Abstract

This paper considers whether political business cycles exist in East European accession countries during the period 1990-99. There is some evidence that the manipulation of the economy in election years is a somewhat common practice in some OECD countries, where budget deficits tend to become larger in election years and/or where monetary policy is looser than in non-election years. Based on the Mundell-Fleming model expanded in Clark and Hallerberg (2000), we argue that the type of exchange rate regime and the relative independence of the central bank affects the instruments governments use to influence the economy before elections. In our empirical analysis, we find that accession countries with dependent central banks and flexible exchange rates have looser monetary policies in electoral periods than in non-electoral periods. If a country has a fixed exchange rate regime, it manipulates its economy in election years through running larger budgets instead of through looser monetary policy. One new finding is that, in countries with independent central banks, there is a monetary contraction in electoral periods. The presence of such cycles in Eastern Europe has implications for the introduction of the Euro in EU accession countries, both in terms of when the Euro should be introduced and what effects the Stability and Growth Pact (SGP) in its current form would have on the Accession Country economies.
Introduction

The European Union is currently involved in accession negotiations with twelve Eastern European and Mediterranean countries. Much focus has been given to the implications of this accession to a variety of European Union programs, such as the Common Agriculture Policy (CAP) or to the possible effects of greater labor mobility from the Accession Countries. There has also been recent discussion of how EU enlargement may affect Economic and Monetary Union (see Vinhas de Souza and Hölscher, 2002, 2001, Vinhas de Souza, 2001 and Vinhas de Souza at al, 1999). Some authors like De Grauwe and Aksoy (1999) argue that some of the applicant countries are already in principle so tightly integrated with West European economies that they already can be considered part of an “optimal currency area” (OCA) with the current members of the euro zone. This level of economic integration would imply that these countries could join EMU soon after they join the EU. Others (see Vinhas de Souza and Hölscher, 2002, 2001), cast doubt on such an optimistic view.

While the status of an expanded monetary union as an optimal currency area is an interesting research question, concerns about the expected policy behaviors of the newly admitted are also warranted. This paper considers whether political business cycles exist in East European accession countries. There is some evidence that the manipulation of the economy in election years is a somewhat common practice in some OECD countries, where budget deficits tend to become larger in election years and/or where monetary policy is looser than in non-election years. The presence of such cycles in Eastern Europe would have implications for the introduction of the Euro in EU Accession Countries, both in terms of when the Euro should be introduced and what effects the Stability and Growth Pact (SGP) in its current form would have on the Accession Country economies. Their presence would also provide information about whether including the accession countries would potentially have a destabilizing impact on the stability of the Euro.

This paper is organized as follows. Section II provides a short introduction to the political business cycle literature. It also considers the role of exchange rates, capital mobility, and central bank independence in restricting or encouraging political business cycles. Based on a Mundell-Fleming model, Clark and Hallerberg (2000) indicate that the type of exchange rate regime affects the instruments governments use to influence the economy before elections.
Assuming that capital is mobile, if the country has fixed exchange rates, then only fiscal cycles are expected. Conversely, if the country has flexible exchange rates then monetary cycles are expected. Independent central banks can eliminate such cycles even under flexible exchange rate regimes. Section III tests this model to determine whether there have been political business cycles during the time period 1990 to 1999 for the 10 Eastern European Accession Countries, when conditions permitted. We find strong evidence in support of the theory—countries with dependent central banks and flexible exchange rates have looser monetary policies in electoral periods than in non-electoral periods.

If a country has a fixed exchange rate regime, it may manipulate its economy in election years through running larger budgets instead of through looser monetary policy. One finding here that differs from Clark and Hallerberg (2000, ibid) is that, in countries with independent central banks, there is a monetary contraction in electoral periods. This finding can be interpreted two ways. First, the model suggests that independent central banks initiate monetary contractions in electoral periods when capital is imperfectly mobile. This finding could be interpreted as evidence that capital was not completely mobile in some Eastern European countries, mainly during the first half of the 1990’s (see Vinhas de Souza and Hölscher, 2002). A second possible interpretation is that capital was mobile, but newly created independent central banks may use electoral years to send signals to markets that they are truly independent. Section IV concludes, and it considers the policy implications for the European Union’s enlargement process and EMU.

II. Political Business Cycles

The political business cycle literature considers how incumbent governments attempt to manipulate the macro-economy before elections. There have been in general two types of cycles reported in the literature. Partisan political business cycles occur when macro-economic policy varies consistently with the partisan hue of government. The standard assumption is that left governments prefer higher rates of growth and therefore tolerate higher inflation rates and/or higher budget deficits than right governments (see Hibbs, 1977 and Oatley, 1999).
governments are simply following the dictates of their core supporters, either labor for left
governments or capital for right governments. While this argument might make intuitive sense,
there is little empirical support for it to date. While Oatley (1999) finds that countries did
experience such partisan cycles before the 1990's, Clark and Hallerberg (2000) found no
evidence of such partisan swings in terms of changes in monetary or fiscal policy in OECD
countries.

We will focus our attention on the second type of cycles, opportunistic political
business cycles (see Nordhaus, 1975, MacRae, 1977, Tufte, 1978 and Keech, 1995). The
basic assumption is that voters support incumbents when their economic position is healthy, but
they support challengers when their economic position is weak. Governments therefore can gain
votes if they can boost the economy shortly before elections. They consciously use the
economic tools available to them (fiscal or monetary policy: see discussion below) to increase
economic growth in electoral periods.

There are two crucial assumptions to the model that are potentially subject to criticism,
and before testing the model we should consider them. First, the model assumes that voters are
short-sighted. They care only about their current economic position when they vote and do not
factor in the future effects of a government manipulation of the economy into their vote calculus.
A second crucial assumption is tied to the first one, namely that governments can manipulate the
economy. The Lucas critique contends that there is no such thing even as a short run Philips
Curve which the government can exploit to boost output and jobs (see Lucas, 1976). Agents
adjust their expectations based on the behavior of the government, and their adjusted behavior
eliminates the positive effect of any discretionary policy action. While this critique has been
devastating to theories concerning long-run Philips curves, there is some empirical evidence that
states do successfully manipulate the economy short-term (see, among others, De Grauwe and
Aksoy, 1999 and De Grauwe, 1997). A short-term real effect is all a government would need
before an election (with such short-sighted agents/voters) in order for it to initiate an economic
expansion.

Exactly how governments boost the economy before elections is the subject of Clark
and Hallerberg (2000). They consider the relevance of a standard Mundell-Fleming model for
opportunistic political business cycles. The Mundell-Fleming model factors in the role of both
the level of capital mobility as well as the exchange rate in determining the relative effectiveness of monetary and fiscal policy in influencing the macro-economy. When capital is not mobile, both monetary and fiscal policies affect economic growth. When capital is mobile, the exchange rate becomes an important variable. If the exchange rate is fixed, monetary policy becomes an ineffective policy instrument, and fiscal policy is the only way that the government can influence the macro-economy. The opposite is the case when the exchange rate is flexible — monetary policy is effective but fiscal policy is not.

Clark and Hallerberg (2000) apply this framework to discussions about the presence or absence of opportunistic political business cycles. They also consider the importance of domestic institutions in preventing opportunistic political business cycles. When capital is not mobile, the government initiates fiscal expansions in electoral periods. If the central bank is dependent, it continues monetary policy as before. If it is independent, however, it responds to a fiscal expansion with a monetary contraction. If capital is mobile, independent central banks are expected to eliminate cycles when exchange rates are flexible. Independent central banks do not adjust policy according to the whims of the electoral calendar, while dependent central banks do. Clark and Reichert (1998) find evidence that independent central banks can block opportunistic changes in macro-economic variables, like economic growth and unemployment. Clark and Hallerberg (2000) find similar results for the importance of independent central banks based on changes in policy instruments such as the money supply. Clark and Hallerberg (2000) also consider the effects of fiscal policy institutions. Hallerberg and von Hagen (1998, 1999) find evidence that either delegation to a strong finance minister, or the setting of budget targets in the form of fiscal contracts among coalition partners reduces the size of budget deficits. Clark and Hallerberg (2000) find that these institutions also reduce the size of opportunistic fiscal cycles when capital is mobile and the exchange rate is fixed, although fiscal contracts are more effective than delegation to a strong finance minister in eliminating the fiscal cycle.

In the empirical section of the paper we concentrate on the effects of the exchange rate regime as well as independent central banks in reducing opportunistic political business cycles in Eastern Europe. We also presume that capital can freely flow into East European countries, given that, as can be seen in Vinhas de Souza and Hölscher (2002), the average level of
freedom of capital movement is quite high among the Accession Countries, and it is also a pre-
requisite for EU Accession, which limits us to the predictions in the cases when capital is mobile.
A summary of our predictions under conditions of capital mobility appears in Table 1 (below).

[Table 1 about here]

III. Empirical Results

We expect that the policy instruments governments use to manipulate the economy in
election years depend upon both the exchange rate regime and whether or not the central bank
is independent when capital is mobile. If the exchange rate is flexible, then fiscal policy is
ineffective and monetary policy is the only tool that governments can potentially use. If central
banks are politically independent from governments, then even this tool is not available.
Conversely, if exchange rates are fixed monetary policy is an ineffective policy tool, and we
anticipate that governments rely upon fiscal policy instead.
Our data on exchange rates as well as the level of central bank independence appears in [names withheld] where we consider in some detail the choices individual states made in their level of central bank independence and their exchange rate regime. To facilitate comparisons with the results obtained by Clark and Hallerberg (2000) for OECD and current EU member countries, we match the regression models as closely as possible. We use all ten East European accession countries for the years 1990-99. There are several non-trivial problems in doing this regression analysis that anyone reading these results should consider. First, there are some clear data restrictions, as some countries simply do not have figures to report for some years. Second, the ten years of competitive elections in Eastern Europe do not provide a long time series to analyze (there were 4 electoral events in Bulgaria, Estonia and Latvia during the period in question, 3 in Hungary, the Czech Republic, Lithuania, Poland, Romania, Slovakia and Slovenia). The results must therefore be considered fairly tentative. Yet one would also expect that, if anything, there would be a bias against finding statistically significant results. Given the scale of the changes in Eastern Europe over the decade there is likely plenty of “noise” in the regressions.

a. Monetary Cycles

The first regression equation for the monetary policy that we estimate using quarterly data takes the form

\[ \Delta M_t \text{ or } \Delta IR_t = \alpha_0 + \alpha_1 \text{Election}_t + \alpha_2 \text{CBI}_t + \alpha_3 \text{Fixed}_t + \alpha_4 \text{Election}_t \times \text{CBI}_t + \alpha_5 \text{Election}_t \times \text{Fixed}_t + \alpha_6 \text{CBI}_t \times \text{Fixed}_t + \alpha_7 \text{Election}_t \times \text{CBI}_t \times \text{Fixed}_t + \alpha_8 \Delta m_{t-1} + \alpha_9 \Delta \text{Prices}_{t-1} \]

We employ two dependent variables. The first is simply the percentage change in the money supply (M1, currency in circulation and in current account deposits) from the quarter in the previous year. The expectation is that the government will increase the money supply in electoral periods in an attempt to lower interest rates. Since incumbents seeking to engineer a monetary expansion would typically do so by lowering interest rates, we also consider whether the government was successful in reducing interest rates pre electoral periods, as opposed to
non-electoral periods. We do this two ways—we compare the absolute level of interest rates (IR, the three-month average of nominal market lending rates) in a given year; and we compare changes in interest rates, calculated in the same fashion as we calculate changes in the money supply.

Our independent variables are coded as follows. **Election** is a dummy variable coded as “1” if a *legislative election* took place either in the current quarter or in the previous three quarters. Our assumption is that voters hold the governments of the day (as opposed to the president) accountable for economic outcomes in the ten countries in our data set. The data on elections come from Shvetsova (1999) and from author updates. **Fixed** is a dummy variable coded as “1” if the country maintained a fixed exchange rate. Table 1a indicates which countries had fixed exchange rates as well as for what periods. One can see that there is some variation. Four countries in our data set always had flexible exchange rates, while the remaining six had periods of fixed exchange rates and periods of flexible exchange rates. **CBI** is a dummy variable for Central Bank Independence. Table 1b provides the data for central bank independence. While we follow Clark and Hallerberg’s (2000) coding rule that banks above the median of the group are independent and banks below the median are dependent, most banks fit easily either the “high” or “low” independence categories.(Mark, that’s true be definition if you divide sample at median!) We also include two control variables, a one period lag of the dependent variable used, and **Prices**$_{t-1}$, which is a one period lag of the inflation rate based on the Consumer Price Index. The central bank is presumably reacting to the latest information on prices when determining the current money supply.

Table 2, 2a, and 2b provide strong evidence that there have been regular monetary cycles in the Eastern European countries considered here, but that these cycles depend upon the level of central bank independence as well as the exchange rate regime in place. Table 2 provides regression equations for our three dependent variables. Beginning with the change in the money supply regression, our variable of interest, **Election**, is both significant and carries the expected sign, indicating that electorally-induced monetary cycles occur do occur. However, because Election is involved in a multiplicative interaction with **CBI** and **Fixed**, the coefficient for **Election** indicates the effect of elections on the money supply only when the variables with
which it interacts equal zero. In practical terms, this means only when central banks are dependent and when there are flexible exchange rates. This result is perfectly consistent with the theory examined here, but it alone cannot tell us all we would like to learn about the modifying effects of monetary institutions.

Table 2a therefore computes the conditional coefficients for Election under different assumptions about central bank independence and the exchange rate for the money supply regression. It is clear that the exchange rate regime plays a critical role. Regardless of the level of central bank independence, governments do not try to manipulate the economy through monetary expansions in pre-electoral periods when the exchange rate is fixed. The level of central bank independence, on the other hand, plays a role when the exchange rate is flexible, that is, under conditions where the Mundell-Fleming model tells us that monetary policy should be effective. When the monetary authority is dependent upon the government, there is a strong increase in the money supply in pre-electoral periods. When the bank is independent, however, there is a tightening of the money supply (though smaller than the expansion under the alternative regime).

The finding that monetary authorities tighten monetary policy during electoral periods when exchange rates are flexible is somewhat of a surprise. The game theoretic model in Clark and Hallerberg (2000) predicts that independent central banks will use monetary contractions to off-set or deter electorally-motivated fiscal expansions when capital is immobile. But when capital is fully mobile, the ineffectiveness of fiscal policy under fixed exchange rates should be sufficient to discourage its use for electoral purposes and, as a result, countervailing pressure from an independent central bank is not necessary. We offer two possible explanations for these results: First, it is possible that capital was, or was perceived to be, sufficiently mobile in these cases to completely discourage electorally-motivated fiscal expansions under fixed exchange rates, in which case independent central banks would engage in monetary contractions of a magnitude proportional to the size of the expected fiscal expansion, but, as indicated previously (see Vinhas de Souza and Hölscher, 2002 and the IMF indexes of capital account liberalization), the average level of freedom of capital movement is quite high among the Accession Countries since mid-1990—and close to complete in the Baltic countries since their independence, and it is also a pre-requisite for EU Accession. A second reason why monetary
contractions may have occurred during electoral periods when the exchange rate was fixed and the central bank was independent is that newly independent monetary authorities wanted to signal to markets that they were indeed independent from government decisions. Unlike with more established central banks in many OECD countries, markets would have little on which to judge the real level of independence of the new banks in Eastern Europe. Moreover, in a time of rapid change and seemingly fluid institutions, it would have been difficult for observers to know whether statutes dictating the independence of the central bank translated into an independent bank in practice. One visible way for banks to signal their independence would be for them to contract the money supply when one would expect dependent central banks to increase it.

While the evidence presented is consistent with our expectations about the ways in which the exchange rate regime and degree of central bank independence should moderate the relationship between elections and the money supply, an examination of the context-dependent relationship between elections and an instrument more directly under the control of monetary authorities would be instructive. Consequently, as indicated above, we estimated two additional models with interest rates, where the money supply is the dependent variable. It should be noted that since a monetary expansion is produced by lowering interest rates, the expected signs on the interest rate equations are the opposite of those in the money supply equation discussed above.

Column two of Table 2 presents the results from the interest rate equation using the percentage change in the interest rate as the dependent variable. Contrary to expectations, the Election coefficient is positive, though it is not statistically significant. This suggests that there is no relationship between elections and the percentage change in the interest rate when the central bank is dependent and the exchange rate is flexible. Note also that the percentage change in the interest rate is not well explained by this model, as the R squared is relatively small, and the only statistically significant variables are the interaction term of CBI and Fixed, and the Prices changes control variable.

Column three of Table 3 presents the results from the interest rate equation using the actual level of the nominal interest rate. The results here are much more in line with expectations. The variable for “Elections” is significant and has the expected negative sign. This coefficient indicates only the effect of an electoral period when other variables interacted with it.
(central bank independence and fixed exchange rate) are equal to zero, and once again we calculate the conditional coefficients in Table 2b. These results indicate that when the central bank is not independent and the exchange rate is flexible, interest rates are lower on average by 2.7 percentage points during electoral periods. Consistent with our expectations, there is no statistically significant effect of elections when a country maintains a fixed exchange rate. The sign of the coefficient for high central bank independence-flexible exchange rates is positive and, with a one-tailed test, statistically significant at the p<0.1 level (Mark, if we’re going to make this claim, then we might as well put an asterisk next to the coefficient in table 2b. I’m not sure, however, if it make sense. We use a one-tailed test to test the PBC hypothesis because its directional….. it tells us what sign to expect on the coefficient (i.e. b1<0 ….so the null hypothesis is b1 is greater than or equal to zero). The agreement here is that if it has the wrong sign we’re going to say that we can’t reject the null hypothesis. By saying the conditional coefficient for the highCBI/flex case is significant at the .10 level one tailed we’re trying to have our cake and eat it. The same issue apply to the highCBI/flex case in table 2a. My advice would be to not put an asterisk next to them and change the discussion in the text to say something like “it would have been significant at the x level had we predicted that banks would take this opportunity to demonstrate their independence by engaging in monetary contractions”….. right now it seems like we’re trying to have our cake and eat it. Conversely, if we are going to count them as significant we need asterisks that are accurate (one star in table 2b and 2 stars in table 2a).This result provides supporting evidence for the findings for the change in money supply: independent central banks tend to tighten monetary policy in electoral periods.

With the exception of the evidence for changes in the interest rates, the results for the ten Eastern European Accession Countries are remarkably consistent with those presented for a data set of OECD countries. Monetary political business cycles exist only when the exchange rate is flexible and the central bank is dependent upon the government.

B. Fiscal Cycles

The second set of regressions examines whether or not there are fiscal cycles when
exchange rates are fixed. We rely upon a modified version of our earlier regression equation, which now takes the following form:

\[
(2) \text{Deficit Level}_t = \hat{\alpha}_0 + \hat{\beta}_1 \text{Election}_t + \hat{\beta}_2 \text{Flexible}_t + \hat{\beta}_3 \text{Election} \times \text{Flexible}_t + \hat{\beta}_4 \text{Deficit Level}_{t-1} + \hat{\beta}_5 \text{GDP}_t.
\]

The dependent variable is the yearly deficit level as a percentage of GDP. The coding of Election follows the coding that Franzese (1996) suggests for yearly data. Instead of coding a year in which there is a legislative election as “1” and a year in which there is not an election “0,” we consider the proportion of an election year that falls before the election as well as the proportion in the previous year. This means, for example, that for an election that is held on July 1 we code the current year as .5 and the previous year as 0.5. As Clark and Hallerberg (2000) demonstrate, this more precise coding can reduce standard errors in regression equations in practice. Flexible is a dummy variable coded as “1” when there is flexible exchange rate in place.

There are some issues both in terms of data and in terms of the regression equation that are important to consider before continuing. The Clark and Hallerberg (2000) regression, which is in turn based on the widely-used Roubini and Sachs (1989) framework, uses changes in gross debt as its dependent variable instead of the current overall budget balance. Gross debt figures are generally preferable; they have more consistent accounting standards across countries than budget balances do. Yet gross debt figures are problematic for Eastern European Accession Countries for two reasons. First, yearly balances based on current figures are available and are usually reliable. Second, many more countries simply do not report gross debt figures than do not report yearly budget balances.

Another set of issues concerns excluded political variables that appear in both Roubini and Sachs (1989) as well as in Clark and Hallerberg (2000). Roubini and Sachs (1989) include an index for the type of government in office, and they find that one party majority governments have the lowest deficits. In Eastern Europe, however, the government types were virtually the same—all had some form of a parliamentary system, and all had some form of coalition government—so this variable is not relevant for the regressions here. Clark and
Hallerberg (2000) consider the effects as well of budgetary institutions by testing whether a strong finance minister or negotiated fiscal contracts eliminate fiscal political business cycles\(^\text{16}\). They find that either institution prevents fiscal political business cycles, much like central bank independence eliminates monetary cycles. Yet there is little data available on budget institutions in Eastern Europe, and to our knowledge no one has yet to publish a comparative study for these countries.

Given these qualifications, we compute a regression that does include the relevant variables to test the hypothesis that governments engage in fiscal expansions shortly before elections. Table 3 presents evidence that *such fiscal expansions are indeed present*. The conditional coefficients indicate that budget deficit worsens 1.5% in pre-electoral periods in countries with fixed exchange rates. In countries with flexible exchange rates, there is a smaller move downward, but in this case the coefficient is statistically indistinguishable from zero. There is evidence, therefore, of electorally-induced cycles in fiscal policy when the exchange rate is fixed, but not when the exchange rate is allowed to fluctuate.

[Table 3 about here]

**Implications of the Results for the Accession to the European Union**

This paper seems to confirm that the Accession Country governments face the same constraints as their OECD counterparts. They may try to manipulate the economy before elections, but the tools they use to do so depend upon the exchange rate regime and upon the institutional framework. If the country has a flexible exchange rate, the government relies upon monetary expansions, while if the country maintains a fixed exchange rate the government engages in fiscal expansions. Independent monetary authorities can eliminate monetary cycles in countries with flexible exchange rates.

These results should be instructive to European Union policymakers who are considering the impact of European Union Enlargement on the European economy. As long as states continue to have flexible exchange rates and dependent central banks, there will likely be a political cycle that the money supply and inflation rates will follow. States that fix their
exchange rates to the euro (or to other currencies) are likely to experience fiscal political business cycles.

Over time, however, the ten Eastern European Accession Countries will all presumably join the euro zone. The road to EMU requires that the future member states implement truly independent central banks, and as such institutions are put in place—as they already are in most of them (see Vinhas de Souza, 2001), monetary political business cycles should disappear even before states become members of the euro zone. Once the Eastern European states become members, monetary policy will be set by the ECB and, for the purposes of this paper, exchange rates become irrevocably fixed. Like their Western European counterparts who are already part of the euro zone, the Accession Countries will give up their ability to manipulate monetary policy. Therefore, political business cycles can continue under EMU, but only through the use of fiscal policy. European policymakers then have two problems to deal with: first, will fiscal political business cycles have any negative effects on the euro zone as a whole, and, second, if so, what measures can be taken to prevent such cycles?

The initial evidence presented here indicates that states do have budget balances that are worse in electoral periods, but the scale of this cycle has been no worse than in the European Union members states before the Treaty of Maastricht. Clark and Hallerberg (2000) estimate that the gross debt burden worsened anywhere between 1.5 and 3 percentage points of GDP in the EU 15 that had fixed exchange rates during the time period 1981-92. The estimates here are that the budget balance worsened 1.5 percent of GDP in the 10 Eastern European states over a roughly comparable ten year period. Given that the original members of the euro zone were able to proceed and to meet the Maastricht Criteria despite the presence of such cycles, there seems to be no reason to believe that the cycles as they now exist in the Accession Countries should lead to any delays in EMU membership.

Presuming that the size of the cycles remains roughly the same under EMU, whether the cycles themselves should be a concern once the Accession Countries join EMU is debatable. On the one hand, the overall size of the new economies as a proportion of total EU GDP shall remain small long after enlargement (even assuming real convergence towards the EU average GDP levels, this would truly be a generation-long process: see Vinhas de Souza et al, 1999), and the eventual impact on the Euroarea of any politically motivated fiscal expansion in any one
Accession Country should be limited. Yet, it is possible to imagine that markets could react negatively if a country’s deficit crossed 3% of GDP and punish the whole Euro zone. The reaction of the markets to the Russian default in 1998 indicates that negative news from even relatively small economies can have a broader impact. The Russian Federation’s economy is currently half of the size of the economy of the Federal Republic of Brazil, yet its default spread panic across the globe. Furthermore, even something smaller than a full default could still impact the external value of the Euro: outside observers may read any deviance from the 3% norm as an indication that all states have the ability to ignore the EU’s fiscal rules.

If individual member states and/or the European Union decide that such politically motivated fiscal cycles should be avoided, the next question is what can be done. As both Clark and Hallerberg (2000) and Vinhas de Souza et al (1999) indicate, the SGP as it is currently constructed does not seem an adequate solution. The main problems are the timing of the process and, therefore, its credibility. The SGP requires the European Commission to draft a recommendation to the Council of Ministers arguing that a state has an excessive deficit in order for the SGP’s procedure to punish states to be initiated. If the Council judges that a state does indeed have an excessive deficit, it must make a non-interest payment relative to the size of the deficit over 3% of GDP. It then has 10 months to make a correction.

Now consider a country that begins a fiscal expansion in an election year. The European Commission is likely to make a recommendation when it receives final figures for the previous year’s accounts. In current EU countries these figures are generally available in March after the budget year. The punishment mechanism is therefore begun only after the elections have taken place, and, for an election held early in the year, any potential fines will not be levied until up to 18 months after the election is over. Politicians for their part likely have short time horizons before elections; if they do not win, they will be out of office, while if they do win they will have time to “correction” the budget in a non-electoral period. Therefore, the SGP, as it is now constructed, does not seem to us to be a credible constraint to prevent governments from overspending in election years.

An alternative might be for governments to put in place domestic institutions, such as a “strong” finance minister or negotiated fiscal contracts, to lessen or eliminate the scale of fiscal cycles. Given that strong finance ministers tend to work best in countries with one-party
governments or in countries where there are two clearly opposing blocks of parties (see Hallerberg and von Hagen, 1999), it is likely that only negotiated fiscal contracts will be effective institutions in Accession Countries where multi-party coalition governments are the norm.

Such fiscal contracts work as follows: the respective political parties that form the government negotiate binding budget targets for every ministry before portfolios are distributed to the parties in a coalition agreement. The negotiation of the targets ensures that the partners consider the full tax burden of their spending decisions, and the process reduces the scope of the common pool resource problem, and along with it its deficit-increasing bias. The European Union, for its part, could also encourage the governments of the member states – current and future – to establish such fiscal targets. It can also use the Commission’s monitoring of the member state performance through the SGP to provide regular information on a country’s budgetary performance, and also use its annual assessments of the Accession Countries for a similar porpoise: such a procedure has actually started in 2001, as part of the pre-Accession strategy (see Vinhas de Souza, 2001).

Yet it must be stressed that a national government coalition partners themselves should negotiate the detailed fiscal targets. While a general goal of a rough budget balance, as written into the SGP, is laudable, more detailed targets are needed to keep the individual ministries within the broader targets built into the SGP, and those should be set domestically.
Table 1: Predictions about the Effects of Exchange Rate Regime and Central Bank Independence on Opportunistic Political Business Cycles

<table>
<thead>
<tr>
<th>Capital Mobility and Fixed Exchange Rates</th>
<th>No Central Bank Independence</th>
<th>Central Bank Independence</th>
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<tr>
<td></td>
<td>Fiscal Cycles,</td>
<td>Fiscal Cycles,</td>
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<tr>
<td></td>
<td>No Monetary Cycles</td>
<td>No Monetary Cycles</td>
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<tr>
<td>Capital Mobility and Flexible Exchange Rates</td>
<td>Monetary Cycles,</td>
<td>No Fiscal or</td>
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<td>No Fiscal Cycles</td>
<td>Monetary Cycles</td>
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Note: This table also appears as Figure 2 in Clark and Hallerberg (2000).
Table 2: Electoral Cycles in Monetary Policy in Eastern Europe 1990-1999.

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<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>M1</td>
<td>Interest Rate</td>
<td>Interest Rate</td>
</tr>
<tr>
<td>Election</td>
<td>0.154** (0.062)</td>
<td>0.030 (0.023)</td>
<td>-2.734* (1.939)</td>
</tr>
<tr>
<td>CBI</td>
<td>0.076 (0.080)</td>
<td>0.042 (0.078)</td>
<td>-3.264 (2.558)</td>
</tr>
<tr>
<td>Fixed</td>
<td>-0.001 (0.042)</td>
<td>-0.024 (0.026)</td>
<td>-5.857** (2.466)</td>
</tr>
<tr>
<td>Elect*CBI</td>
<td>-0.214*** (0.068)</td>
<td>0.053 (0.113)</td>
<td>16.187* (10.677)</td>
</tr>
<tr>
<td>Elect*Fixed</td>
<td>-0.165** (0.070)</td>
<td>-0.031 (0.038)</td>
<td>4.541** (2.497)</td>
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<tr>
<td>CBI*Fixed</td>
<td>0.031 (0.062)</td>
<td>0.231*** (0.087)</td>
<td>12.848** (5.159)</td>
</tr>
<tr>
<td>Elect<em>CBI</em>Fixed</td>
<td>0.167** (0.092)</td>
<td>-0.085 (0.153)</td>
<td>-17.331 (10.829)</td>
</tr>
<tr>
<td>Lagged Dependent variable</td>
<td>0.558*** (0.051)</td>
<td>0.097 (0.130)</td>
<td>0.796*** (0.157)</td>
</tr>
<tr>
<td>Inflation t-1</td>
<td>0.225*** (0.059)</td>
<td>-0.089*** (0.032)</td>
<td>-12.827*** (4.027)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.029 (0.083)</td>
<td>-0.032 (0.047)</td>
<td>3.649** (1.642)</td>
</tr>
<tr>
<td>Observations</td>
<td>260</td>
<td>245</td>
<td>250</td>
</tr>
</tbody>
</table>

Regression with Panel-corrected standard errors and country dummies (not reported). Alternative equations that include additional lags of the dependent variable and of Inflation yields virtually identical results.

* significant at 10% level; ** significant at 5% level and *** at the 1% level. One tailed test used for variables involving Election, two-tailed otherwise.
Table 2a: Conditional Estimated Effect of *Election* on the Change in the Money Supply under Different Configurations of Central Bank Independence and Exchange Rate Regime

<table>
<thead>
<tr>
<th>Exchange Rates</th>
<th>Central Bank Independence</th>
<th>Flexible</th>
<th>Fixed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>-.06*</td>
<td>-.06</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.03)</td>
<td>(.05)</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>.15**</td>
<td>-.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.06)</td>
<td>(.03)</td>
</tr>
</tbody>
</table>

* p<.1 ** p<.05, *** P<.01 One tailed test.

Table 2b: Conditional Estimated Effect of *Election* on Interest Rates under Different Configurations of Central Bank Independence and Exchange Rate Regime

<table>
<thead>
<tr>
<th>Exchange Rates</th>
<th>Central Bank Independence</th>
<th>Flexible</th>
<th>Fixed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>13.45</td>
<td>.66</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(10.38)</td>
<td>(1.15)</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>-2.73*</td>
<td>1.81</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1.94)</td>
<td>(1.50)</td>
</tr>
</tbody>
</table>

?? p<.1 ** p<.05, *** P<.01 One tailed test.

<table>
<thead>
<tr>
<th>Variables of Interest</th>
<th>Coefficient</th>
<th>(Standard Error)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Election</td>
<td>-1.5**</td>
<td>(.8)</td>
</tr>
<tr>
<td>Flexible</td>
<td>-.71</td>
<td>(.61)</td>
</tr>
<tr>
<td>Election*Flexible</td>
<td>.76</td>
<td>(1.39)</td>
</tr>
</tbody>
</table>

Conditional Coefficients

<table>
<thead>
<tr>
<th>Election</th>
<th>Flexible=0</th>
<th>-1.5**</th>
<th>(.8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Election</td>
<td>Flexible=1</td>
<td>-.78</td>
<td>(1.1)</td>
</tr>
</tbody>
</table>

Control Variables

| Intercept | -.7        |<.05    |
| d Deficit | .46***     |(.11)   |
| d Gdp     | .05        |(.03)   |

N=87, r-squared .27, * p<.1 ** p<.05, *** P<.01.
### Table 1a: Exchange Rate Arrangements of the Accession Countries

<table>
<thead>
<tr>
<th>Countries</th>
<th>Currency</th>
<th>Exchange Rate Regime</th>
<th>Date of Introduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>Lev</td>
<td>Currency board regime (anchor is the euro).</td>
<td>July 1997</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Koruna</td>
<td>Managed float.</td>
<td>May 1997</td>
</tr>
<tr>
<td>Estonia</td>
<td>Kroon</td>
<td>Currency board regime (anchor is the Euro).</td>
<td>June 1992</td>
</tr>
<tr>
<td>Hungary</td>
<td>Forint</td>
<td>Managed Float</td>
<td>October 2001</td>
</tr>
<tr>
<td>Latvia</td>
<td>Lats</td>
<td>Peg with the IMF’s Special Drawing Rights, with intervention bands (+/- 1%).</td>
<td>October 1993</td>
</tr>
<tr>
<td>Lithuania</td>
<td>Litas</td>
<td>Currency board regime (anchor is the USD).</td>
<td>March 1994</td>
</tr>
<tr>
<td>Poland</td>
<td>Zloty</td>
<td>Managed float.</td>
<td>April 2000</td>
</tr>
<tr>
<td>Romania</td>
<td>Leu</td>
<td>Managed float.</td>
<td>August 1992</td>
</tr>
<tr>
<td>Slovakia</td>
<td>Koruna</td>
<td>Managed float.</td>
<td>October 1998</td>
</tr>
<tr>
<td>Slovenia</td>
<td>Tolar</td>
<td>Managed float.</td>
<td>October 1991</td>
</tr>
</tbody>
</table>

Sources: [names withheld].

### Table 1b: Central Bank Independence in the Accession Countries

<table>
<thead>
<tr>
<th>Countries</th>
<th>Monetary Authority Status</th>
<th>Independence Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>CBA.</td>
<td>0.875(a)</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Legally Independent Central Bank *</td>
<td>0.875(a)</td>
</tr>
<tr>
<td>Estonia</td>
<td>CBA.</td>
<td>1.000(a), 0.74(b)</td>
</tr>
<tr>
<td>Hungary</td>
<td>Legally Independent Central Bank *</td>
<td>0.312(a)</td>
</tr>
<tr>
<td>Latvia</td>
<td>Legally Independent Central Bank.</td>
<td>0.85(b)</td>
</tr>
<tr>
<td>Lithuania</td>
<td>CBA.</td>
<td>0.125(a), 0.82(b)</td>
</tr>
<tr>
<td>Poland</td>
<td>Legally Independent Central Bank.</td>
<td>0.50(a)</td>
</tr>
<tr>
<td>Romania</td>
<td>Legally Independent Central Bank *</td>
<td>0.50(a)</td>
</tr>
<tr>
<td>Slovakia</td>
<td>Non Independent Central Bank *</td>
<td>n.a (assume low)</td>
</tr>
<tr>
<td>Slovenia</td>
<td>Legally Independent Central Bank *</td>
<td>n.a (assume high)</td>
</tr>
</tbody>
</table>

Table based on [names withheld]. Note the following key for the table above: (a): Lougani and Sheets, 1997, (b): Äimä, 1998. Äimä’s index is based on the so-called "Cukierman’s index", which can vary from 0 - no independence- to 1 - complete independence. Banks coded as independent in the regressions appear in **bold**.


the OECD Post-war Experience.” Paper presented at the annual meeting of the Midwest Political Science Association, Chicago.


To try to impose a more binding constraint on the fiscal behavior of the member countries of the European Union, a system of punitive pecuniary fines was introduced by the Stability and Growth Pact (SGP), through which –after a lengthy joint political decision process- individual EU member countries that incur in non-cyclical adjusted deficits that are deemed to be “excessive” –namely, over a 3% benchmark- would transfer up to 0.5% of their GDP to the Union.

Namely, the countries studied here are Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia.

While it would be useful to include fiscal institutions in this paper, we know of no published material that compares fiscal institutions in Eastern Europe.


See Greene (2000) for a more detailed explanation of the proper interpretation of conditional coefficients.

A test for a “cyclical” behavior -namely, that the monetary expansion would be reversed after the “election event”- was done for the M1 regression. The signs for Election and the interaction of Election and CBI are indeed reversed, and the coefficients themselves are of similar, but smaller values (indicating that the expansion/retraction was only partially compensated), while the exchange rate regime still has the expected binding effect. Unfortunately, none of the relevant variables was statistically significant.

Since an independent monetary authority is able to erase the real effects of a fiscal expansion, incumbents and independent central bankers may have an incentive to coordinate on a cooperative outcome where neither fiscal
expansions nor monetary contractions occur under these circumstances.

12 Another difference in the model, of course, is that we control for lagged interest rates, rather than lagged change in the money supply.

13 As examples of difficulties with this data, the Baltic countries start their lives as independent countries with a virtually null stock of debt, given the political agreement that led to the Russian Federation inheriting all former “Soviet” assets also implied that it assumed all the liabilities, including public debt stocks. Also, the “division” of debt stocks between Slovenia and the rest of Yugoslavia, and the Czech and Slovak republics, up on their respective separations, implied non-economic reasons for their initial debt position. See Vinhas de Souza et al. (1999).

14 These restrictions on gross debt figures also make it difficult to compute expected interest payments on the debt, which is another independent variable considered in Roubini and Sachs (1989). In empirical work, however, this variable is rarely significant; see Hallerberg and von Hagen (1998 and 1999).

15 In particular, they code a one-party majority government as a “0,” a two or three party majority government as a “1,” a four or five party majority government as a “2,” and a minority government as a “3.” They find that as the value of the index increases there is a statistically significant worsening of changes in the gross debt burden in OECD countries. Edin and Ohlsson (1991) break up the index into dummy variables and find only that minority governments have an effect. Clark and Hallerberg (2000) also use Edin and Ohlsson’s (1991) formulation in their regression work.

16 For more details about these institutions see von Hagen and Harden (1994) and Hallerberg and von Hagen (1999).

17 The figure for the Clark and Hallerberg (2000) is the coefficient when there were fixed exchange rates and no “fiscal institutions” in place.

18 See Velasco (1999) and Hallerberg and von Hagen (1999) for explanations in formal terms establishing the relationship between increases in the common pool resource problem and increases in the budget deficit.