

Engineering Good Times: Fiscal Manipulation in a Global Economy

Abstract:

In a global economy, a country's international economic ties affect both how desirable pre-electoral fiscal manipulation is to the government, and how costly it is to the government to engage in such manipulation. Under conditions of partial capital mobility, governments are more likely to engage in pre-electoral fiscal manipulation when the country's exchange rate is flexible and the domestic economy is highly open to international trade, and when the exchange rate is fixed and the domestic economy is relatively closed to international trade. This argument is tested empirically through a quantitative analysis of changes in government debt in 20 OECD countries from 1974 to 2000.

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Introduction

Scholars have long argued that governments are more likely to be reelected in good times than in bad.¹ What is more contentious is what, if anything, incumbents can do to engineer “good times”. One of the most commonly available tools attributed to the government for manufacturing good times prior to an election is fiscal manipulation—spending more or taxing less prior to an election. When governments manipulate fiscal policy depends upon the domestic institutional, political and economic context of each election, as has been demonstrated through both single country and cross-national studies.² With the exception of Clark and Hallerberg (2000) and Clark (2002), the key variables of interest in these studies have almost all been domestic, with little attention paid to how international variables may affect the likelihood of fiscal manipulation.

In a global economy increasingly characterized by cross-border trade and capital flows, the assumption that international economic ties do not impinge upon a government’s decision to manipulate fiscal policy becomes difficult to justify. In this paper, I redress the balance between domestic and international explanations by exploring how a country’s international economic relations influence the government’s decision to engage in pre-electoral fiscal manipulation. I argue that a country’s economic ties affect both how desirable pre-electoral fiscal manipulation is to the government, and how costly it is to the government to engage in such manipulation.

In particular, the government’s decision to engage in pre-electoral fiscal manipulation is mediated by a country’s monetary and trade relations with the rest of the world. Whether or not a government manipulates fiscal policy prior to an election depends upon the combination of a country’s exchange rate regime and its exposure to international trade.³ I argue that pre-electoral fiscal manipulation is most likely to occur when the country’s exchange rate is flexible and the domestic economy is highly open to international trade, and when the exchange rate is fixed and the domestic economy is relatively closed to international trade. Conversely, governments are less likely to engage in pre-electoral fiscal manipulation when the country’s exchange rate is fixed and the domestic economy is highly open to international trade,

and when the exchange rate is flexible and the domestic economy is relatively closed to international trade.

Pre-electoral fiscal manipulation and international economic ties: The argument in brief

A country's trade and monetary relations with the rest of the world affect both how desirable pre-electoral fiscal manipulation is to the government, and how effective pre-electoral fiscal manipulation is in increasing the government's chances of re-election. International trade acts as a conduit for international economic volatility. While governments may already desire pre-electoral fiscal manipulation to offset economic shocks originating in the domestic economy, exposure to international shocks amplifies their demand for fiscal manipulation. As a country becomes more open to international trade, the likelihood that economic shocks will be imported into the domestic economy increases. This is problematic for governments because greater exposure to economic shocks increases the uncertainty of good times prior to the election, increasing the uncertainty that the government will win, thus increasing the government's desire to manipulate fiscal policy. Therefore, as a country's trade openness increases, governments' desire to manipulate fiscal policy prior to an election will also increase.

While a country's trade ties may increase the government's desire to engage in fiscal manipulation in the run up to an election, a country's monetary ties affect the effectiveness of doing so. How flexible a country's exchange rate is, in combination with international capital mobility, affects the effectiveness of fiscal manipulation. As Clark and Hallerberg (2000) argue, when capital is fully mobile internationally a flexible exchange rate renders fiscal manipulation ineffective; that is, fiscal manipulation will have no effect on aggregate economic growth. As a result, when capital is fully mobile and the exchange rate is flexible, governments will never engage in fiscal manipulation. However, while the post-Bretton Woods period is characterized by relatively high levels of capital mobility, capital is not fully mobile. When capital is partially mobile, increased exchange rate flexibility reduces the effectiveness of fiscal manipulation. As a result, as the flexibility of the exchange rate increases, the likelihood of fiscal manipulation decreases, all else equal. Therefore, when the exchange rate is flexible, governments will

only engage in pre-electoral fiscal manipulation when the benefit of doing so is high. Because the benefit of pre-electoral fiscal manipulation increases in trade openness, under a flexible exchange rate governments are only likely to manipulate fiscal policy when trade openness is high.

In contrast, while the government can quite effectively manipulate fiscal policy when the exchange rate is fixed, fiscal manipulation under a fixed exchange rate will lead to an appreciation of the real exchange rate, which in turn reduces domestic producers' international competitiveness. While reducing international competitiveness will have little effect on the domestic economy if the economy is relatively unexposed to international trade, as the country's international trade openness increases, the loss of international competitiveness will offset the benefit of fiscal manipulation. As a result, under a fixed exchange rate regime, governments become less willing to manipulate fiscal policy as their country's international openness increases. Hence, when the exchange rate is fixed, governments will only manipulate fiscal policy when trade openness is low. These expectations are delineated in Figure 1, and explored in more detail in the next two sections. A more formal exposition of this argument is presented in the Appendix.

[Figure 1 about here]

Exchange rate flexibility and the effectiveness of pre-electoral fiscal manipulation

Exchange rate flexibility affects both the effectiveness of fiscal manipulation in increasing aggregate economic performance and the distributive impact of fiscal manipulation on the domestic economy. With respect to the effectiveness of fiscal manipulation in increasing aggregate economic performance, Clark and Hallerberg (2000, 326) argue that "when capital becomes mobile...fiscal policy is effective only when exchange rates are fixed". The logic driving this argument stems from a Mundell-Fleming perspective to open economy analyses and rests upon a series of assumptions embedded within the Mundell-Fleming perspective "in which prices are held constant, capital is fully mobile, and the short-term effects of policy are ignored" (326, fn12). The problem with these assumptions is that in the real world prices are not held constant, capital is not fully mobile, and the short-term effects of policy are

vitaly important when one examines the government's preference for manipulating the economy in the run-up to an election—an inherently short-term effect.

If capital is viewed as partially rather than fully mobile, a view that is more reflective of the reality of the last few decades, increased exchange rate flexibility does not render fiscal manipulation fully ineffective but simply reduces its effectiveness. When fiscal manipulation is completely ineffective, governments will not use it; when fiscal manipulation is less effective, it will only be used when the benefit of doing so outweighs the cost. The cost of fiscal manipulation can be reckoned both in terms of a budget constraint and an audience cost. Money spent on fiscal manipulation prior to an election reduces the amount available for other purposes either before or after the election. Moreover, as the incumbent spends more to induce a pre-electoral fiscal expansion, the likelihood that their actions will be noticed and punished by voters increases; that this cost is effective in disciplining incumbents is supported by Alt and Lassen's (2006) finding that the likelihood of pre-electoral fiscal manipulation declines as transparency increases.

As fiscal manipulation becomes less effective, a higher level of fiscal manipulation is required to increase the government's chances of reelection, thus increasing the cost of fiscal manipulation as a tool of political expediency. Therefore, by reducing the effectiveness of fiscal manipulation, exchange rate flexibility increases the costliness of pre-electoral fiscal manipulation. As a result, I expect that in a world of partial capital mobility, all else equal, the likelihood of pre-electoral fiscal manipulation decreases as exchange rate flexibility increases, and governments will only engage in pre-electoral fiscal manipulation when the benefit of doing so is relatively high. I argue that, when the exchange rate is flexible, trade openness creates the added incentive that spurs governments to engage in fiscal manipulation prior to an election.

Political economy scholars have not considered how trade openness affects pre-electoral fiscal manipulation, but how a country's international trade ties affect public expenditure more broadly is a large debate. From one perspective, trade openness and public expenditures are inversely related (the efficiency hypothesis). From another perspective, trade openness and public expenditures are positively

correlated (the compensation hypothesis).⁴ The reason for this divergence stems from how a country's trade ties affect both demand for and constraints on government spending.

While international trade openness may increase aggregate national income, it may also increase its volatility. Moreover, by creating new economic winners and losers, increased trade openness acts redistributively.⁵ The compensation hypothesis posits that governments in countries that are highly open to international trade will maintain high levels of public expenditures to cushion the domestic economy from adverse international shocks (Rodrik 1998).⁶ The role of public expenditures in this view is to act as a stabilizing force to smooth and redistribute aggregate income. As such, increased public expenditures reflect the "embedded liberalism" thesis upon which Ruggie (1982) argues developed democracies' macroeconomic policies are based.⁷ Thus, under the compensation hypothesis, as trade openness increases, public expenditures will increase.

Alternatively, proponents of the efficiency hypothesis argue that, while high levels of international trade may increase the government's desire to cushion the economy, they reduce the government's ability to do so. This occurs because increased trade openness increases the domestic economy's exposure to international competitive pressures. As international competitive pressures increase, domestic producers are forced to produce goods more competitively. To do so, domestic producers must reduce their costs, and one key mechanism to do this is a reduction in their tax burden. As a result, increased trade openness will force governments to reduce taxes; reducing their tax revenue and leading to a reduction in public expenditures. Thus, under the efficiency hypothesis, as trade openness increases, public expenditures will decrease.⁸

While empirical support for both arguments has been mixed due to differences in definitions, samples and methodology (Brune and Garrett 2005), recent research appears to find stronger support for the compensation hypothesis than for the efficiency hypothesis (Hays et al. 2005, and Hicks and Zorn 2005). Taken as a whole, the empirical results from this research agenda suggest that governments in countries that face higher levels of international volatility do appear to spend more money, but that when governments do so depends on the type of international volatility that the country faces (Burgoon 2001,

Hays et al. 2005), that governments do so within constraints (Garrett 1995), and that they target where to increase expenditures (Hicks and Zorn 2005).⁹

These analyses have focused on the long run relationship between trade openness and public expenditures. However, when a government considers manipulating fiscal policy prior to an election, its time horizon is quite short. The short time horizon involved in pre-electoral fiscal manipulation further calls into question the explanatory power of the efficiency hypothesis. Because the efficiency hypothesis relies on the long run effect of public expenditures on domestic competitiveness, as the time horizon for increased public expenditures declines, any constraints on public expenditures imposed by trade openness will also decline. Thus, in the short run, increased trade openness increases the government's desire to manipulate fiscal policy, while constraints on the government's ability to do so are not as binding. As a result, as trade openness increases, the government's desire to engage in pre-electoral fiscal manipulation as a mechanism for offsetting international volatility will increase (compensation effect). To the extent that the efficiency hypothesis does hold, pre-electoral fiscal manipulation will lead to an accentuation of the political budget cycle in which higher spending or lower taxes prior to an election are offset by lower spending or higher taxes after the election.

In sum, while exchange rate flexibility decreases the effectiveness of fiscal manipulation, strong trade ties make pre-electoral fiscal manipulation more valuable to the government. As a result, as the flexibility of the exchange rate increases, pre-electoral fiscal manipulation is only likely when trade openness is relatively high. This argument yields hypothesis 1; when the exchange rate is flexible, the likelihood of pre-electoral fiscal manipulation increases in trade openness.

Exchange rate flexibility and the distributive impact of pre-electoral fiscal manipulation

A country's exchange rate regime affects not only the effectiveness of fiscal manipulation, but also the distributive effect of fiscal manipulation on domestic economic actors. Under the Mundell-Fleming perspective, fiscal manipulation under a fixed exchange rate is highly effective; as Clark and Hallerberg (2000: 326 fn11) note, "the reasoning is that fiscal expansion...leads to an increase in both

income and interest rates. When capital is mobile, the rise in interest rates attracts capital, which leads to a currency appreciation. When the exchange rate is fixed, the central bank has to expand money supply to offset the effects of the capital inflow on the [nominal] exchange rate. Thus, under fixed exchange rates and mobile capital, a fiscal expansion induces a reinforcing monetary expansion.”

When prices are held constant, as assumed under the Mundell-Fleming perspective, the benefit of fiscal manipulation and its concomitant monetary expansion is distributed equally across the economy. However, when one recognizes that both the fiscal and monetary expansions lead to an increase in domestic prices, the analysis is no longer as straightforward. An increase in domestic prices under a fixed nominal exchange rate leads to an appreciation of the real exchange rate. As the real exchange rate appreciates, it becomes more difficult for exporters to sell their goods abroad, while imports become relatively cheap vis-à-vis domestic goods. This suggests that, when the exchange rate is fixed, the benefit to the domestic economy of pre-electoral fiscal manipulation will be offset as domestic producers lose competitiveness vis-à-vis international competitors.

This effect is unimportant if the country is not involved in international trade, as the loss of international competitiveness has no effect when no actors are exposed to international competition. This effect does not exist when the exchange rate is flexible as changes in competitiveness will be reflected in changes in the nominal exchange rate. This effect will matter when the exchange rate is fixed and the domestic economy is highly open to international trade. Based upon the appreciation of the real exchange rate that stems from fiscal manipulation, when the exchange rate is fixed, the effectiveness of pre-electoral fiscal manipulation as a tool of political expediency will decrease as trade openness and the fixity of the exchange rate increase. As a result, I expect that, all else equal, the likelihood of pre-electoral fiscal manipulation decreases as the fixity of the exchange rate and trade openness increase. This argument yields hypothesis 2; when the exchange rate is fixed, the likelihood of pre-electoral fiscal manipulation decreases in trade openness.

To summarize the argument developed in this paper and couched in hypotheses 1 and 2, the government’s decision to engage in pre-electoral fiscal manipulation in a world of partial capital mobility

is mediated by a country's exchange rate regime and level of economic openness. I expect that pre-electoral fiscal manipulation is most likely to occur when the country's exchange rate is flexible and the domestic economy is highly open to international trade, and when the exchange rate is fixed and the domestic economy is relatively closed to international trade. Governments are less likely to engage in pre-electoral fiscal manipulation when the country's exchange rate is fixed and the domestic economy is highly open to international trade, and when the exchange rate is flexible and the domestic economy is relatively closed to international trade.

Empirical analysis

To test the two hypotheses that when the exchange rate is flexible, the likelihood of pre-electoral fiscal manipulation increases in trade openness, and that when the exchange rate is fixed, the likelihood of pre-electoral fiscal manipulation decreases in trade openness, a proxy for fiscal manipulation, the dependent variable, is needed. In keeping with the extant literature on fiscal manipulation, the proxy for fiscal manipulation used in this paper is the *Change in Gross Government Debt as a Percentage of Gross Domestic Product*.¹⁰ This measure assumes that increases in government expenditure, or decreases in taxes, will be reflected in an increase in government debt. The key drawback of this measure is that, to the extent that governments can target fiscal expenditures, as discussed in Hicks and Zorn (2005), fiscal manipulation may be less evident in such an aggregate measure. What this means is that using an aggregate measure for fiscal manipulation should reduce the likelihood of observing a significant level of fiscal manipulation, and thus make it more difficult to find support for the two hypotheses outlined above. Another potential drawback of this measure is that it may be pro-cyclical—that is, when the economy is doing well government debt ought to decrease, all else equal. To control for cyclicity in the dependent variable, I include *GDP Growth* and *Unemployment* in the analyses as proxies for the strength of the economy.¹¹ I also include a lag of gross government debt as a percentage of gross domestic product (*Government Debt as a % of GDP, lagged*) to control for temporal stickiness in the government's fiscal stance.

The independent variables of interest in this model are *Election*, *Exchange Rate*, *Trade Openness*, and the interactions between these three variables. There are three *Election* measures used in these analyses. The first, *All Elections* is a dichotomous variable coded one in a year in which an election occurs, and zero otherwise.¹² The second two election variables identify “regular elections”; that is, elections that occur near the end of the constitutional inter-election period (CIEP). The logic behind these measures is that, all else equal, fiscal manipulation is less likely when an election is early than when it occurs at the end of its constitutional inter-election period. There are two reasons for this. First, to the extent that governments call early elections when the economy is doing relatively well, or more specifically, when there is a belief that the economy will be doing less well later on, there is less need to manipulate the economy. Second, given that many early elections occur unexpectedly, it can also be argued that there will be less fiscal expansion prior to an early election as there is less time to plan before an early election.

The first regular election variable, *Regular Elections 90% CIEP*, is a dichotomous variable coded one in a year in which an election occurs if the election occurs in the last one-tenth of the constitutional inter-election period, and zero otherwise, and is coded by the author based upon data on constitutional election rules provided in Strøm, Müller and Bergman (2003), and from various national election sources. Treating any elections that occur in the first 90% of the constitutional inter-election period as early mirrors the coding adopted in Strøm, Müller and Bergman (2003, 166-67). The benefit of this measure is that it controls for differences in countries’ constitutional inter-election period while focusing on the election expectations that build in the last ten percent of the term. A key critique of this measure is that, because constitutional inter-election periods do vary across countries, the last ten percent of the constitutional inter-election period captures a different absolute amount of time across different countries. Under this view, a fixed period of time, for example six months, may be a better measure than *Regular Elections 90% CIEP*. The second measure for a regular election takes this critique into account and codes all elections that fall within 6 months of the end of the constitutional inter-election period as one and all other observations as zero. This variable is *Regular Elections 6 Months*.¹³ Because pre-electoral fiscal

manipulation should be more likely prior to regular than early elections, *Regular Elections 90% CIEP* and *Regular Elections 6 Months* are expected to perform better in the empirical analyses than *All Elections*.

Exchange Rate is an observational measure of the exchange rate regime based on Reinhart and Rogoff (2004) and its coding is based upon both how flexible countries say their exchange rate is and how flexible it is in reality. This variable is coded one for fixed exchange rates, two for limited exchange rate flexibility, and three for floating exchange rates.¹⁴ Although the argument developed in the previous sections treats exchange rate flexibility as a continuous range, empirically, data on exchange rate flexibility are discrete, as demonstrated by the categorical nature of *Exchange Rate*. While I can assume that the categories in *Exchange Rate* are monotonic, I cannot assume that the intervals between each category are evenly spaced. As a result, rather than include *Exchange Rate* as a linear variable, I include three dichotomous exchange rate variables. The first, *Fixed Exchange Rate*, is coded one when *Exchange Rate* is coded one, and zero otherwise. *Intermediate Exchange Rate* is coded one when *Exchange Rate* is coded two, and zero otherwise. Finally, *Flexible Exchange Rate* is coded one when *Exchange Rate* is coded three, and zero otherwise.

Trade Openness is coded as (Exports + Imports)/Gross Domestic Product. The data are from the OECD National Accounts.

Due to the contingent nature of the argument developed in the previous section, interactions among the election, exchange rate and trade openness variables are needed to test the two hypotheses. Eleven variables are included in these analyses to capture the interacted and un-interacted effects of elections, exchange rate flexibility and trade openness on the likelihood of fiscal manipulation. The first set of variables captures the effects of the exchange rate and trade openness on fiscal manipulation in the absence of elections. These five variables are *Fixed Exchange Rate*, *Fixed Exchange Rate x Trade Openness*, *Intermediate Exchange Rate*, *Intermediate Exchange Rate x Trade Openness* and *Flexible Exchange Rate x Trade Openness*. *Flexible Exchange Rate* is the excluded category in these analyses. The second set of variables captures the effects of the exchange rate and trade openness on fiscal manipulation during an election year. These six variables are *Elections under a Fixed Exchange Rate*, *Elections under a*

Fixed Exchange Rate x Trade Openness, Elections under an Intermediate Exchange Rate, Elections under an Intermediate Exchange Rate x Trade Openness, Elections under a Flexible Exchange Rate and Elections under a Flexible Exchange Rate x Trade Openness.

Beyond the inclusion of *GDP Growth, Unemployment* and *Government Debt as a % of GDP, lagged*, which correct for cyclical and temporal characteristics of the dependent variable, four other control variables are also included in the analyses. First, *Debt Service Costs* is included to capture borrowing constraints that might exist for the government. As the cost of servicing the country's debt increases, the expectation is that the government will decrease government debt.¹⁵ Second, because a large percentage of government expenditure is demographically driven (e.g. pensions), and because the government's revenue is affected by the size of the working population, I also include two population age variables, *% of Population 65 years of age and older*, and *% of Population between age of 15 and 64*.¹⁶ Finally, because governments' fiscal expenditures may reflect their ideological stances, I include a variable for the left-right position of the *Chief Executive's Party*, as identified in the World Bank's Database of Political Institutions (Beck et al. 2000). This variable is coded zero if the party is on the left, one if the party is in the center and two if the party is on the right. Each of these variables is included in the following analyses.¹⁷

I employ ordinary least squares regressions on time-series cross section data with panel corrected standard errors (as discussed in Beck and Katz 1995) on a sample of 20 OECD countries from 1974-2000 to test the two hypotheses. The first hypothesis, that when the exchange rate is flexible, the likelihood of pre-electoral fiscal manipulation increases in trade openness, is captured by the interaction *Elections under a Flexible Exchange Rate x Trade Openness*, and its component parts. If this hypothesis is true, then the marginal effect of an election on government debt when the exchange rate is flexible and trade openness is high should be positive (as captured by a positive coefficient on *Elections under a Flexible Exchange Rate x Trade Openness*). When trade openness is low, elections should not result in an increase in government debt (as captured by a non-positive coefficient—one that is either negative, or not significantly different from zero—on *Elections under a Flexible Exchange Rate*). If the second

hypothesis, that when the exchange rate is fixed, the likelihood of pre-electoral fiscal manipulation decreases in trade openness, is true, then *Elections under a Fixed Exchange Rate* will be positive, while *Elections under a Fixed Exchange Rate x Trade Openness* will be negative. Governments will engage in pre-electoral fiscal manipulation when the exchange rate is fixed and trade openness is low (as captured by a positive coefficient on *Elections under a Fixed Exchange Rate*), but as trade openness increases, pre-electoral fiscal manipulation declines (as captured by a negative coefficient on *Elections under a Fixed Exchange Rate x Trade Openness*).

Table 1 presents two sets of models that differ in their election variables and in their samples. Model 1 examines the effect of *All Elections* on pre-electoral fiscal manipulation, while Models 2 and 4 limit the analysis to elections that fall in the last one-tenth of the constitutional inter-election period (*Regular Elections 90% CIEP*), and Models 3 and 5 analyze the likelihood of fiscal manipulation prior to elections that fall in the last six months of the constitutional inter-election period (*Regular Elections 6 Months*). Taking into account Brender and Drazen's (2005) argument that the evidence of pre-electoral fiscal manipulation found in large-n analyses of pre-electoral fiscal manipulation is driven by the inclusion of new democracies in the sample, Models 1-3 include only countries that are democracies for the full 1974-2000 time period.¹⁸ Models 4 and 5 include new democracies (Greece, Spain and Portugal) in the analyses.

[Table 1 about here]

Because the variables of interest in these regressions represent interactions rather than exogenous quantities, the coefficients and standard errors reported in Table 1 are insufficient to judge either the marginal effects of elections, exchange rates or trade ties, or their levels of significance.¹⁹ To address this problem, I also report the predicted marginal effect of an election on government debt in a country with low trade ties (such as Japan) and a country that is more highly open to trade (such as Belgium) under fixed and flexible exchange rates for each model in Table 2, and whether or not these marginal effects are significantly different from zero.²⁰

[Table 2 here]

Beginning with Model 1 which analyzes the effect of *All Elections* on fiscal manipulation, while the coefficients of interest (*Elections under a Flexible Exchange Rate x Trade Openness* (+), *Elections under a Flexible Exchange Rate* (-), *Elections under a Fixed Exchange Rate* (+), and *Elections under a Fixed Exchange Rate x Trade Openness* (-)) are all in the predicted directions, none is significant. While an election may result in a two percent increase in government debt when the exchange rate is fixed and trade openness is low, as reported in Table 2, this increase is not significantly different from the effect of an election when the exchange rate is flexible and trade openness is low or when the exchange rate is fixed and trade openness is high. Moreover, an election has no significant effect on government debt when the exchange rate is flexible and trade openness is high. The results from Model 1 provide scant support for hypothesis 2, and no support for hypothesis 1. However, I argue that the lack of support for these two hypotheses in Model 1 should not be construed as damning, but rather stems from the heterogeneity of elections included in *All Elections*. When only regular elections are considered, as in Models 2-5, there is substantial support for these two hypotheses.

Turning to Models 2 and 3, which analyze the effect of a regular election on fiscal manipulation, the variables of interest are both significant and in the hypothesized directions. For Model 2, which uses *Regular Elections 90% CIEP*, when the exchange rate is flexible and trade openness is high, a regular election results in a 7.3 percentage point increase in government debt; an increase that is significantly different from the effect of an election when the exchange rate is flexible and trade openness is low, and when the exchange rate is fixed and trade openness is high. This provides support for hypothesis 1. Similarly, and in support of hypothesis 2, when the exchange rate is fixed and trade openness is low, an election results in a 3.6 percentage point increase in government debt, an increase that is also significantly greater than the effect of an election when the exchange rate is fixed and trade openness is high and when the exchange rate is flexible and trade openness is low. The results from Model 3, which uses *Regular Election 6 Months*, are consistent with those from Model 2.

Models 2 and 3 suggest that, at least for developed countries when controlling for international economic ties, Brender and Drazen's (2005) argument that pre-electoral fiscal manipulation is unlikely in

old, established democracies does not hold. Although the argument posited in this paper does not distinguish between new and established democracies, Models 4 and 5 broaden the sample of countries included in Models 2 and 3 to include three new democracies—Greece, Spain and Portugal—to test whether the results from Models 2 and 3, which included only old democracies, are broadly consistent across a larger range of developed democracies. Comparing Models 4 and 5 to Models 2 and 3, the results do appear to be broadly consistent. All of the coefficients of interest are in the hypothesized direction and are significant at the 90% level or above.

Focusing on Model 5, when the exchange rate is flexible and trade openness is high, an election leads to a 7.6 percentage point increase in government debt, while an election under a fixed exchange rate and low trade openness increases government debt by 4.3 percentage points. Figure 2 depicts how an election affects government debt over a large range of trade openness under both a fixed and a flexible exchange rate. During an election year, when the exchange rate is flexible, an increase in trade openness increases government indebtedness. This effect becomes significant when trade openness is 0.8 or greater; that is, for any country with trade ties that are two-thirds of a standard deviation or more above the mean value of trade openness. In terms of countries' trade openness in 2000, this would suggest that seven of the twenty countries included in Model 5 would engage in pre-electoral fiscal manipulation when their exchange rate is flexible.²¹ When the exchange rate is fixed, lower trade openness results in higher levels of government indebtedness. This effect is significant for countries with a trade openness level of 0.8 or less. Thus, under a fixed exchange rate and based on 2000 levels of trade openness, 13 of the 20 countries included in Model 5 are expected to engage in pre-electoral fiscal manipulation.²²

[Figure 2 about here]

While the results in Model 5 appear to be stronger than the results from Model 3, the opposite is true when comparing the results of Models 2 and 4. The reason for this disparity stems from differences in the two regular election variables. Under *Regular Election 6 Months*, the 1993 and 2000 Greek elections are considered regular elections because they fall within six months of the end of Greece's four year constitutional inter-election period. As a percentage of the constitutional inter-election period,

however, the 1993 election occurs at 88%, while the 2000 election occurs at the 89%. Thus, the results reported in Model 4 are weakened because these two elections are not coded as “regular”. The results from Models 4 and 5 are insufficient to fully test for the effect of democratic consolidation, or level of development. Such a test would require analyzing a much larger sample of new and established democracies across the developed-developing country divide. For now, these act as a robustness check that the effects posited in this paper hold broadly across developed democracies.

Turning to the non-election variables included in these models, government debt appears to be greatest when the exchange rate is not fixed and trade openness is low. Recalling that *Flexible Exchange Rate* is the excluded category, the negative and significant coefficient on *Fixed Exchange Rate* suggests that government debt is lower when the exchange rate is fixed than when the exchange rate is flexible. The insignificant coefficient for *Intermediate Exchange Rate* suggests that there is no difference between government debt under a flexible or intermediate exchange rate. For both flexible and intermediate exchange rates, government debt declines in non-election years as trade openness increases. The difference in election and non-election years may reflect the amplified political budget cycle suggested by the efficiency hypothesis.

Of the economic and political control variables, higher levels of government debt in the previous year appears to limit how much additional debt the government will take on this year, as captured by the negative coefficient for *Government Debt as a % of GDP, lagged*. Similarly, the better the economy is doing (as measured by *GDP Growth*), the less likely it is that the government will increase its indebtedness. In contrast, higher levels of *Unemployment* may make the government somewhat more likely to increase its debt, although this effect is only significant at the 90% level in three of the five regressions. Finally, the more conservative the government, as captured by *Chief Executive's Party*, the less likely the government is to increase government debt.

Conclusion

Under conditions of partial capital mobility, governments are more likely to increase public expenditures prior to an election when the exchange rate is fixed and trade openness is low, and when the exchange rate is flexible and trade openness is high. These results stand in contrast to Clark and Hallerberg's (2000) finding that governments will not manipulate fiscal policy when the exchange rate is flexible, and will always manipulate fiscal policy when the exchange rate is fixed.

The difference between this analysis and previous research stems from the different assumptions made in each about the nature of capital mobility and domestic prices. Building upon a Mundell-Fleming framework, Clark and Hallerberg (2000) assume that capital is perfectly mobile and domestic prices are unaffected by fiscal manipulation. In contrast, the analysis in this paper assumes that capital is only partially mobile and that fiscal manipulation results in an increase in domestic prices. Based upon the empirical results reported in the previous section, these assumptions appear to comport better with reality than do the ones embedded within the Mundell-Fleming framework.

The Mundell-Fleming framework is a powerful workhorse for political economic analyses and has provided a simple, elegant framework for incorporating the international economic environment into our understanding of domestic macroeconomic policymaking. In particular, it has allowed scholars to better understand the tradeoffs governments face amongst their choice of macroeconomic policy tools.²³ One of the reasons that the Mundell-Fleming framework has played such an important role in political economic analyses is because it makes such stark assumptions about the world. These assumptions yield clear, empirically testable hypotheses. In light of the predictive power of these assumptions, it is important to analyze how changing these assumptions affects our hypotheses. The analysis in this paper is one attempt to do so, and is one demonstration of how relaxing these assumptions leads to alternative hypotheses. This paper is not a call to abandon the Mundell-Fleming framework, but rather is a call to look more critically at how the assumptions embedded within the framework shape the model's predictions. To the extent that these assumptions do not reflect reality, do they yield hypotheses that are

also less reflective of reality? When they do, future research in political economy will require moving beyond the Mundell-Fleming framework.

These differences also have an important substantive effect, as can be seen through the two argument's implications for pre-electoral fiscal manipulation in the eurozone. To the extent that eurozone member states are characterized by high levels of trade openness, the argument forwarded in this paper suggests that, with the adoption of the euro, governments will be less likely to engage in pre-electoral fiscal manipulation. This stands in marked contrast to Clark and Hallerberg (2000), which argues that with the adoption of the euro, eurozone members will be more likely to engage in pre-electoral fiscal manipulation.

More broadly for comparative politics, these results highlight the importance of taking into account the international environment in which domestic decisions are undertaken.²⁴ By looking only at domestic characteristics of pre-electoral fiscal manipulation, scholars implicitly assume that the macroeconomic costs and benefits of manipulating fiscal policy remain constant regardless of the country's international ties. While a more complete analysis of a government's decision to engage in pre-electoral fiscal manipulation should take into account both domestic and international factors, the analysis in this paper clearly demonstrates that a country's international economic ties affect both how desirable pre-electoral fiscal manipulation is to the government, and how costly it is to the government to engage in such manipulation.

Bibliography

- Adserà, Alicia, and Carles Boix. 2002. Trade, Democracy, and the Size of the Public Sector: The Political Underpinnings of Openness. *International Organization* 56 (2): 229-62.
- Alesina, Alberto, Nouriel Roubini, with Gerald D. Cohen. 1997. *Political Cycles and the Macroeconomy*. Cambridge: Massachusetts Institute of Technology Press.
- Alt, James E. and David Dreyer Lassen. 2006. Transparency, Political Polarization, and Political Budget Cycles in OECD Countries. *American Journal of Political Science* 50 (3): 530-550.
- Anderson, Christopher J. 2000. Economic Voting and Political Context: a Comparative Perspective. *Electoral Studies* 19 (2-3):151-170.
- Beck, Nathaniel, and Jonathan N. Katz. 1995. What to do (and not to do) with Time-Series Cross-Section Data. *American Political Science Review*. 89 (3): 634-647.
- Beck, Thorsten, George Clarke, Alberto Groff, Phillip Keefer, and Patrick Walsh. 2001. New tools in comparative political economy: The Database of Political Institutions. *World Bank Economic Review* 15 (1): 165-176.
- Bernhard, William, J. Lawrence Broz, and William Roberts Clark. 2002. The Political Economy of Monetary Institutions: An Introduction. *International Organization* 56 (4): 693-723.
- Binghamton University Center on Democratic Performance Election Results Archive
<http://www.binghamton.edu/cdp/era/>; accessed Summer 2006.
- Blyth, Mark. 2002. *Great Transformations: Economic Ideas and Institutional Change in the Twentieth Century*. Cambridge: Cambridge University Press.
- Brambor, Thomas, William Roberts Clark, and Matt Golder. 2006. Understanding Interaction Models: Improving Empirical Analyses. *Political Analysis* 14 (1): 63-82.
- Braumoeller, Bear F. 2004. Hypothesis Testing and Multiplicative Interaction Terms. *International Organization* 58 (4): 807-820.
- Brender, Adi, and Allan Drazen. 2005. Political Budget Cycles in New versus Established Democracies. *Journal of Monetary Economics* 52: 1271-1295.
- Brune, Nancy, and Geoffrey Garrett. 2005. The Globalization Rorschach Test: International Economic Integration, Inequality, and the Role of Government. *Annual Review of Political Science* 8: 399-423.
- Burgoon, Brian. 2001. Globalization and Welfare Compensation: Disentangling the Ties that Bind. *International Organization* 55 (3): 509-51.
- Cameron, David. 1978. The Expansion of the Public Economy: A Comparative Analysis. *American Political Science Review* 72 (4): 1243-61.
- Clark, William Roberts. 2002. Capitalism not Globalism: Capital Mobility, Central Bank Independence

- and the Political Control of the Economy. Ann Arbor: University of Michigan Press.
- Clark, William Roberts and Mark Hallerberg. 2000. Mobile Capital, Domestic Institutions, and Electorally Induced Monetary and Fiscal Policy. *American Political Science Review* 94 (2): 323-346.
- de Haan, Jakob and Jan-Egbert Sturm. 1997. Political and Economic Determinants of OECD Budget Deficits and Government Expenditures: A Reinvestigation. *European Journal of Political Economy* 13 (4): 739-50.
- Franzese, Robert J. Jr., and Cindy K. Kam. forthcoming. Modeling and Interpreting Interactive Hypotheses in Regression Analysis. Ann Arbor: University of Michigan Press.
- Friedman, Thomas L. 2000. *The Lexus and the Olive Tree: Understanding Globalization*. New York: Anchor.
- Garrett, Geoffrey. 1995. Capital Mobility, Trade, and the Domestic Politics of Economic Policy. *International Organization* 49 (4): 657-87.
- Garrett, Geoffrey. 1998a. Global Markets and National Politics: Collision Course or Virtuous Circle? *International Organization* 52 (4): 787-824.
- Garrett, Geoffrey. 1998b. *Partisan Politics in the Global Economy*. Cambridge: Cambridge University Press.
- Garrett, Geoffrey, and Deborah Mitchell. 2001. Globalization, Government Spending and Taxation in the OECD. *European Journal of Political Research* 39 (2): 145-78.
- Gourevitch, Peter. 1978. The Second Image Reversed: The International Sources of Domestic Politics. *International Organization* 32 (4): 881-912.
- Greider, William. 1997. *One World, Ready or Not: The Manic Logic of Global Capitalism*. New York: Simon and Schuster.
- Hays, Jude C., Sean D. Ehrlich, and Clint Peinhardt. 2005. Government Spending and Public Support for Trade in the OECD: An Empirical Test of the Embedded Liberalism Thesis. *International Organization* 59 (2): 473-494.
- Hicks, Alexander, and Christopher Zorn. 2005. Economic Globalization, the Macro Economy, and Reversals in Welfare: Expansion in Affluent Democracies, 1978-94. *International Organization* 59 (3): 631-662.
- International Foundation for Election Systems Election Guide <http://www.electionguide.org/>; accessed Summer 2006.
- International Institute for Democracy and Electoral Assistance <http://www.idea.int/index.cfm>; accessed Summer 2006.
- Katzenstein, Peter. 1985. *Small States in World Markets: Industrial Policy in Europe*. Ithaca: Cornell University Press.

- Kayser, Mark Andreas. 2005. Who Surfs, Who Manipulates? The Determinants of Opportunistic Election Timing and Electorally Motivated Economic Intervention. *American Political Science Review* 99 (1): 17-28.
- Korpi, Walter, and Joakim Palme. 2003. New Politics and Class Politics in the Context of Austerity and Globalization: Welfare State Regress in 18 Countries. *American Political Science Review* 97 (3): 425-46.
- Krause, George A. 2004. Electoral Incentives, Political Business Cycles and Macroeconomic Performance: Empirical Evidence from Post-War US Personal Income Growth. *British Journal of Political Science* 35 (1): 77-101.
- Krugman, Paul. 1995. *Development, Geography, and Economic Theory*. Cambridge: MIT Press.
- Lewis-Beck, Michael and Mary Stegmaier. 2000. Economic Determinants of Electoral Outcomes. *Annual Review of Political Science* 3: 183-219.
- Mares, Isabela. 2004. Economic Insecurity and Social Policy Expansion: Evidence from Interwar Europe. *International Organization* 58 (4): 745-774.
- Organization for Economic Cooperation and Development. Various years. *Economic Outlook*. Paris.
- Organization for Economic Cooperation and Development. Various years. *National Accounts*. Paris.
- Persson, Torsten and Guido Tabellini. 2000. *Political Economics: Explaining Economic Policy*. Cambridge: Massachusetts Institute of Technology Press.
- Reinhart, Carmen M. and Kenneth S. Rogoff. 2004. The Modern History of Exchange Rate Arrangements: A Reinterpretation. *Quarterly Journal of Economics* 119 (1): 1-48.
- Rodrik, Dani. 1998. Why Do More Open Economies Have Bigger Governments? *Journal of Political Economy* 106 (5): 997-1032.
- Ruggie, John G. 1982. International Regimes, Transactions, and Change: Embedded Liberalism in the Postwar Economic Order. *International Organization* 36 (2): 195-231.
- Scheve, Kenneth, and Matthew J. Slaughter. 2004. Economic Insecurity and the Globalization of Production. *American Journal of Political Science* 48 (4): 662-674.
- Strøm, Kaare, Wolfgang C. Müller, and Torbjörn Bergman. 2003. *Delegation and Accountability in Parliamentary Democracies*. Oxford: Oxford University Press.
- Swank, Duane. 2002. *Global Capital, Political Institutions, and Policy Change in Developed Welfare States*. Cambridge: Cambridge University Press.
- World Bank. 2005. *World Development Indicators*. Washington, D.C.: World Bank Group.

Appendix 1

Building upon the logic discussed in Section II, the model constructed in this section presents a government utility function for pre-electoral fiscal manipulation (U_{FM} , shown in equation 1), in which the benefit accruing from fiscal manipulation (B) stems from trade openness, while the cost of fiscal manipulation (C) is a function of trade openness, capital mobility, and the flexibility of the exchange rate.

$$U_{FM} = B - C \quad (1)$$

Based upon the compensation effect, pre-electoral fiscal manipulation becomes more valuable to the government as the domestic economy becomes more exposed to international volatility. As trade openness (T), and hence the domestic economy's exposure to international volatility, increases, the benefit the government derives from fiscal manipulation increases. This is captured in equation 2, in which trade openness ranges from zero to one ($T: [0,1]$), where zero represents an economy that is completely closed to international trade and one represents an economy that is completely open to international trade.

$$B = T \quad (2)$$

There are two components to the cost of pre-electoral fiscal manipulation—the effectiveness effect of fiscal manipulation as exchange rate flexibility and capital mobility vary, and the real exchange rate appreciation effect of fiscal manipulation as exchange rate flexibility and trade openness vary. As capital mobility and exchange rate flexibility increase, the effectiveness of fiscal manipulation declines. As a result, the amount of expenditures needed to achieve reelection, and hence the costliness of pre-electoral fiscal manipulation, increases. This is captured by the denominator in equation 3, in which exchange rate flexibility (E) ranges from zero to one ($E: [0,1]$), where zero represents a fully fixed exchange rate and one represents a fully flexible exchange rate. K represents partially mobile capital, which ranges between zero and one ($K: (0,1)$), but is never perfectly mobile nor perfectly immobile. Capital mobility increases as K approaches one, and declines as K approaches zero.²⁵

$$C = \frac{aT(1-E)}{1-(K * E)} \quad (3)$$

Turning to the real exchange rate appreciation effect of fiscal manipulation on the domestic economy, how fiscal manipulation affects the real exchange rate determines how beneficial fiscal manipulation is to the domestic economy. When the exchange rate is fixed, an increase in fiscal manipulation leads to an appreciation of the real exchange rate. As the real exchange rate appreciates, the cost of domestically produced goods vis-à-vis international goods increases, reducing the international competitiveness of domestic producers. To the extent that the economy is involved in international trade, domestic producers will no longer be able to compete as effectively against foreign producers; as a result, their ability to sell their product will decline. A drop in the purchase of domestically produced goods will offset the growth accruing to the domestic economy through fiscal manipulation. The size of this effect depends upon how much the government spends (which is a function of the effectiveness of fiscal manipulation, captured in the denominator of equation 3), how exposed the economy is to international trade (T), and how fixed the exchange rate is (E). This real exchange rate appreciation effect is captured by the numerator in equation 3.

In addition to the terms described above, equation 3 also contains a modifying constant, a . Technically, this term serves to differentiate the size of the effects of T (the trade openness term in equation 2) and E (the exchange rate term in the denominator of equation 3), which both have modifying constants normalized to one, from the effect of $T(1-E)$ in the numerator of equation 2. Substantively, a captures the relative importance of the real exchange rate effect on the government's utility—as a increases, the real exchange rate appreciation effect increases in importance vis-à-vis the effectiveness and compensation effects.

Substituting equations 2 and 3 into equation 1 yields the government's utility function (U_{FM}) shown in equation 4.

$$U_{FM} = T - \frac{aT(1-E)}{1-(K * E)} \quad (4)$$

Below are the partial derivatives of the government's utility function with respect to trade openness (equation 5) and exchange rate flexibility (equation 6).

$$\frac{\partial U_{FM}}{\partial T} = 1 - \frac{a(1-E)}{1-(K^*E)} \quad (5)$$

$$\frac{\partial U_{FM}}{\partial E} = \frac{T}{1-K^*E} - \frac{aT(1-E)}{(1-K^*E)^2} K \quad (6)$$

From these partial derivatives, two key comparative statics emerge. First, when the exchange rate is flexible ($E=1$), government utility from fiscal manipulation increases as trade openness increases. Second, as exchange rate flexibility declines ($\downarrow E$), the utility the government derives from increased trade openness declines. Taking these two comparative statics together, how far the government's utility declines as trade openness increases and exchange rate flexibility decreases depends upon the value of a , substantively, on the relative importance of the real exchange rate effect. When $a < K^{-1}$ and the exchange rate is fixed, an increase in trade openness increases the government's utility from fiscal manipulation, but at a much reduced rate than when the exchange rate is flexible. In contrast, when $a > K^{-1}$, an increase in trade openness decreases the government's utility from fiscal manipulation. The greater is capital mobility (as K approaches 1) the more likely it is that $a > K^{-1}$. What this suggests is that as capital mobility increases, the real exchange rate effect is likely to matter more to the government. For the hypotheses presented in this paper and tested in the empirical analysis, I assume that $a > K^{-1}$. This is an empirical question. If $a < K^{-1}$, Hypothesis 2 will not hold, and will be falsified in the empirical analysis.

Table 1. Pre-Electoral Fiscal Manipulation as the Exchange Rate and Trade Openness Vary

	Model 1	Model 2	Model 3	Model 4	Model 5
	All Elections	Regular Elections 90% CIEP	Regular Elections 6 months	Regular Elections 90% CIEP	Regular Elections 6 months
	Old Democracies	Old Democracies	Old Democracies	Old & New Democracies	Old & New Democracies
Elections Under a Fixed Exchange Rate	2.48 (1.95)	4.59* (2.46)	4.61* (2.46)	3.68^ (2.40)	5.46** (2.26)
Elections Under a Fixed Exchange Rate x Trade Openness	-1.76 (2.18)	-4.95* (2.70)	-4.97* (2.70)	-4.26^ (3.07)	-5.61* (2.95)
Elections Under an Intermediate Exchange Rate	1.24 (1.90)	-0.47 (2.65)	-0.55 (2.64)	0.72 (2.76)	0.47 (2.76)
Elections Under an Intermediate Exchange Rate x Trade Openness	-2.13 (2.95)	1.09 (4.57)	2.31 (4.53)	-0.42 (4.89)	0.96 (4.85)
Elections Under a Flexible Exchange Rate	-0.13 (1.68)	-3.60* (1.79)	-3.99* (1.75)	-3.68* (2.18)	-4.06* (2.13)
Elections Under a Flexible Exchange Rate x Trade Openness	0.76 (3.53)	6.51* (3.52)	6.90* (3.48)	6.57* (3.63)	6.94* (3.57)
Fixed Exchange Rate	-3.46* (1.56)	-4.26** (1.53)	-4.34** (1.52)	-4.58** (1.70)	-4.92** (1.69)
Fixed Exchange Rate x Trade Openness	0.18 (1.41)	0.50 (1.36)	0.50 (1.35)	0.75 (1.84)	0.95 (1.81)
Intermediate Exchange Rate	0.09 (1.28)	-0.12 (1.25)	-0.23 (1.25)	-0.75 (1.37)	-0.82 (1.35)
Intermediate Exchange Rate x Trade Openness	-3.27* (1.62)	-4.14** (1.52)	-4.23** (1.51)	-3.44* (1.49)	-3.57* (1.47)
Flexible Exchange Rate x Trade Openness	-7.21** (1.78)	-8.39** (1.79)	-8.40** (1.79)	-8.41** (1.80)	-8.39** (1.80)
Government Debt as a % of GDP, lagged	-0.03* (0.01)	-0.03* (0.01)	-0.03* (0.01)	-0.03* (0.01)	-0.02* (0.01)
Debt Service Cost	-0.03 (0.16)	-0.04 (0.16)	-0.05 (0.16)	-0.09 (0.18)	-0.10 (0.18)
GDP Growth	-0.83** (0.14)	-0.81** (0.13)	-0.81** (0.13)	-0.85** (0.14)	-0.85** (0.14)
Unemployment	0.15 (0.09)	0.16^ (0.10)	0.17^ (0.10)	0.17 (0.11)	0.18^ (0.11)
% of Population between Age 15 and 64	0.04 (0.10)	0.02 (0.10)	0.03 (0.10)	0.02 (0.10)	0.02 (0.11)
% of Population 65 years of age and older	0.14 (0.12)	0.14 (0.11)	0.14 (0.11)	0.13^ (0.08)	0.12 (0.08)
EXECRLC	0.79** (0.23)	0.80** (0.23)	0.81** (0.23)	0.68** (0.16)	0.69** (0.16)
Constant	1.70 (7.78)	2.89 (7.71)	2.79 (7.68)	3.39 (7.67)	3.61 (7.68)
R2	0.29	0.30	0.30	0.30	0.30
Observations	397	397	397	437	437

^p < 0.1, *p < 0.05, **p < 0.01. Standard Errors in parentheses.

One-tailed tests for election variables; two-tailed tests for all other variables.

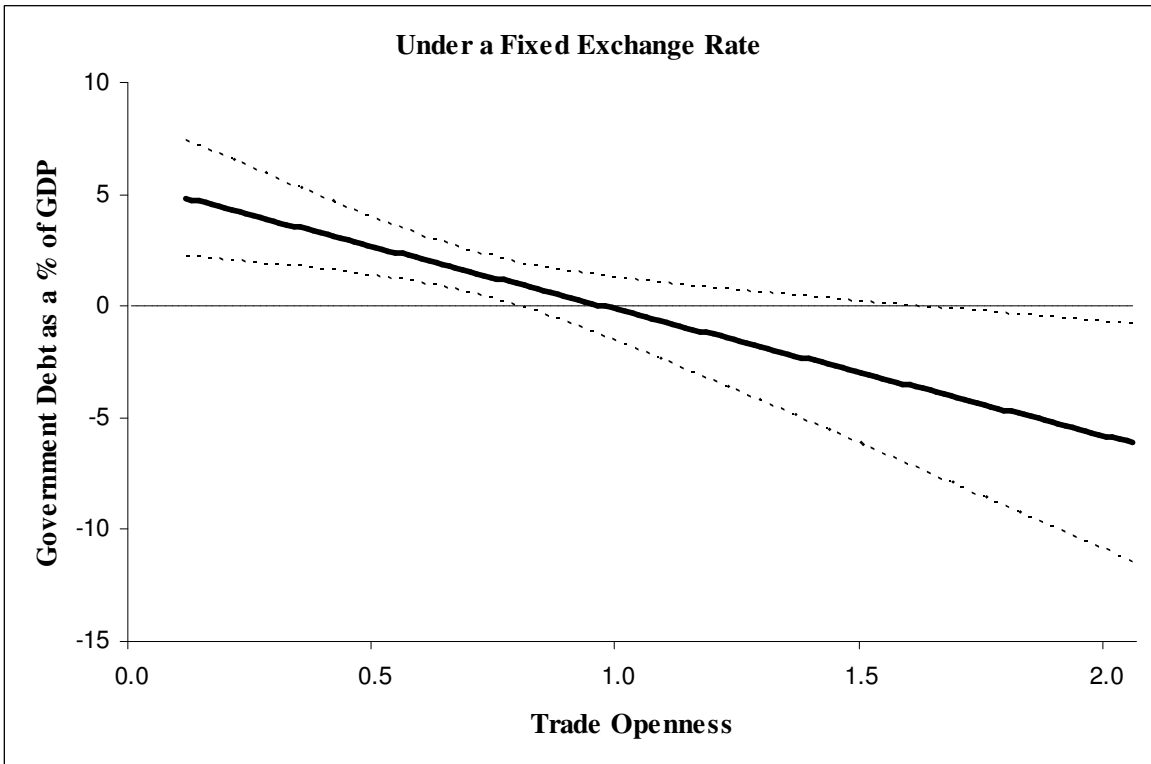
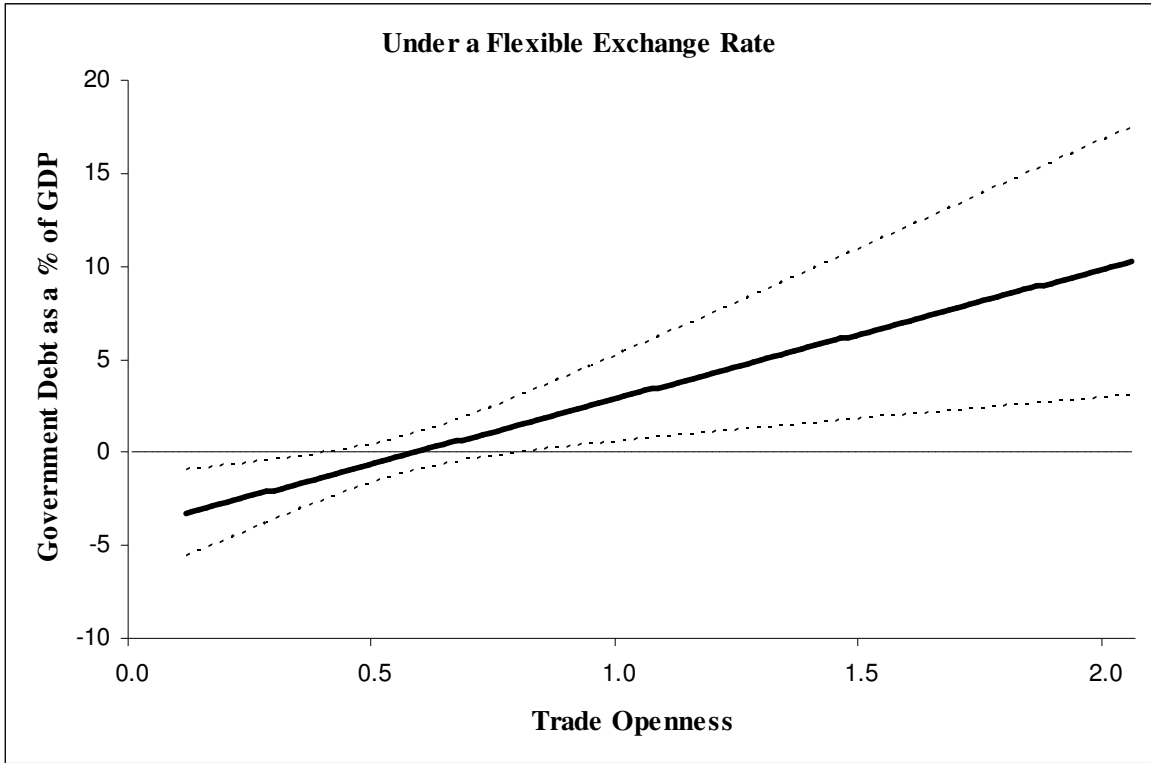
Table 2. Marginal Increase in Government Debt as the Exchange Rate and Trade Openness Vary

	Flexible Exchange Rate	Fixed Exchange Rate
1. <i>All Elections</i>	0.03	2.13 [^]
Old Democracies	1.15	-0.49
2. <i>Regular Election 90</i>	-2.29*	3.60*
Old Democracies	7.34 [^]	-3.72 [^]
3. <i>Regular Election 6</i>	-2.61*	3.61*
Old Democracies	7.60*	-3.74 [^]
4. <i>Regular Election 90</i>	-2.36 [^]	2.83 [^]
New & Old Democracies	7.37*	-3.48
5. <i>Regular Election 6</i>	-2.67*	4.33*
New & Old Democracies	7.60*	-3.97 [^]
[^] p < 0.1, *p < 0.05		

Figure 1. Likelihood of Fiscal Manipulation
as Trade Openness and Exchange Rate Flexibility Vary

	Flexible Exchange Rate	Fixed Exchange Rate
Low Trade Openness	Low	High
High Trade Openness	High	Low

Figure 2. Marginal Effect of Pre-Electoral Fiscal Manipulation as Trade Openness Varies (Model 5)



— Marginal Increase in Government Debt as a % of GDP; --- 90% Confidence Intervals

Notes

¹ See Lewis-Beck and Stegmaier (2000) and Anderson (2000) for recent reviews of scholarship examining the role of the economy on an incumbent's chances of reelection. As Lewis-Beck and Stegmaier note, there is a strong correlation across democracies between strength of the economy and the likelihood that an incumbent will be reelected.

² For recent reviews of the large literature on political budget cycles and the manipulation of fiscal policy, see Kayser (2005), Krause (2004), Persson and Tabellini (2000), and Alesina et al (1997).

³ This stands in contrast to Clark and Hallerberg (2000), which looks only at a country's exchange rate regime.

⁴ The terms "efficiency" and "compensation" stem from Garrett (1995).

⁵ For a discussion of international trade as a source of external risk and domestic redistribution, see Cameron (1978), Ruggie (1982), Katzenstein (1985), Garrett (1995, 1998a, 1998b), Rodrik (1998), Adserà and Boix (2002), Swank (2002), Mares (2004), and Scheve and Slaughter (2004).

⁶ This argument has been refined by subsequent analyses to more clearly delineate the source of the international uncertainty (Garrett and Mitchell 2001, Burgoon 2001, Hays, Ehrlich and Peinhardt 2005), the type of government expenditure that is the most likely to increase (Burgoon 2001, Hicks and Zorn 2005), and what role partisan, institutional and regime differences might have on the government's reaction function (Garrett 1998a, 1998b, Swank 2002, Adserà and Boix 2002).

⁷ For a defense of the continued embeddedness of "embedded liberalism" and the robustness of the relationship between trade openness and public expenditures, see Hays et al. (2005). For a less sanguine interpretation, see Blyth (2002).

⁸ For the efficiency argument, see Krugman (1995), Greider (1997), Friedman (2000), Burgoon (2001), Garrett and Mitchell (2001), and Korpi and Palme (2003).

⁹ These studies focus on levels of expenditures and levels of trade openness. The results may be reversed when changes, rather than levels, are considered (see Brune and Garrett 2005 for a review.)

¹⁰ The analyses run in this section are patterned after the analyses conducted first in de Haan and Sturm (1997) and then in Clark and Hallerberg (2000). I thank these authors for making their data available to me. I have updated their data as discussed below. Gross government debt as a percent of gross domestic product is from the OECD Economic Outlook.

¹¹ *GDP Growth* is the annual change in real gross domestic product. *Unemployment* is the unemployment rate. Both series are from the OECD Economic Outlook.

¹² Data on elections were collected from Binghamton University's Center on Democratic Performance Election Results Archive <http://www.binghamton.edu/cdp/era/>; the International Foundation for Election Systems' Election Guide <http://www.electionguide.org/>; the International Institute for Democracy and Electoral Assistance <http://www.idea.int/index.cfm>; and various national election sources.

¹³ Of the 145 elections that occur within the sample, 85 (59%) are coded as regular elections under *Regular Election 90*; 89 (61%) are coded as regular elections under *Regular Election 6*. *Regular Election 90* and *Regular Election 6* are correlated at 98%.

¹⁴ The Reinhart and Rogoff categorization reports 5 types, of which the fifth type, freely falling, does not appear in the sample analyzed in this paper. For this paper, I collapse category 3: managed float and category 4: free float into one floating exchange rate category. This creates three categories, each of which contains, roughly, one-third of the observations (fixed exchange rate: 27%; intermediate exchange rate: 38%; flexible exchange rate: 35%).

¹⁵ This measure is included in both the de Haan and Sturm (1997) and Clark and Hallerberg (2000) analyses as a measure to capture budgetary constraints on the government's ability to increase government debt. Defined by Clark and Hallerberg (2000) as "the change in the real interest rate minus the change in the growth rate times the gross deficit in the previous year", where the growth rate used was nominal. I recreate this measure using real GDP growth rather than nominal, as this seems more consistent with the use of the change in real interest rates. The analysis is robust to the inclusion of either transformation.

¹⁶ These variables are available from the World Bank World Development Indicators.

¹⁷ The statistical results are broadly consistent regardless of the inclusion or exclusion of the control variables included in the analysis. For each model reported in this paper, I include the results for the inclusion of each control variable individually in the supplementary documentation.

¹⁸ These countries are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Sweden, the United Kingdom, and the United States.

¹⁹ For a discussion of how to interpret multiplicative interactions, see Brambor, Clark and Golder (2006), Braumoeller (2004), and Franzese and Kam (forthcoming).

²⁰ Trade openness ranges from a minimum of 0.11 to a maximum of 1.82, with a mean of 0.61 and standard deviation of 0.30. For the results reported in Table 2, I chose the values of 0.20, which represents Japan's trade openness in 2000, as indicative of a low trade openness country, and 1.68, which represents Belgium's trade openness in 2000, as indicative of a high trade openness country.

²¹ These seven countries and their trade openness levels are Denmark: 0.82, Canada: 0.85, Sweden: 0.86, Austria: 0.89; the Netherlands: 1.30, Belgium: 1.68, and Ireland: 1.82.

²² These thirteen countries and their trade openness levels are Japan: 0.20, the United States: 0.26, Australia: 0.45, Italy: 0.56, the United Kingdom: 0.58, Greece: 0.62, Spain: 0.62, Germany: 0.67, New Zealand: 0.67, Portugal: 0.74, Norway: 0.76, Finland: 0.77.

²³ See Bernhard, Broz and Clark (2002) for an overview of how the Mundell-Fleming framework has contributed to open economy political economic analyses.

²⁴ This critique has a long tradition, featured most prominently in Gourevitch (1978).

²⁵ Throughout this analysis, capital mobility will be treated as a constant.