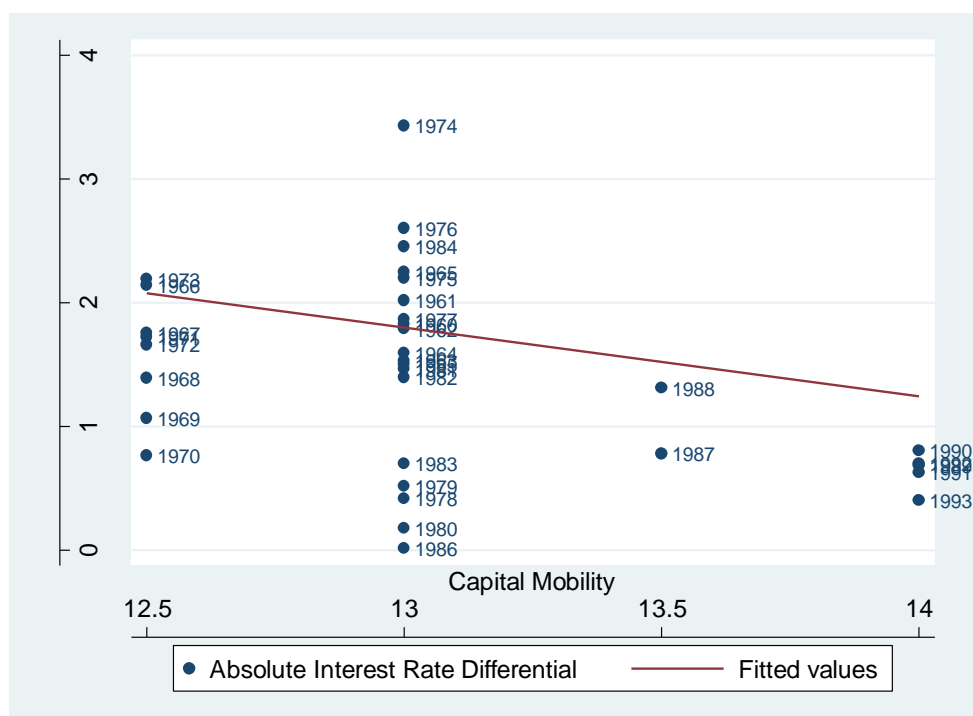

Figure 4.1 US Interest Rate Differential (Monetary Policy Autonomy) (Absolute Values), 1960-2009,
and Financial Openness (Capital Mobility), 1960-1993
Source: Armingeon et al. (2008) Comparative Political Data Set I, 1960-2006 and Armingeon et al. (2011)
Comparative Political Data Set I, 1960-2009

Since the data in Figure 4.1 on the financial openness index (capital mobility) is

available over the period from 1960 to 1993, I also take the absolute value of the

interest rate differential (my measure of US monetary policy autonomy) and plot it

against the trade openness of the US economy in Figure 4.2 in order to test the capital

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mobility hypothesis (H_2). I utilize data drawn from Comparative Political Data Set I,

1960-2009 (Armingeon et al. 2011) for trade openness of a country's economy

measured as total trade/Gross Domestic Product (GDP) for the whole period, 1960-

2009. I use trade openness of a country's economy as a proxy for capital mobility.

Figure 4.2 and Table 4.5 show that, in a fixed exchange rate era, as capital mobility

measured by the trade openness increased from an average score of 10.03 in Johnson's

term (1965-1968) to 11.21 in Nixon's first term (1969-1972), monetary policy

autonomy measured by interest differentials went down from 1.89% in Johnson's term

to 1.30% in Nixon's first term. In a floating exchange rate era, as capital mobility

went up from an average score of 15.36 in Nixon's second term (1973-1974) to 24.72

in Clinton's second term (1997-2000) and to 28.37 in Bush second term (2005-2008),

the average differentials got smaller from 2.81% in Nixon's term to 1.41% in Clinton's
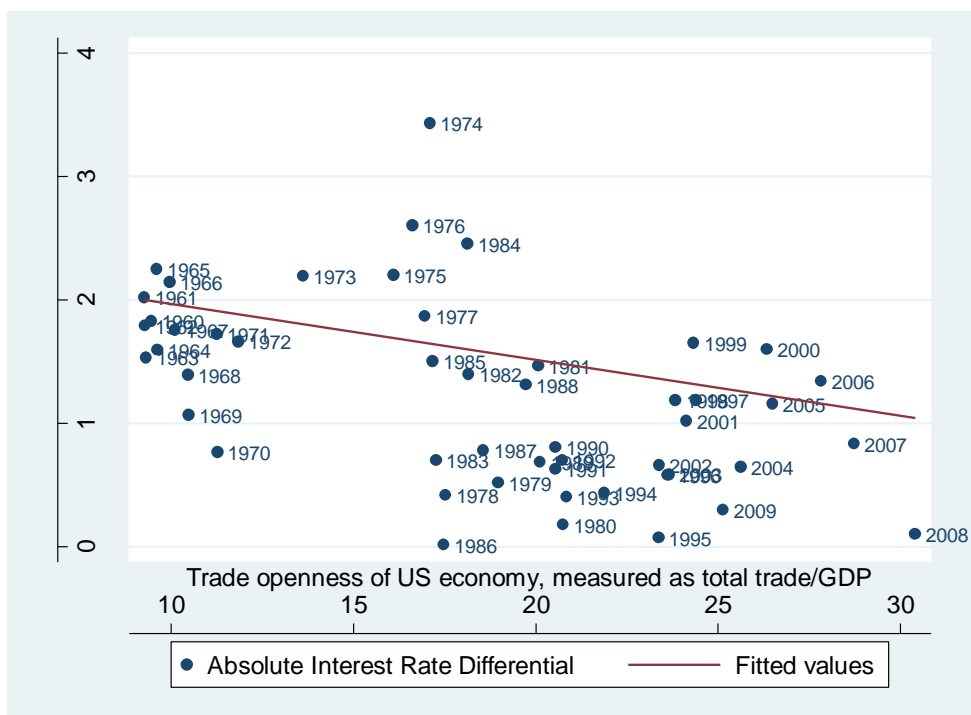
term and to 0.86% in Bush's term.

Figure 4.2 US Interest Rate Differentials (Absolute Values) and Trade Openness of US Economy
Measured as Total Trade/GDP, 1960-2009
Source: Armingeon et al. (2011) Comparative Political Data Set I, 1960-2009

The implication of such a systematic pattern for the US economy is that the US

was not able to enjoy as much policy autonomy to influence cross-border capital

investments during the floating exchange rate period as it was during the fixed

exchange rate period.

As the data in Figure 4.2 and also in Table 1.1 in Chapter I display, increased

capital mobility as measured by trade openness, from an average score of 10.15 to

21.36, is associated with decreased monetary policy autonomy, from 1.65 points to

0.22 points, when the United States moved to the floating exchange rates. The United

States may have imposed constraints on foreign bonds investments, which are known

as trade tariffs or taxes, in the Bretton Woods period of fixed exchange rates in order

to dissuade investors from foreign bonds investment. The United States began to levy an interest equalization tax or tariff on foreign bonds over the period from 1963 to 1974 to discourage investors from purchasing foreign bonds. Interest rates in the United States may have been lower than the world interest rate in the Bretton Woods period of fixed exchange rates, which could have encouraged investors to sell national bonds and begin to buy foreign bonds to increase returns on their capital assets. As Table 4.5 shows, compared to a floating exchange rate era, in a fixed exchange rate era the US interest rates were much lower than the world interest rates. By imposing an interest equalization tax or tariff, the United States increased national bonds investments and, as can be seen in Table 4.5, increased interest rate differentials that prevented cross-border capital investments and thus increased economic growth in the United States.

Since economic growth provides benefits to Democratic parties' consumer constituents, the average interest rate differential in Johnson's administration, as Table 4.5 shows, was higher (-1.89% compared to -1.30%) than in Nixon's administration for the Bretton Woods period of fixed exchange rates. The high US interest rate differential in a fixed exchange period between the national rate and the world rate could have discouraged investors from moving capital assets across international borders to look for higher interest rates in the world market. Compared to the Bretton Woods period of fixed exchange rates, in the post-Bretton Woods period of floating exchange rates, the interest rate differential, as Table 4.5 displays, becomes smaller because the interest rate differential (0.17% plus 1.41% = 1.58%) in Clinton's

administration was almost indistinguishable from the interest rate differential (0.73%

plus 0.86% = 1.59%) in Bush's administration. It appears that parties cannot exercise

as much influence on capital mobility in a floating exchange rate period as they did in

a fixed exchange rate period because increased capital mobility and the market forces

in conjunction with floating exchange rates imposed constraints on monetary policy

autonomy from the world interest rate. Increased capital mobility limits monetary

policy autonomy in a way that makes the national interest rate and world interest rate

match and encourages cross-border capital investments, which would provide benefits

to Republican parties' investor constituents.

Overall, the data in Figure 4.1 and Figure 4.2 shows that as capital mobility

increases, interest rate differential decreases, which seems to confirm the capital

mobility hypothesis (H_2).

Conclusion and Findings

In this chapter, I tested the party in power hypothesis (H_1) by using data on

presidential appointments in the US. I tested the capital mobility hypothesis (H_2) by

plotting the absolute value of the interest rate differential (my measure of US

monetary policy autonomy) against capital mobility. I tested the central bank

independence hypothesis (H_3) by employing data on presidential appointments. For a

fixed exchange rate era, when looking at Democratic or Republican-appointed FOMC

members' votes for loose policy versus votes for tight policy, the finding seems to

confirm the party in power hypothesis (H_1). Parties voted differently but Democratic

appointees voted more often for tight monetary policy than Republican appointees. The finding also seems to confirm the capital mobility hypothesis (H_2) that an increase in capital mobility coincided with a decrease in the US interest rate differential. However, the finding does not appear to confirm the central bank independence hypothesis (H_3). Central bank independence did not change in the Bretton Woods period of fixed exchange rates. Thus, the finding seems to confirm my political model of monetary policy but contradicts the Mundell-Fleming model for a fixed exchange rate period.

The finding shows that there was almost no difference between Democratic appointees and Republican appointees in a floating exchange rate era, which suggests that policy autonomy declined as the US moved to floating exchange rates. The finding does not seem to confirm the party in power hypothesis (H_1). Nevertheless, the finding appears to confirm the capital mobility hypothesis (H_2). The finding also appears to confirm the central bank independence hypothesis (H_3) for a floating exchange rate era. Central bank independence did not change, but since there is no difference between Democratic appointees and Republican appointees, the finding here is consistent with the argument that central bank independence means the Federal Reserve is insulated from domestic (or party) politics. Hence, the finding does not seem to support my political model of monetary policy for a floating exchange rate period. The finding does not seem to support the Mundell-Fleming model either. The finding that given high capital mobility there is no monetary policy autonomy in a floating exchange rate period does not support Mundell-Fleming (1963; 1962) because

Mundell-Fleming (1963; 1962) assert that given high capital mobility there is monetary policy autonomy in a floating exchange rate period.

Furthermore, when looking at Democratic or Republican appointees' votes for loose versus tight policy across administrations in a fixed exchange rate era and in a floating exchange rate era, the data reveals that most votes by Democratic or Republican appointees were for tight policy during the Democratic presidential administration but loose policy during the Republican presidential administration, which was not the expectation.

The finding shows that as the US moves to floating exchange rates from fixed exchange rates, the party in power becomes less influential on monetary policy autonomy but capital mobility becomes more influential on monetary policy autonomy and central bank independence remains high across times. It appears that capital mobility cannot impose as many constraints on monetary policy autonomy in a floating exchange rate period as it does in a fixed exchange rate period. Therefore, increased capital mobility with floating exchange rates is the reason for a decrease in monetary policy autonomy that parties cannot enjoy as much in a floating exchange rate period as they enjoy in a fixed exchange rate period. It is possible to extend this finding to the view that in a floating exchange rate regime, compared to a fixed exchange rate regime, the US long-term interest rates approximate the world interest rate. That is, the US long-term interest rate differential is getting smaller when the US switches its exchange rate regime from a fixed to a floating.

In the concluding chapter, I will compare the results of a cross-national analysis of eighteen advanced industrial countries in Chapter III and the US case study in Chapter IV.

CHAPTER V

CONCLUSION

Introduction

The research questions I am posing in this doctoral dissertation are as follows: 1.

What explains variations in monetary policies? and 2. What is the effect of political

parties in power on monetary policies? I pull together all the results in order to address

to these research questions. In this chapter, I compare the quantitative result of a

cross-national examination of my political model of monetary policy in open

economies in Chapter III with the qualitative result of a case study of the United States

in Chapter IV to see whether the quantitative chapter result is similar to the qualitative

chapter result. When the same variables are significant in both quantitative and

qualitative analyses, I can have more confidence in my results. I find that the party in

power variable had an effect in the quantitative model both for a fixed exchange rate

period and for a floating exchange rate period and had an effect in the qualitative

model for a fixed exchange rate period but not for a floating exchange rate period.

Besides that, I find that the capital mobility variable in conjunction with the party in

power variable had effects in the quantitative model for each period and the capital

mobility variable independent of the party in power variable had an effect in the

qualitative model for each period. In addition, I find that the central bank

independence variable did not have an effect in the quantitative model for each period and in the qualitative model for a fixed exchange rate period but it had an effect in the qualitative model for a floating exchange rate period.

My theoretical expectation for the party in power variable is that left parties' in power monetary policy choice should differ systematically from right parties' in power monetary policy choice in a country's economy both in a fixed exchange rate period and in a floating exchange rate period. Because my original political model of monetary policy in open economies reframes the Mundell-Fleming model, I take monetary policy autonomy, which is one of the three of the Mundell-Fleming trilemma variables (monetary policy autonomy, capital mobility, fixed exchange rate), as my dependent variable. The Mundell-Fleming model suggests that a country cannot have monetary policy autonomy in the short-term under high capital mobility and a fixed exchange rate regime. My political model of monetary policy suggests that a country can have monetary policy autonomy and high capital mobility both in a fixed exchange rate regime and in a floating exchange rate regime when party politics and long-term interest rates are examined in conjunction with the Mundell-Fleming trilemma variables.

In the political and economic literature the theoretical expectation for the party in power variable is that left parties in power should be associated with loose monetary policy while right parties in power should be associated with tight monetary policy.

For the capital mobility variable, the theoretical expectation is that increased capital mobility should result in decreased monetary policy autonomy from the world interest rate both for a fixed exchange rate period and for a floating exchange rate period.

With regard to the central bank independence variable, the theoretical expectation is that central bank independence should be associated with decreased monetary policy autonomy both for a fixed exchange rate period and for a floating exchange rate period.

In this chapter, I then explain the implications of my model both for monetary policies and monetary policy autonomy. Finally, I consider how generalizable this model is and directions for future research.

A Comparison of the Results of the Quantitative and Qualitative Analyses of a Political Model of Monetary Policy in Open Economies

In the framework of the three hypotheses of the dissertation, I compare the result of the quantitative model with the result of qualitative model by looking at all the result together both for a fixed exchange rate era and for a floating exchange rate era.

Party in Power

The party in power hypothesis (H_1) posits that differences in monetary policy exist in a country's economy based on left or right party in power. In this dissertation

the party in power hypothesis (H_1) is my central hypothesis which posits that changes in political parties in power affect a country's monetary policy autonomy from the world interest rate. In my quantitative analysis, the party in power variable accounts for variations in monetary policy autonomy both in a fixed exchange rate period and in a floating exchange rate period. Left parties in power were associated with more monetary policy autonomy from the world interest rate than right parties in power for each period. This result was the expectation of my theory for the party in power variable that the monetary policies of left parties and the monetary policies of right parties in a country should be different.

In my qualitative analysis, for a fixed exchange rate period, party in power matters because parties voted differently, but the Democratic party voted more often for tight monetary policy than the Republican party in the United States. For a floating exchange rate period, party in power does not matter because there was almost no difference between Democratic appointees and Republican appointees. This was not what my theory expected for the party in power variable for this period.

Since the party in power variable was significant in the quantitative analysis for a fixed exchange rate period and for a floating exchange rate period and in the qualitative analysis for a fixed exchange rate period but not for a floating exchange rate period, I can have more confidence in my results. The result in my quantitative analysis for each period and the result in my qualitative analysis for a fixed exchange rate period seem to provide strong support for the party in power hypothesis (H_1) and

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my political model of monetary policy in open economies but contradict the Mundell-Fleming model. However, the result in the qualitative analysis for a floating exchange rate period does not appear to support the party in power hypothesis (H_1) and my model. The result in the qualitative analysis for a floating exchange rate period does not appear to support the Mundell-Fleming model either because the result that there is no monetary policy autonomy under high capital mobility and a floating exchange rate regime is the opposite of what the Mundell-Fleming model expects. The Mundell-Fleming model expects that there is monetary policy autonomy under high capital mobility and a floating exchange rate regime.

Increased Capital Mobility

The capital mobility hypothesis (H_2) postulates that an increase in capital mobility results in less monetary policy autonomy from the world interest rate. In my quantitative analysis the marginal effect of party in power given high capital mobility was associated with more monetary policy autonomy than the marginal effect of party in power given low capital mobility both for a fixed exchange rate period and for a floating exchange rate period. This result based on the prediction of the interaction term of party in power with capital mobility was not the theoretical expectation for the capital mobility variable. This result does not appear to support the capital mobility hypothesis (H_2) and Cohen (1993) and Peterson's (1995) prediction that increased capital mobility coincides with less monetary policy autonomy in a country's economy.

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Nevertheless, this result here in my quantitative analysis appears to provide strong support for Cohen (1996), who breaks away from his earlier (Cohen 1993) prediction, Kapstein (1994) and Goodman's (1992) argument that the government has policy autonomy. To support his argument about the government's policy autonomy, Cohen (1996) cites Goodman (1992) and Kapstein's (1994) argument.

Goodman (1992) supports his argument by stating that between 1971 and 1972, to reinforce its expansionary monetary policy, the government in France facilitated increases in capital investments in its economy by allowing investors to move their funds from American investments to France investments that expanded the money supply in France's economy. In the early 1970s President Richard Nixon suspended the convertibility of the US dollar into gold and began reflationary policies by means of lowering interest rates that, in turn, reduced the value of the US dollar and encouraged capital holders to move their capital across international borders (Goodman 1992) in search of higher interest rates in the world market. International markets loaned France which facilitated the government in France to maintain expansionary policies with no a swift reduction in the value of the French franc. The Banque de France (France's central bank) supported the government's expansionary policies by avoiding policies that may have weakened the goal of maintaining economic growth and by providing credit for the economy. Goodman (1992) argues that monetary policy was not perfectly isolated from political influences because the government made the Banque de France to act as an agent of the government's finance minister.

Goodman (1992) also argues that the result of the attempts [26]of governments in

the European Community (EC) (such as Germany, France, and Italy) for monetary

cooperation is dependent on the strategic relation of governments to central banks.

Goodman (1992) supports his argument by stating that the Bundesbank (Germany's

central bank) tolerated government strains in 1978 when political leaders, business,

and labor along with Germany's trading counterparts (the United States and Japan)

supported Germany's government policy for economic growth. In June 1978 the

Bundesbank was reluctant to commit to reflationary measures (such as decreases in

interest rates) at the upcoming G7 summit, but slow economic growth, as one of the

multi-part factors, strengthened the German government's international bargaining

strategy. Consequently, Germany was able to acquire concessions from such countries

as the United States and Japan at the G7 summit in July 1978 in Bonn, Germany. The

United States concurred on buttressing the dollar to lower inflation and imports, and

Japan concurred on the exercise of a reflationary policy and raising imports, and

Germany committed to implement extra expansionary measures. This commitment at

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[26] Since the decline of the Bretton Woods system financial integration of the world's capital markets has caused governments in the European Community (EC) (such as Germany, France, and Italy) to attempt to reinforce monetary cooperation (Goodman 1992). These attempts have led to three stages for monetary cooperation: 1. The European Exchange Rate Agreement, which is also known as "snake", was in effect over the period of 1972-1979 (while the EC countries along with Britain, Ireland, Sweden, and Norway supported the snake in which the margin of currency fluctuation against the dollar was at a maximum of 4.5% and the margin between the EC currencies was at a maximum of 2.25%); 2. The European Monetary System (EMS) was in operation from 1979 to the present (in 1979 the EC leaders created the European Currency Unit (ECU), which was a weighted average of the EC currencies, as a monetary unit); and 3. The European Economic and Monetary Union (EMU), based on the 1985 Single European Act, required the creation of a European currency and a European central bank (Goodman 1992, 182-208).

the G7 summit legally required the Bundesbank (Germany's the central bank) to endorse the government's policy (Goodman 1992).

With regard to the government's policy autonomy, Kapstein (1994) supports his argument by saying that even when governments concur on policy means and goals, governments hardly ever concur on the allocation of costs associated with international agreements. Kapstein (1994) argues that since national authorities are reluctant to act as lender-of-last-resort[27] to foreign banks to share the costs of the stability of the international financial system, home country influence requires nations to take responsibilities for the enforcement of regulatory agreements. Home country influence/supervision ensures that financial institutions have adequate capital and will desist from competitive deregulation. Based on home country influence (that is, governments are in charge of regulating national financial institutions and thus a national regulator supervises each international bank), governments have responded to the challenges posed by the financial integration of the world's capital markets by creating political, regulatory structures for the global economy (Kapstein 1994). Governments support international markets to achieve their economic and political goals in spite of the regulatory costs associated with controlling on banking sectors and monetary policies. To protect their national financial institutions from systemic strains resulting from the relative position of the government in the world finance system (that is, whether a government's banks are less or more competitive relative to

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[27] Lender-of-last-resort is the central bank that bails out a troubled bank or financial institution (Kapstein 1994).

the government's counterparts in international finance), governments have, since

1974, formulated international cooperation, such as the foundation of a bank

supervisory committee by G10[28] countries at the Bank for International Settlement

(BIS) in Basle, Switzerland (Kapstein 1994). The Basle Committee created an

international banking regime with the standard of capital adequacy by releasing the

Basle Accord in 1988. Kapstein (1994) argues that the effectiveness of this Basle

Accord depends on the home country because the home county is responsible for

enforcement.

The pre-and post-2008 global financial crisis experience from the United States

that suggests the need for national regulatory choices because of the inadequacy of the

Basel framework is consistent with Kapstein's (1994) argument. As Corder (2012)

argues, the 2008 financial crisis suggested that the Basel framework was inadequate,

so new regulatory choices, such as oversight of the market for credit derivatives or

reinforcing of bank and nonbank institutions' capital requirements, were the choices

that the United States Federal Reserve was exposed to. With the adoption of the Basel

Accord, rules adopted by the Federal Reserve encouraged regulated and unregulated

banks to take extra risks stemming from the creation and selling of new forms of

securities, such as "synthetic asset-backed security collateralized debt obligations (or

ABS CDO)", that were resecuritizations of mortgage-backed security (MBS) (Corder

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[28] Central bank governors in G10 countries (eleven countries, namely, the United States, the United Kingdom, Germany, France, Belgium, Italy, the Netherlands, Sweden, Japan, Canada, and Switzerland) meet annually to develop standards such as bank capital that requires international banks to live up to (Kapstein 1994).

2012, 63). With the Based Accord or Basel I, the 1999 rules about resecuritizations

that resulted in the rapid growth of synthetic asset-backed securities stimulated

regulatory arbitrages, and updates about capital requirements increased the

dependence of risk assessments on rating agencies (Corder 2012). Regulatory

arbitrages occur when banks convert assets from one type to another in their balance

sheets in an effort to lower capital requirements and create new loans (Corder 2012).

The adoption of the Basel II in 2004 facilitated internal risk assessments by large

financial institutions which resulted in decreasing capital requirements along with

increasing risk-taking within these massive institutions (Corder 2012). According to a

2004 Federal Reserve study, internal risk models that banks used to adhere to the new

requirement resulted in decreases in banks' capital requirements, which caused

regulators in the United States to postpone the adoption of Basel II which outlined

risk-oriented capital requirements and supervision of capital adequacy (Corder 2012).

Corder (2012) says that the 2010 Dodd-Frank Wall Street Reform and Consumer

Protection Act (that established government agencies such as the Financial Stability

Oversight Council) under President Barack Obama's administration stipulated that the

United States Federal Reserve formulated risk-oriented capital requirements along

with prudential regulations for nonbank and bank institutions. Prudential regulations

facilitate bank supervisions according to whether or not bank practices meet the needs

of safety targets. Corder (2012) also says that the adoption of new capital

requirements, which increased capital requirements from 4% to 6% and allowed

national regulators to add an extra capital requirement, 2.5%, to the lowest capital

requirement in times of swift credit growth, was introduced with Basel III in 2010, began to take effect in 2013 and will be finalized in 2018.

The implementation of lowering capital requirements for banks in the United States, as the 2004 Federal Reserve study revealed (Corder 2012), may have increased the money supply in the US economy and thus may have triggered inflation that implied lower national interest rates which, in turn, would reduce the value of the dollar and encourage cross-border capital investments. The result of the 2004 Federal Reserve study is consistent with the result here in my qualitative analysis based on the case study of the United States in which an increase in capital mobility coincided with a decrease in the United States interest rate differential.

The result of my qualitative analysis based on the case study of the United States both for a fixed exchange rate period and for a floating exchange rate period seems to provide pretty strong support for the capital mobility hypothesis (H_2).

Central Bank Independence

The central bank independence hypothesis (H_3) suggests that the more independent the central bank, the lower the inflation rate is in industrial countries and more insulated the central bank is from political influence of left or right parties. In my quantitative model central bank independence was not statistically significant both for the Bretton Woods period of fixed exchange rates and for the post-Bretton Woods period of floating exchange rates.

In my qualitative model, for a fixed exchange rate period, central bank independence did not change in the United States. For a floating exchange rate period, central bank independence did not change, but since there is no difference between left appointees and right appointees, the result here is consistent with the argument that central bank independence means the Federal Reserve is insulated from party politics.

In short, compared to my results for the capital mobility variable and the central bank independence variable, I have more confidence in my results for the party in power variable because party politics matters most to account for variations in monetary policies in both my quantitative and qualitative analyses. The higher the additional effect of political parties in power on capital mobility is, the higher the interest rate differential with which political parties in power will be associated in a country's economy both for a fixed exchange rate period and for a floating exchange rate period. However, the size of the interest rate differential will increase as a country moves from fixed to floating exchange rates because of floating exchange rates in conjunction with market forces and capital mobility. The link between party politics and monetary policy (which is what my model suggests but what the Mundell-Fleming model ignores) is the reason why a country has variations both in monetary policies, loose monetary policy versus tight monetary policy, and in monetary policy autonomy, more monetary policy autonomy versus less monetary policy autonomy.

Implications of an Original Political Model of Monetary Policy in Open Economies

The original political model of monetary policy explained in this dissertation expands the focus of monetary policy inquiries beyond existing inquiries in the economic and political science literature in a way that reframes the Mundell-Fleming model. The model I developed suggests that a country can have monetary policy autonomy, high capital mobility, and a fixed exchange rate at the same time when party politics and long-term interest rates are included, while the Mundell-Fleming model suggests that a country cannot have monetary policy autonomy, high capital mobility, and a fixed exchange rate at the same time in the short term. To capture whether a country can consider simultaneously the three economic variables (monetary policy autonomy, high capital mobility, and fixed exchange rate) in its economic policy formation, I treat capital mobility as a structural condition in world politics and explain the relationship between the additional influence of party in power on capital mobility and monetary policy autonomy (which is measured by the long-term interest rate differential) in a country's economy both for a fixed exchange rate period and for a floating exchange rate period. My model suggests that when a country has high capital mobility differences in monetary policy exists in a country's economy based on left or right party in power both for a fixed exchange rate period and for a floating exchange rate period. The implication of my model for monetary policy autonomy is that advanced industrial democracies in the world may face similar pressure of the world economy (high capital mobility), but monetary policy autonomy varies across democracies and across times, as can be seen in Table 1.1. Party politics matters for a country's monetary policy autonomy from the world interest rate.

Therefore, I incorporate party politics and long-term interest rates into my political model of monetary policy in open economies because long-term interest rates have effects on the consumption preference of left parties' consumer constituents and the investment preference of right parties' investor constituents. By incorporating long-term interest rates and party politics into my model, I reframe the Mundell-Fleming model that ignores party politics and explains short-term interest rates.

One of the implications of my model for monetary policy is that if a country's economic policy formation models rely on my model that examines long-term interest rates, then this country may not face the zero bound problem both in a fixed exchange rate period and in a floating exchange rate period since the zero bound problem is associated with short-term interest rate monetary policy.

The other implication of my model for monetary policy is that if a country's economic policy formation models rely on my model that examines long-term interest rates on government bonds, then this country may address recessions. In order to address the global recession of 2008, the United States Federal Reserve purchased long-term securities and extended purchases of these securities in 2011 (Corder 2012). Along with the purchases of long-term securities that reduced long-term interest rates on securities, the purchases of agency mortgaged-backed security (MBS) by the United States Federal Reserve decreased interest rates in the mortgage market and spurred economic growth (Corder 2012). The purchases of agency MBS by the

Federal Reserve to respond to the global recession of 2008 formed part of a financial stability policy pursued by President Obama (Corder 2012).

Directions for Future Research

Since the results of a cross-national examination of eighteen advanced industrial countries in my quantitative analysis in this dissertation appear to confirm my political model of monetary policy in open economies, I can say that my model is generalizable and thereby contributes to scholarship scientifically. I would like to do more case studies to see whether the same variables are significant in other qualitative studies; then I will have more confidence in my results. In this dissertation I chose to use the United States for my case study to see whether the large United States economy exerts an influence on the world's economies. I would like to use the United Kingdom for future case study research so that I can compare the results of the United States case study and the United Kingdom case study. In order to compare the results of both case studies, I will replicate as many parts of the United States case study as possible using data from the United Kingdom.

For the United States case study, I made use of data on votes by members of the FOMC drawn from official records of the FOMC Meeting Minutes and of Policy Action in the Annual Reports of the Board of Governors of the Federal Reserve in order to test the party in power hypothesis (H_1). For the United Kingdom case study I would like to utilize data on policy decisions pulled from official records of the Court of Directors' Minutes of the Bank of England to test the party in power hypothesis

(H_1). A comparison with the United Kingdom will be useful because, as can be seen in Table 1.1 in Chapter I, the United States and the United Kingdom represent variations in monetary policy autonomy. According to Table 1.1, monetary policy autonomy in the United States is different from monetary policy autonomy in the United Kingdom both for the Bretton Woods period of fixed exchange rates and for the post-Bretton Woods period of floating exchange rates. Table 1.1 displays that the average interest rate difference is -1.65 for the United States compared to 0.70 for the United Kingdom in a fixed exchange rate era. Table 1.1 also shows that, in a floating exchange rate era, the average interest rate difference is 0.22 for the United States compared to 2.18 for the United Kingdom. What this means is that the United States national interest rate varies less from the world interest rate than interest rates in the United Kingdom. This suggests the United States has less monetary policy autonomy from the world interest rate, but it is more likely that the large United States economy influences world interest rates greatly and thereby the interest rate differential is smaller in the United States.

A comparison of the results of case studies of Germany and France would also be useful in tracking national variations in monetary policy autonomy because, as can be seen in Table 1.1, monetary policy autonomy in Germany differs from monetary policy autonomy in France. As Table 1.1 displays, the average interest rate difference is 0.75 for Germany compared to 0.39 for France in the Bretton Woods period of fixed exchange rates, and in the post-Bretton Woods period of floating exchange rates, the average interest rate difference is -0.78 for Germany compared to 1.44 for France.

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This means that France has more monetary policy autonomy from the world interest rate than Germany. I would like to use further case studies along these lines to compare them and, more importantly, to test qualitatively the three hypotheses of the dissertation.

In the future, I would like to utilize a data set in order to reexamine the hypotheses of the dissertation. When the data from Comparative Political Data Set I, 1960-2006 (Armingeon et al. 2008) on financial openness of a country's economy, which is a measure of capital mobility, becomes available for the whole period (1960-2009) under consideration, I would like to expand the observations of this study that is based on data from the financial openness for a period (1960-1993) to improve my results in both quantitative and qualitative analyses.

Conclusion

In this chapter, first I briefly recapped my theoretical expectations and looked at all the result of this dissertation together. I then presented implications of my political model of monetary policy in open economies both for monetary policy and monetary policy autonomy. Finally, I presented directions for future research.

I conclude from my results in both quantitative and qualitative analyses from this dissertation that party politics is the most important factor to account for variations in monetary policy autonomy across time and across countries. For capital mobility, I have some confidence in my results from my qualitative analysis for the

Bretton Woods period of fixed exchange rates and for the post-Bretton Woods period of floating exchange rate period because as capital mobility increases, the long-term interest rate differential in the United States becomes smaller. Since differences in monetary policy are almost indistinguishable between left appointees and right appointees, I also have some confidence in my results from my qualitative analysis that the Federal Reserve set the United States interest rates independently of politics for the post-Bretton Woods period of floating exchange rates.

BIBLIOGRAPHY

Alesina, Alberto. "Macroeconomic Policy in a Two-Party System as a Repeated Game." *The Quarterly Journal of Economics* 102, no. 3 (1987): 651-678.

Alesina, Alberto and Lawrence H. Summers. "Central Bank Independence and Macroeconomic Performance: Some Comparative Evidence." *Journal of Money, Credit, and Banking* 25, no. 2 (1993): 151-162.

Andrews, David M. "Capital Mobility and State Autonomy: Toward a Structural Theory of International Monetary Relations." *International Studies Quarterly* 38, no. 2 (1994): 193-218.

Armingeon, Klaus, Marlene Gerber, Philipp Leimgruber, Michelle Beyeler. Comparative Political Data Set I 1960-2006. Institute of Political Science, University of Berne, 2008.

Armingeon, Klaus, David Weisstaner, Sarah Engler, Panajotis Potolidis, Marlene Gerber, Philipp Leimgruber. Comparative Political Data Set I 1960-2009. Institute of Political Science, University of Berne, 2011.

Arthur, C. Damien. *Economic Actors, Economic Behaviors, and Presidential Leadership.* Lanham, Boulder, New York, London: Lexington Books, 2014.

Barro, Robert J., and David B. Gordon. "Rules, Discretion and Reputation in a Model of Monetary Policy." *Journal of Monetary Economics* 12, no. 1 (1983): 101-121.

Bearce, David H. "Monetary Divergence: Domestic Political Institutions and the Monetary Autonomy—Exchange Rate Stability Trade-off." *Comparative Political Studies* 35, no. 2 (2002): 194-220.

Bearce, David H. *Monetary Divergence: Domestic Policy Autonomy in the Post-Bretton Woods Era.* Ann Arbor, MI, USA: University of Michigan Press, 2007.

Board of Governors of the Federal Reserve System. Monetary Policy. ONLINE. 1965-1972. The Federal Reserve System. Available: www.federalreserve.gov/monetarypolicy/fomc_historical.htm.

Board of Governors of the Federal Reserve System. Monetary Policy. ONLINE. 1997-2004. The Federal Reserve System. Available: www.federalreserve.gov/monetarypolicy/fomc_historical.htm.

Board of Governors of the Federal Reserve System. Membership of the Board of Governors of the Federal Reserve System. ONLINE. 1914-Present. The Federal Reserve System. Available: www.federalreserve.gov/aboutthefed/bios/board/boardmembership.htm.

Boix, Carles. "Partisan Governments, the International Economy, and Macroeconomic Policies in Advanced Nations, 1960-93." *World Politics* 53, no. 1 (2000): 38-73.

Brambor, Thomas, William Roberts Clark, and Matt Golder. "Understanding Interaction Models: Improving Empirical Analyses." *Political Analysis* 14, no. 1 (2006): 63-82.

Chappell Jr, Henry W., Rob Roy McGregor, and Todd A. Vermilyea. *Committee Decisions on Monetary Policy: Evidence from Historical Records of the Federal Open Market Committee.* Cambridge, Massachusetts London, England: MIT Press Books 1, 2005.

Clark, William Roberts and Mark Hallerberg. "Mobile Capital, Domestic Institutions, and Electorally Induced Monetary and Fiscal Policy." *The American Political Science Review* 94, no. 2 (2000): 323-346.

Cohen, Benjamin J. "The Triad and the Unholy Trinity: Lessons for the Pacific Region." In Richard A. Higgott, Richard Leaver, and John Ravenhill, eds. *Pacific Economic Relations in the 1990s: Cooperation or Conflict?* (133-158). Boulder, Colorado: Lynne Rienner Publishers, 1993.

Cohen, Benjamin J. "Phoenix Risen: The Resurrection of Global Finance." *World Politics* 48, no. 2 (1996): 268-296.

Corder, Kevin. *Central Bank Autonomy: The Federal Reserve System in American Politics*. New York and London: Garland Publishing, Inc., 1998.

Corder, Kevin. *The Fed and The Credit Crisis*. Boulder and London: Lynne Rienner Publishers, 2012.

Cukierman, Alex, Steven B. Webb and Bilin Neyapti. "Measuring the Independence of Central Banks and Its Effect on Policy Outcomes." *The World Bank Economic Review* 6, no. 3 (1992): 353-398.

Cukierman, Alex, Steven B. Webb and Bilin Neyapti. *Measuring Central Bank Independence and Its Effect on Policy Outcomes*. San Francisco: ICS Press, 1994.

Eichengreen, Barry. *Exorbitant Privilege: The Rise and Fall of the Dollar and the Future of the International Monetary System*. New York: Oxford University Press, 2011.

Fleming, J. Marcus. "Domestic Financial Policies under Fixed and Floating Exchange Rates." *Staff Papers-International Monetary Fund* 9, no. 3 (1962): 369-380.

Garrett, Geoffrey. "Capital Mobility, Trade, and the Domestic Politics of Economic Policy." *International Organization* 49, no. 4 (1995): 657-687.

Garrett, Geoffrey. *Partisan Politics in the Global Economy*. Cambridge, New York, Melbourne: Cambridge University Press, 1998.

Goodman, John B. *Monetary Sovereignty: The Politics of Central Banking in Western Europe*. Ithaca and London: Cornell University Press, 1992.

Grilli, Vittorio, Donato Masciandro, and Guido Tabellini. "Political and Monetary Institutions and Public Financial Policies in the Industrial Countries." *Economic Policy: A European Forum* 6, no. 2 (1991): 342-92.

Havrilesky, Thomas, and John Gildea. "Reliable and Unreliable Partisan Appointees to the Board of Governors." *Public Choice* 73, no. 4 (1992): 397-417.

Hibbs, Douglas A. "Political Parties and Macroeconomic Policy." *The American Political Science Review* 71, no. 4 (1977): 1467-1487.

Hibbs, Douglas A. *The American Political Economy: Electoral Policy and Macroeconomics in Contemporary America*. Cambridge, MA: Harvard University Press, 1987.

Huber, Evelyne, Charles Ragin, John D. Stephens, David Brady, and Jason Beckfield. Comparative Welfare States Data Set. Northwestern University, University of North Carolina, Duke University and Indiana University, 2004.

International Monetary Fund. *Annual Report on Exchange Arrangements and Exchange Restrictions*. Washington, DC: International Monetary Fund, 1960-2009.

International Monetary Fund. *International Financial Statistics*. Washington, DC: International Monetary Fund, 1960-2009.

Kapstein, Ethan B. *Governing the Global Economy: International Finance and the State*. Cambridge, Massachusetts, London, England: Harvard University Press, 1994.

Kettl, Donald F. *Leadership at the Fed*. New Haven: Yale University Press, 1986.

Kennedy, Peter. *A Guide to Econometrics*. 6th Ed. Massachusetts, Oxford, Victoria: Blackwell Publishing, 2008.

Kurzer, Paulette. *Business and Banking: Political Change and Economic Integration in Western Europe*. Ithaca, N.Y.: Cornell University Press, 1993.

Kydland, Finn E. and Edward C. Prescott. "Rules Rather than Discretion: The Inconsistency of Optimal Plans." *Journal of Political Economy* 85, no. 3 (1977): 473-492.

Lijphart, Arend. *Patterns of Democracy: Government Forms and Performance in Thirty-Six Countries*. New Haven and London: Yale University Press, 1999.

McGough, Bruce and Glenn D. Rudebusch and John C. Williams. "Using a Long-Term Interest Rate as the Monetary Policy Instrument." *Journal of Monetary Economics* 52, no. 5 (2005): 855-879.

Meltzer, H. Allan. *A History of the Federal Reserve.* Chicago: University of Chicago Press, 2009.

Mundell, Robert A. "Capital Mobility and Stabilization Policy under Fixed and Flexible Exchange Rates." *The Canadian Journal of Economics and Political Science* 29, no. 4 (1963): 475-485.

Oatley, Thomas H. *Monetary Politics: Exchange Rate Cooperation in the European Union.* Ann Arbor: University of Michigan Press, 1997.

Oatley, Thomas H. "How Constraining is Capital Mobility? The Partisan Hypothesis in an Open Economy." *American Journal of Political Science* 43, no. 4 (1999): 1003-1027.

Peterson, Erik P. "Surrendering to Markets." *The Washington Quarterly* 18, no. 4 (1995): 103-115.

Polillo, Simone and Mauro F. Guillen. "Globalization Pressures and the State: The Global Spread of Central Bank Independence." *American Journal of Sociology* 10, no. 6 (2005): 1764-1802.

Puckett, Richard H. "Federal Open Market Committee Structure and Decisions." *Journal of Monetary Economics* 14, no. 1 (1984): 97-104.

Quinn, Dennis P. and Carla Inclan. "The Origins of Financial Openness: A Study of Current and Capital Account Liberalization." *American Journal of Political Science* 41, no. 3 (1997): 771-813.

Scharpf, Fritz W. *Crisis and Choice in European Social Democracy.* Ithaca, N.Y.: Cornell University Press, 1991.

Woolley, John T. *Monetary Politics: The Federal Reserve and the Politics of Monetary Policy.* Cambridge, London, New York, New Rochelle, Melbourne, Sydney: Cambridge University Press, 1984.