

**Distributional Politics in Times of Crisis:
Eastern European Policy Responses to the 2008-2010 Global
Financial and Economic Crisis**

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Abstract

In response to the global economic crisis of 2008-10, several Eastern European democracies successfully internal adjustment strategies and suffered from wage depression, widespread job losses, and a contracting economy in the process. The choice of this policy path is puzzling, because existing research argues that the high costs of internal adjustment makes it politically infeasible. Democratic governments faced with severe balance-of-payments problems can therefore only choose external adjustment, i.e. a devaluation of the currency. This paper argues that the spread of foreign currency borrowing has generated significant opposition to this latter policy option among voters, because it has greatly increased voters' vulnerability to devaluation. As a result, exchange-rate policy decisions have become more politicized and are no longer an "easy solution" to balance-of-payments problems whereas internal adjustment has become a viable policy option when voters' vulnerability to external adjustment is very high. The paper uses a mix of cross-national survey data evidence from 25 transition countries and descriptive evidence at the country level to test this argument. The results suggest that individuals are well aware of the distributional consequences of macroeconomic policy adjustment for their personal financial situation and evaluate their governments accordingly. The macro-level analysis shows that during the recent economic crisis, transition country governments in countries exhibiting high levels of foreign currency debt were more likely to adjust internally rather than letting the exchange rate depreciate. In contrast, those countries in which such financial concerns were less relevant pursued the traditional path of devaluing rather than imposing the pain of a contracting domestic economy on voters.

1. Introduction

The global financial and economic crisis of 2008-2010 hit the transition countries in Eastern Europe and the former Soviet Union particularly hard (EBRD 2009, 2010; Connolly 2012; Myant and Drahokupil 2012). In virtually all of these countries, economic growth slowed considerably, turning negative in most of them and unemployment increased. While most of the economies in the regions had boomed in the pre-crisis years, they had also accumulated large macroeconomic imbalances, evidenced, for example, by credit booms and substantial current account deficits. As the crisis spread from the advanced economies to emerging markets, these macroeconomic vulnerabilities translated into speculative pressure on these countries. Despite similar macroeconomic problems and bearish market conditions, however, governments throughout the transition region responded quite differently to the crisis. While some countries, such as the Baltic states, implemented drastic domestic reforms but left their currency regimes untouched, other countries, such as Poland, let their exchange rates depreciate but did not substantially alter more domestically oriented policies. Yet others, like Hungary, opted for a mixed strategy, in which domestic economic tightening was coupled with a moderate adjustment of the exchange rate.

This variation in policy responses is puzzling because existing research in political economy argues that in situations like the one facing transition countries during the 2008-2010 crisis, the only politically feasible strategy for democratic governments is to devalue the currency (Simmons 1994; Eichengreen 1996; Eichengreen and Termin 1997). In such situations the national economy lacks international competitiveness, so that exports do not generate enough revenue to finance all the purchases of imported goods and services. As a

result, the funds needed for domestic investments are larger than those domestic citizens can provide in the form of domestic savings. This usually leads to balance of payments problems in the form of large current account deficits, which are financed by inflows of foreign capital.¹ When these capital inflows dry up – either because of a change in the global investment climate or because international investors become skeptical about the sustainability of the country’s economic policies – policymakers need to act, because the current account deficit can no longer be financed with foreign capital.

There are two ways to address the balance of payments problems that emerge in this situation. Both aim at regaining internationally competitiveness for domestically produced products by lowering real prices, which increases the international competitiveness of domestic vis-à-vis foreign products and hence reduces the current account deficit. The first possible strategy is *external adjustment*. This means that the value of the exchange rate is depreciated in order to make exports cheaper internationally and to raise the price of imports. As a result, expenditure is switched away from the consumption of internationally tradable goods and towards the production and export of such goods. A second possible adjustment strategy is *internal adjustment*, in which monetary and fiscal policy are tightened. Here, the goal is to deflate domestic prices and wages through a depression of wages, fiscal contraction, and significant structural change, which once more makes domestic products more competitive internationally and reduces the demand for imports.

Since these second strategy leads to significantly lower wages, rising unemployment and lower purchasing power for the median voter, previous research has argued that it is virtually impossible for democratic governments interested in political survival to impose

¹ These capital inflows usually lead to an increase in foreign debt, domestic credit expansions and real exchange rate appreciations, which can fuel a further deterioration of the current account.

such costs on their electorate (Simmons 1994; Eichengreen and Termin 1997). The political difficulties faced by the Greek government in implementing such reforms vividly illustrate this point. Nonetheless, several Eastern European countries, such as the Baltic states or Bulgaria managed to successfully implement painful internal adjustment strategies during the recent crisis, while keeping the exchange rate firmly pegged to the Euro. Why did national governments across the region respond so differently to seemingly similar problems? Under what circumstances can democratic governments successfully pursue internal adjustment rebalance their balance of payments?

To answer this question, this paper investigates how distributional concerns of individual voters affect democratic policymakers' responses to balance of payments problems. It argues that the distribution of voters' vulnerabilities to different types of adjustment strategies influences policymakers' incentives to address macroeconomic imbalances. Whereas the highly negative effects of internal adjustment measures on individual voters has received much attention in previous research, the spread of financial globalization in recent years has given rise to new vulnerabilities among individual voters. This is because private individuals as well as firms increasingly have the option to borrow money denominated in foreign currencies. In some countries well over one half of private debt taken out in recent years has been denominated in foreign currency. This development has greatly increased voters' vulnerability to exchange-rate depreciation, which can easily bankrupt individuals owing such debt. As a result, exchange-rate policy decisions have become much more politicized and are no longer an "easy solution" to balance-of-payments problems. In contrast, the policy path of internal adjustment, which hitherto has been regarded as unfeasible for democratic policymakers, has become a viable policy option when voters' vulnerability to external adjustment is very high.

To test this argument, this paper employs a twofold research strategy. In a first step, I investigate the microlevel implications of the argument that foreign-currency denominated liabilities matter for how voters evaluate governments' policy responses to balance of payments problems. For this purpose, I use survey data from the EBRD's "Life in Transition"-Survey (LiTS) 2010 (EBRD 2011). This survey covers individual voters in 25 transition countries and was conducted in the fall of 2010, a phase when economic condition slowly began to recover in most of these countries. The analysis builds on the assumption that voters assess the performance of the incumbent based on how his or her policy choices have affected their personal economic situation in recent months. By combining individual-level information about respondents' exposure to foreign-currency debt with country-level information about the countries' exchange-rate policy choices during the crisis, this survey allows me to tease out how voters with different levels of vulnerability to external adjustment responded to the different adjustment strategies implemented by their governments. The results suggest that individual vulnerabilities to different macroeconomic policy adjustments have clear electoral consequences for national governments. Building on this result, the second part of the analysis therefore looks at the country-level and examines to what extent the national prevalence in foreign-currency denominated liabilities is related to national policy responses to the 2008-10 global economic and financial crisis in the transition countries. This analysis suggests that countries characterized by widespread foreign-currency denominated liabilities were less likely to adjust externally and more likely to adjust internally, and vice versa. Overall, the evidence presented in the paper therefore suggests that the internationalization of finance has turned the bitter pill of "internal adjustment" into a policy option for democratic policymakers, despite its high economic costs.

2. The Distributional Effects of External and Internal Adjustment

Policy adjustments to balance of payments problems have significant consequences for voters who live in economically open economies. Especially when imbalances have been allowed to build up, such adjustment tends to be quite painful. However, the costs of adjustment are not distributed equally across a country's citizenry. Since exchange-rate, monetary and fiscal policy have strong distributional implications, some voters carry heavier burdens from certain types of policy adjustments than others (Frieden 1991; Walter 2011). As a result, different adjustment strategies hit some groups of citizens harder than others. In such situations, political struggles are likely to emerge about how the costs of adjustment are to be distributed. Some groups will be more vulnerable to the consequences of external adjustment, while for others internal adjustment is more painful.

2.1 Democratic governments don't adjust internally – the traditional argument

The traditional argument has been that ordinary citizens are hit hardest by internal adjustment (Simmons 1994; Eichengreen and Termin 1997). The goal of internal adjustment is to deflate prices to such a level, that the domestically produced products become competitive again on international markets. The resulting change in relative prices will then lead to a rebalancing of the current account and the macroeconomy more generally. Citizens can exhibit both direct and indirect vulnerabilities to the contractionary policies of internal adjustment. Directly, many citizens are confronted with lower wages, an increased risk of losing employment altogether, higher taxes, lower public transfer payments, and higher interest payments on personal loans. All of these directly decrease citizens' disposable income. In addition to these negative direct effects, citizens can be

indirectly vulnerable to internal adjustment because of the adverse consequences of this adjustment strategy on their employers and general economic conditions. Firms in the nontradables and import-competing sectors tend to be particularly exposed to monetary tightening because they have a strong orientation towards the domestic economy (e.g. Frieden 1991; Henning 1994; Hefeker 1997; Bearce 2003). Moreover, internal adjustment of both fiscal and monetary policy indirectly hurts all citizens because it weakens the country's general economic conditions and usually causes the economy to enter a phase of recession. The widespread job losses and negative income effects of this slowdown are painful for every voter who depends on the state of the domestic economy. The dependence on domestic economic conditions is particularly pronounced for the majority of voters whose main source of income is their own labor. Labor is less mobile internationally than capital and therefore much more affected by a domestic economic downturn. There is much research showing that labor is hurt by tight monetary policies, especially in the short run (for example, Alesina et al. 1997). This effect is particularly pronounced when labor markets are characterized by a high level of labor market inflexibility.

As a consequence, internal adjustment strategies are likely to be painful for a majority of citizens. It is therefore not surprising that political economy research has argued that internal adjustment is particularly difficult to achieve in democratic countries, because the median voter will be negatively affected by this adjustment strategy (Simmons 1994; Eichengreen 1996; Bearce and Hallerberg 2011).

In comparison with the widespread painful effects of internal adjustment, external adjustment has long been viewed as the lesser evil, although depreciations or devaluations of the exchange rate also directly and indirectly affect voters. Since such changes in the exchange rate strongly affect relative prices, at least in the short to medium run, they

decrease voters' purchasing power. External adjustment thus has a direct negative consumption effect on citizens, which is why voters are often assumed to be unenthusiastic about depreciations (e.g. Frieden and Stein 2001; Stein and Streb 2004; Blomberg et al. 2005). However, depreciations also affect voters in more indirect ways, which can sometimes offset the loss in purchasing power. The first indirect path is through the effect of external adjustment on individuals' employers. Here, the conventional wisdom holds that producers of tradable goods are the main beneficiaries of a depreciation because it increases their competitiveness, while non-tradable producers are hurt by the loss in the currency's value (Frieden 1991).² Recent research has shown, however, that the competitiveness effects of depreciations are somewhat more complex than this traditional view suggests (Muller and Verschoor 2006). For example, depreciations are not necessarily unambiguously good for export-oriented firms, because the increased competitiveness of their export-products can be dampened by higher prices for imported inputs and intermediate goods. Nonetheless, existing research indicates that in terms of competitiveness, depreciation tends to be advantageous for employees in the tradables sector, whereas individuals working for companies in the nontradable sector tend to be hurt by depreciations, especially when these companies use a lot of imported inputs. The second indirect effect of external adjustment on voters is its effect on the country's general economic conditions. Depending on the country's economic structure, depreciations can trigger economic expansions and contractions in the overall economy. This depends mostly on how the country-specific real and financial effects of a downward adjustment of the exchange rate discussed above add up in the aggregate. Here, the traditional textbook view

² Firm-level evidence indicates, for example, that firms with greater foreign sales perform significantly better after depreciations than firms that do not sell their products abroad {Forbes, 2002 #1122;Pratap, 2003 #326;Echeverry, 2003 #327;Aguiar, 2005 #1160

has been that depreciations often have expansionary effects on output and employment, because a depreciated exchange-rate increases foreign demand for domestic products and therefore boosts exports and this positive effect can then spill over into the general economy. The positive effects on employment and output associated with such an expansion are clearly positive for citizens as well.

In sum, downward exchange-rate adjustments can affect voters in very different ways that can partially offset each other. Individuals are directly and negatively exposed to devaluations in terms of their purchasing power, but individuals working in export-oriented industries and individuals living in countries in which the depreciation has an expansionary effect on the economy as a whole tend to benefit from a depreciation. Overall, the effects of external adjustment have therefore traditionally been viewed as less painful for citizens overall than the consequences of internal adjustment. Although some individuals may suffer, democratically elected governments have therefore been argued to prefer external adjustment over internal adjustment when a balance of payments crisis forces them to act. The competitive devaluations in the interwar years, which led to the breakdown of the gold standard, constitute the classic example for this behavior.

2.1 Foreign Currency Lending and the Changing Cost of External Adjustment.

The spread of financial globalization in recent decades has fundamentally changed this structure of costs. With the increase in international capital mobility, foreign-currency denominated assets and liabilities have become quite common both amongst firms and individuals. Borrowing in foreign currencies is no longer limited to sovereign borrowing by the government, but is now undertaken by the private sector as well, where large corporations, small- and medium-sized enterprises, as well as consumers take out such

loans (e.g. Jeanne 2003; Brown et al. 2009a). In fact, private foreign borrowing now often exceeds public foreign borrowing. Moreover, the phenomenon of foreign-currency denominated liabilities is not limited to the developing world or emerging economies. For example, foreign currency borrowing by firms and consumers has become the rule, rather than the exception, in some Eastern European countries such as the Baltic countries. In Latvia, the vast majority of all loans to firms and consumers in recent years have been denominated in a foreign currency (Brown et al. 2009b). But even in financially highly developed countries such as Luxembourg, Austria, or the United Kingdom, substantial fractions of private sector loans are denominated in foreign currencies. For instance, in Austria almost one third of all loans taken out in 2007, especially mortgages, held by private households were denominated in foreign currency, mostly Swiss francs (Austrian National Bank 2007). Overall, this indicates that foreign-currency borrowing has become a regular feature in most countries.

Foreign-currency borrowing thus has evolved into a new but important source of financial vulnerability of individuals to depreciation, which has become at least as important as the relative price effects of depreciation on voters' purchasing power and is likely to significantly influence voters' preferences about exchange-rate policy and external adjustment (Walter 2011). This is because any change in the exchange rate immediately affects the value of assets and liabilities denominated in a foreign currency. For example, in 2009 Hungarian consumers saddled with Swiss-Franc-denominated loans faced up to 70% higher debt servicing costs than they had originally calculated (The Economist 2009). Thus, unless foreign-currency liabilities are hedged (that is, simply put, insured against exchange market risk), depreciations immediately increase the debt burden when financial liabilities are denominated in foreign currencies, and increase the revenues of foreign currency-

denominated assets. However, many holders of foreign-currency debt do not hedge, either because they are unaware of the currency-risk or because buying hedges against the currency-risk is too costly. For these borrowers a depreciation of the currency means that their debt burden increases immediately and often substantially in domestic currency terms. Servicing the debt in terms of both interest payments and paying off the principal suddenly becomes much more expensive. As a result, the proliferation of foreign-currency denominated debt can produce a large and vocal constituency against external adjustment. Voters' direct vulnerability to external adjustment and their resulting policy preferences thus not only depend on the vulnerability of their purchasing power to depreciation, but also on the composition of their assets and liabilities.

Moreover, global financial integration also changes the indirect effects of external adjustment on individuals, because it exposes them to the *financial* effects of external adjustment on the companies they work for and on the general economy. Analogous to individuals' balance sheets, a depreciation of the national currency strengthens or weakens all those balance sheets of firms that contain positions denominated in foreign currencies, a situation which has become increasingly common. Any firm engaged in cross-border transactions will naturally exhibit such positions in its balance sheets: Exporters' revenues abroad result in foreign-currency denominated assets in their balance sheets, and importers often accrue foreign-currency denominated liabilities when they buy products abroad. Moreover, just like the consumers discussed above, firms in financially open economies increasingly borrow money in foreign currency, either because loans in domestic currency are not available, or because the interest rates on these loans are much higher than those on foreign-currency loans. When a firm's balance sheet contains a substantial currency mismatch, a depreciation of the exchange rate poses a great threat to

its net worth and ultimately its sheer survival. This is because its debt burden increases significantly when the domestic currency loses its value.³ Depreciations can therefore trigger a decrease in investment, output and profitability for firms exhibiting high levels of unhedged foreign-currency debt (e.g. Aghion et al. 2004; Cook 2004).⁴ Empirical studies show that large depreciations indeed substantially increase the risk of bankruptcy and decrease investment and the profitability of firms with a high international debt exposure (e.g. Claessens et al. 2000; Aguiar 2005; Chue and Cook 2008). Individuals, who work for such firms, are thus indirectly vulnerable to external adjustment, because the problems experienced by their employers can put their jobs and incomes in jeopardy.

Moreover, it is by now well established that contrary to the traditional view of expansionary devaluations, devaluations of the currency can also have significant contractionary effects on the overall economy. The loss in the currency's value can negatively affect both aggregate supply and aggregate demand (Caves et al. 2002). One particularly relevant aspect in this context is the effect of a depreciation on the financial sector in financially open economies. When a country's financial institutions exhibit large currency mismatches, large depreciations can cause liquidity or even solvency problems among these institutions (Chang and Velasco 2001). This can result in credit crunches, bank runs and full-blown financial crises, which impose vast costs on the economy. But even banks, whose balance sheets do not exhibit a mismatch, can be harmed substantially by depreciation if their borrowers exhibit a mismatched portfolio. Since a depreciation raises

³ The risks associated with exchange rate fluctuations can be lowered through hedging, which means that companies counterbalance the currency-risk created by their foreign-currency debt. However, despite the potential advantages of hedging, this strategy is often judged as too costly by firms. The empirical evidence suggests that most firms do not fully hedge their exchange rate risk, and many do not hedge at all {Dollar, 2000 #589; Fosler, 2004 #1289}.

⁴ For a good review of the theoretical and empirical literature on the effect of international debt on firms more generally and its mixed findings, see Chue and Cook (2008)

the risk of default amongst these borrowers, depreciations create a considerable indirect risk for their creditors as well (Mishkin 1996). It is therefore not surprising that currency and banking crises often coincide (Kaminsky and Reinhart 1999). When a banking crisis emerges in the wake of the devaluation, voters not only face the risk of losing their deposits with failing banks and difficulties in securing financing, but also suffer from the general economic downturn associated with financial crises. In addition, as taxpayers they typically have to pay for the resolution of these crises.

Taken together, this discussion shows that the proliferation of foreign-currency denominated debt has significantly altered the cost of external adjustment for individuals. Especially voters directly exposed to devaluation by holding personal loans denominated in foreign currency should exhibit a strong preference against this adjustment strategy. However, in countries with a high level of foreign-currency debt held by the private sector even individuals who are not directly exposed should judge the prospects of a devaluation negatively because of the indirect costs it would cause. As a result, in these countries the median voter no longer unambiguously prefers external over internal adjustment. Rather, the higher the national prevalence of foreign-currency denominated borrowing, the more voters are going to prefer the harsh costs of internal adjustment over the even harsher costs of external adjustment.⁵ This in turn enables democratic policymakers to implement internal adjustment measures, despite their painful consequences for voters.

⁵ In fact, their preferred option would be no adjustment, which explains why devaluations and adjustment more generally is so often delayed (see Walter 2008, 2011; Walter and Willett 2012).

2.3 Hypotheses

The argument about the growing importance of foreign-currency borrowing for the politics of macroeconomic adjustment presented has a number of empirical implications both at the micro-level – for individual evaluations of government policies and performance – and at the macro-level, in particular concerning governments’ policy responses to balance of payments problems. On the micro-level, the argument suggests that (1) the more vulnerable an individual is to external adjustment, the more negatively he or she will evaluate a depreciation of the currency in response to balance-of-payments problems. The argument also suggests that this evaluation should translate into politically meaningful policy preferences and opinions. As a result, another implication is that (2) individuals with a high vulnerability to external adjustment should hold a more negative view of the government’s performance if this government allows the exchange rate to depreciate. As governments anticipate and accommodate such opposition, however, the argument further implies that on the macro-level, (3) governments in countries with a high level of foreign-currency denominated debt should be more likely to implement internal adjustment, whereas those presiding over countries with a more “traditional” vulnerability profile should be more likely to respond to balance-of-payments pressures with external adjustment.

3. Empirical Evidence

The last section argued that the proliferation of foreign-currency denominated debt has altered the politics of macroeconomic adjustment to balance-of-payments problems both at the micro- and the macro-level. The remainder of this paper sets out to test the

three hypotheses developed above by looking at the experience of the transition countries during the 2008-10 global financial and economic crisis. These countries are well suited for such an analysis for a number of reasons. First, most of these countries exhibited current account deficits in 2007, just before the crisis hit (Myant and Drahokupil 2012). As deficit countries, they hence virtually all faced the choice between internal and external adjustment when capital inflows stopped in the wake of the global crisis, leading to speculative pressure on their currencies. Second, after they had opened their financial accounts in the process of transition, foreign capital had flown into these countries. However, the prevalence of foreign-currency denominated loans varied widely across the region. It ranged from relatively low levels of foreign-currency denominated loans in Serbia or the Czech Republic, where foreign currency-denominated loans amounted to only 8% and 13% of total bank loans in 2007, to a very high level in the Baltic Republics or Bulgaria, where the majority of bank loans were denominated in foreign currency, with Latvia exhibiting the highest level with 86.3% of all bank loans in foreign currency (Myant and Drahokupil 2012: table 5). Third, these countries also differed significantly in the adjustment strategies chosen to address the balance of payments problems they experienced in the context of the global financial crisis. As discussed in the introduction, some countries allowed their currencies to depreciate, thus following a path of external adjustment, while others kept their exchange rates stable and adjusted internally instead (EBRD 2009, 2010; Connolly 2012). These countries thus present an interesting testing ground for the argument about the importance of foreign-currency denominated loans for the choice of macroeconomic adjustment strategies. Fortunately, there is also a wealth of data available that allows me to examine both the micro-and macro-level implications of the argument for this region.

Empirically, I proceed in two steps. The first part of the analysis, focuses on the micro-level and uses cross-national survey data from 25 transition countries to investigate how foreign-currency denominated liabilities matter for individuals' evaluation of the governments' policy responses to the global financial crisis, with a particular focus on external adjustment. Employing multi-level regression analysis, this data allows me to exploit the variation in national exchange-rate policies during the crisis as well as variation in individual exposure to foreign-currency denominated debt to tease out how voters with different levels of vulnerability to external adjustment evaluated their governments' crisis management. To complement this micro-level analysis, which forms the core of the empirical analysis, the analysis then turns to the country-level and examines to what extent the national prevalence in foreign-currency denominated liabilities is related to national adjustment strategies in the region.

3.1 Survey Evidence on the Effects of Individual Exposure to Foreign-Currency Debt

The analysis begins with an examination of the micro-level relationship between individual vulnerability to adjustment and individuals' evaluation of their government's adjustment strategy chosen in response to the balance of payments problems, which emerged in the wake of the global financial and economic crisis of 2008-10.

3.1.1 Research Design

To examine the political consequences of individual vulnerability to external adjustment, I use survey data from the "Life in Transition"-Survey 2010 (EBRD 2011). This cross-national survey project undertaken by the European Bank for Reconstruction and Development surveyed between 1000 and 1500 individuals in each of 25 transition

countries in the fall of 2010, a time when most of these countries just began to recover from the crisis. The survey is unique in that it includes quite detailed information about individual respondents' financial situation and simultaneously asks respondents to assess the effects of the crisis and the performance of their national government. Since all respondents were asked identical questions, but answered these questions against the backdrop of very different macroeconomic policies in 25 countries, the survey is well-suited for teasing out how specific policy responses combine with individuals' vulnerabilities to external adjustment to shape their evaluations of their government's performance during the crisis.

I use three different dependent variables to measure how voters evaluated their government's adjustment strategy in light of their personal exposure to foreign-currency denominated debt. The first question asked respondents how the crisis had affected their household during the past two years.⁶ I recoded the answers into a dummy variable, which takes the value of one if the crisis affected the respondent's household "a great deal," and zero otherwise. Voters' evaluations of their personal economic situation are a matter of importance for incumbent policymakers, because voters base their decision on whether or not to reelect the incumbent government at least partly on these evaluations, as extensive research on the phenomenon of "economic voting" has shown (for overviews see Lewis-Beck and Stegmaier 2007, 2000). When voters observe that their personal economic situation is deteriorating, they are more likely to punish the incumbent at the next election, whereas improvements in the economy tend to increase the incumbent's vote share. However, past research has also shown that this relationship is affected by whether voters hold their governments accountable for this deterioration (e.g. Hellwig 2008). The second

⁶ Question 8.01

dependent variable therefore looks at this aspect and builds on a question which asks respondents to identify the entities, which they believe to be (co-)responsible for to global economic crisis. In addition to the entry “our government”, the list of possible answers includes, amongst others, the USA, the European Union, and foreign banks.⁷ I recoded the answers into a dummy variable, which takes the value of one if respondents mentioned their government as at least partly responsible for the global economic crisis, and zero otherwise. The final variable steps away from the direct assessment of crisis management and asks respondents about their evaluation about their national government’s performance more generally.⁸ This dummy variable takes the value of one if respondents evaluated the national government’s overall performance as “good” or “very good”, and zero otherwise.

To examine how different macroeconomic adjustment strategies influence these individual assessments of the government’s crisis management, I exploit the fact that the respondents surveys in the “Life in Transition” survey project not only differed in their personal vulnerability to external adjustment, but also experienced quite different national adjustment strategies implemented by their governments. By combining respondent-specific information with information about different national exchange-rate policies during the crisis as explanatory variables, I can examine how voters with different vulnerability profiles responded to different adjustment strategies.

To proxy respondents’ direct vulnerability to external adjustment in terms of foreign-currency denominated debt, the first main independent variable measures whether

⁷ Question 8.03a

⁸ Question 6.20

respondents are repaying a mortgage denominated in a foreign currency.⁹ Although individuals can also hold other types of foreign-currency denominated liabilities (such as consumer loans), holding a foreign currency mortgage constitutes a substantial risk associated with exchange rate depreciation. However, since it only covers one possible type of vulnerability to external adjustment, this operationalization is likely to underestimate the effects of vulnerability to external adjustment. The variable is recoded as a dummy variable taking the value of one if respondents hold a mortgage in any currency other than their local currency, and zero otherwise.

National variation in the extent of external adjustment implemented during the crisis is operationalized as the change in annual nominal exchange rates with the euro between 2008 and 2010.¹⁰ I use the euro-exchange rate because the majority of foreign-currency mortgages in the sample are denominated in this currency. The variable is coded thus that higher values denote a depreciation of the currency. It varies from a 12% appreciation in Azerbaijan to a 38% depreciation in Ukraine.

The argument predicts that respondents holding a foreign-currency denominated mortgage should be particularly vulnerable to external adjustment. This suggests that these respondents should be more pessimistic about the repercussions of the crisis, should hold their government more responsible for the crisis and should evaluate the overall performance of their government more negatively the more the currency has been allowed to depreciate during the crisis. In contrast, they should judge the effects of the crisis on their household more positively, should hold their government less responsible for the crisis and

⁹ Question 2.07. 63% of all foreign-currency denominated mortgages in the sample are denominated in Euro, 24% in Swiss francs, 8% in US dollar, 4% in Russian Rubles and .6% in Japanese Yen.

¹⁰ Data are from the ECB and from the Central Bank of Slovenia (<http://www.bsi.si/podatki/povp-tec-en.asp?MapaId=1282>) for Albania, Armenia, Azerbaijan, Belarus, Bosnia & Hercegovina, Georgia, Kazakhstan, Kyrgyzstan, Macedonia, Moldova, Mongolia, Serbia. Note that

should evaluate the government performance more positively when the currency has appreciated, because an appreciation reduces their debt burden in domestic currency. The effect of foreign-currency denominated debt on voters' evaluations of the national adjustment strategy is thus conditional on the direction of external adjustment. To capture this conditional effect empirically, I include an interaction term between the foreign-currency-mortgage dummy and the country-level change in the euro-exchange rate over the course of the crisis. If the theoretical expectation is correct, the interaction term should be positive and statistically significant regarding the severity of crisis repercussions and the responsibility of the government for the crisis, indicating that foreign-currency debt is particularly problematic when the exchange rate depreciates. Regarding the evaluation of government performance, the interaction term should be negative and statistically significant, indicating that vulnerable respondents assess the performance more negatively when they are hurt by a depreciating exchange rate.

While the focus of the analysis is on external adjustment, I also include an indicator measuring the country-specific extent of internal adjustment to model the trade-off between these two types of adjustment strategies. Since internal adjustment usually requires a contraction of the domestic economy, I control for the growth reversal brought about by the crisis in this country. This variable is taken from Connolly (2012: 41 and table 1) and measures the difference between the average 2000-2007 growth rates and the 2009 rate of economic growth, with more negative values indicating a more negative development in the country's growth trajectory. I also control for the direct repercussions of the crisis on the respondent's household, by including a dummy variable indicating whether the respondent or another member of the household lost her job during the crisis and for whether the household is repaying a mortgage (denominated in local or foreign

currency).¹¹ Since other personal characteristics of respondents are also likely to influence respondents' assessment of the government's adjustment strategy, I control for respondents' level of education, the age group and the gender of the household head.¹² Following EBRD (2011), I also control for respondent's consumption status, using dummy variables to indicate whether they own a car, a bank account, or a secondary residence, the main source of the household's income, differentiating between salaries from employment, self-employment, pensions, financial help from relative or friends, and the sale or bartering of farm products (all other possible types of income constitute the base category), and whether she lives in rural or urban environment.¹³

To exploit the fact that respondents from the same country share a common context, which varies across countries, I employ multilevel regression analysis. Since the dependent variables are dichotomous, I estimate a random intercept logit model for each dependent variable, with respondents nested in countries.

3.1.2 Results

How do respondents' vulnerability to external adjustment and the adjustment strategy implemented in response to the global economic crisis influence respondents' views of the crisis and the performance of the government? Table 1 presents the results of three multilevel regression models examining this question. The first column shows the determinants of respondents' evaluations of the effects of the crisis on their household, the second column looks at the determinants of the extent to which respondents hold their

¹¹ Questions 8.02 (job loss) and 2.05 (mortgage).

¹² Questions 5.15 (education), 1.04 (age), and 1.02 (gender).

¹³ Questions 2.25 (consumption status), 2.26 (main sources of income), and variable tablec (type of settlement, recoded as a dummy variable for a rural environment).

Table 1: Determinants of Individual Crisis Assessments and Government Evaluations

	Crisis very bad for household	(Government is (co-)responsible for crisis	(Very) good performance of government
Foreign-Currency denominated mortgage	0.220 (0.19)	-0.515** (0.16)	0.124 (0.21)
Exchange Rate Depreciation, 2008-10	-0.095 (1.27)	-0.116 (1.09)	-0.172 (1.72)
Forex mortgage* Depreciation	1.486 (1.23)	2.839* (1.14)	-3.781* (1.89)
Growth Reversal	-0.013 (0.02)	-0.060*** (0.01)	0.072** (0.02)
Household member lost job	1.395*** (0.04)	0.402*** (0.03)	-0.326*** (0.05)
Mortgage-Dummy	0.360** (0.12)	0.064 (0.09)	0.128 (0.11)
Level of Education	-0.089*** (0.01)	-0.055*** (0.01)	0.030* (0.01)
Young head of household (18-34 yrs)	-0.232*** (0.05)	-0.091* (0.04)	0.043 (0.05)
Old household head (over 65)	-0.215*** (0.05)	-0.078+ (0.04)	0.236*** (0.05)
Female Household Head	0.095* (0.04)	-0.051+ (0.03)	0.013 (0.04)
Household owns a car	-0.196*** (0.04)	-0.053+ (0.03)	0.084* (0.04)
Household owns bank account	-0.413*** (0.05)	-0.339*** (0.04)	0.223*** (0.05)
Household owns secondary residence	-0.090 (0.07)	-0.113* (0.05)	-0.122+ (0.07)
Rural Environment	-0.058 (0.04)	0.039 (0.03)	0.226*** (0.04)
Main income: Salary	-0.127** (0.04)	0.108** (0.03)	0.004 (0.04)
Main income: Self-Employment	-0.040 (0.05)	0.070+ (0.04)	-0.068 (0.05)
Main income: Pensions	-0.176*** (0.04)	-0.023 (0.04)	-0.008 (0.04)
Main income: Help from relatives/friends	0.155** (0.05)	0.119** (0.04)	-0.161** (0.05)
Main income: Sale/barter of agricultural products	-0.202*** (0.06)	-0.067 (0.05)	0.258*** (0.05)
Constant	-1.283*** (0.26)	-0.893*** (0.22)	-0.680* (0.34)
N (countries)	23614 (25)	25275 (25)	21850 (25)
log likelihood	-10245.393	-15586.206	-10771.497
AIC	20532.785	31214.412	21584.994
BIC	20702.247	31385.301	21752.825
Country Level Variance	0.649	0.558	0.883
Intraclass correlation	0.113***	0.087***	0.191***

Notes: Random intercept logit models. The dichotomous dependent variables are listed at the top of each column. Values in parentheses are robust standard errors + $p \leq .1$; * $p \leq .05$; ** $p \leq .01$, *** $p \leq .001$

national government (co-)responsible for the crisis and the third column shows the determinants of respondents' assessment of the government's overall performance.

The results indicate that individuals take the macroeconomic adjustment path chosen by the government into account when assessing the effects of the crisis and the performance of the governments. For example, respondents affected by crisis-induced job-loss and respondents living in countries in which the growth rate sharply deteriorated during the crisis were more likely to have seriously suffered from the crisis. Moreover, this suffering has political consequences: these individuals were also more likely to hold their government accountable for the crisis and to evaluate its overall performance more negatively.

Individual vulnerability to external adjustment similarly influences respondents' assessments of the crisis and the government's role in managing the crisis. Depending on the behavior of the exchange rate over the past years, respondents holding foreign-currency denominated mortgages hold significantly different views about the consequences of the global economic crisis for them personally and about their assessment of the government than respondents who are not repaying such a mortgage. The direction of this effect depends on the recent behavior of the exchange rate: When the exchange rate has depreciated in the past year, holding a foreign-currency denominated mortgage increases the perceived severity of the repercussions of the crisis on respondents' households and is associated with a more negative evaluation of the national government. The opposite holds in countries in which the currency has appreciated. Here, foreign-currency debt reduces

mortgage-holders' concern about the effects of the crisis and improves their assessment of government performance. This is in line with expectations, because an appreciation reduces citizens' debt burden on foreign-currency liabilities in domestic currency.

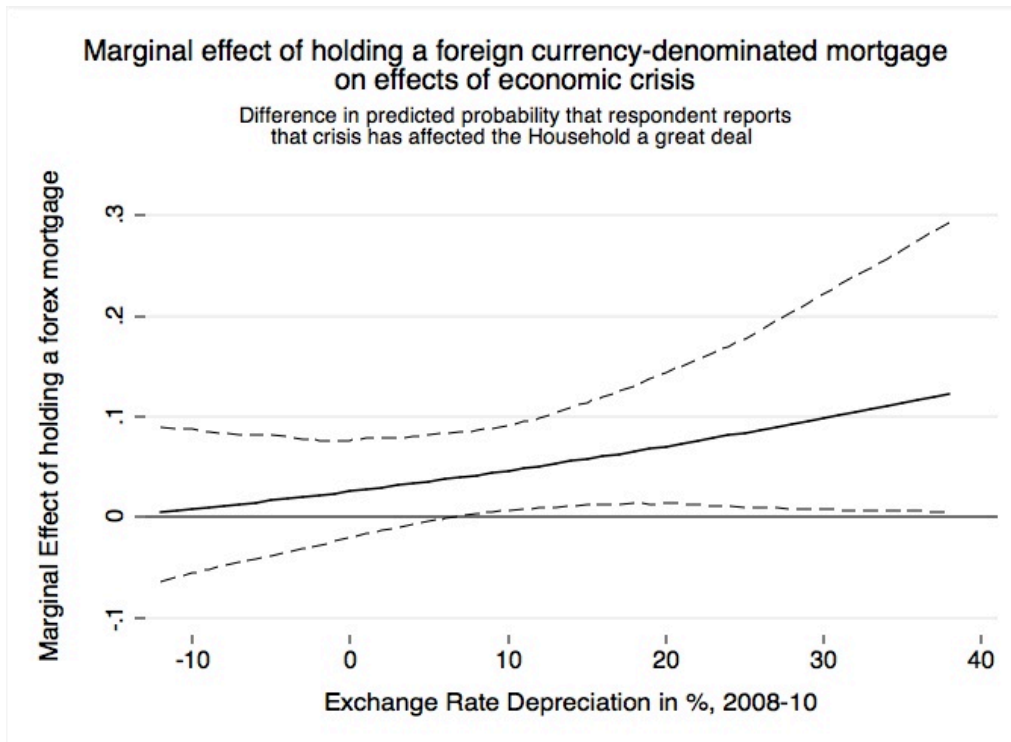
Figures 1a, 1b and 1c illustrate this conditional effect between individual exposure to external adjustment and the recent behavior of the exchange rate graphically.¹⁴ The figures show the marginal effect of holding a foreign-currency denominated mortgage on the probability that the median respondent¹⁵ feels that the economic crisis has affected his household a great deal in the past two years (figure 1a), that the national government is at least co-responsible for the economic crisis (figure 1b) and that she rates the overall performance of the national government as good or very good (figure 1c).

With regard to the individual repercussions of the economic crisis, figure 1a shows that respondents living in households, which are repaying a foreign-currency denominated mortgage were significantly more likely to report that the economic crisis had affected them "a great deal" when the exchange rate had depreciated by over 10% over the course of the crisis. This shows that when individuals or households owe money in foreign currencies and have not hedged against potential movements of the exchange rate, a depreciation can substantially increase their debt burden, with negative effects on their prosperity.

¹⁴ The graphs were generated using the STATA code provided by Brambor, Clark and Golder at <https://files.nyu.edu/mrg217/public/interaction.html> (for more information see Brambor et al. 2006)

¹⁵ The median respondent lives in a country where growth during the first year of the crisis has been 10.7% lower than in the pre-crisis period, has not lost a job during the crisis, holds a mortgage, has an (upper) secondary education and who lives in an household in an urban environment headed by a man aged between 25 and 65 years, which owns a car and a bank account, but no secondary residence, and whose main income comes from wages or salaries.

Figures 1a Effects of the Economic Crisis on the Respondent's Household



Figures 1b and 1c demonstrate that this vulnerability to depreciation also has political consequences. Figure 1b shows that respondents, whose balance sheets are particularly sensitive to external adjustment because they are currently repaying a foreign-currency denominated mortgage, hold their government significantly less accountable for the economic crisis if the government abstained from letting the economy substantially adjust externally. While the behavior of the exchange rate has hardly any effect on this assessment amongst respondents not holding such a mortgage, the predicted probability that the median holder of a foreign-currency denominated mortgage holds the government accountable for the crisis substantially changes depending on the exchange-rate policy

Figure 1b (Co-)Responsibility of the National Government for the Global Economic Crisis

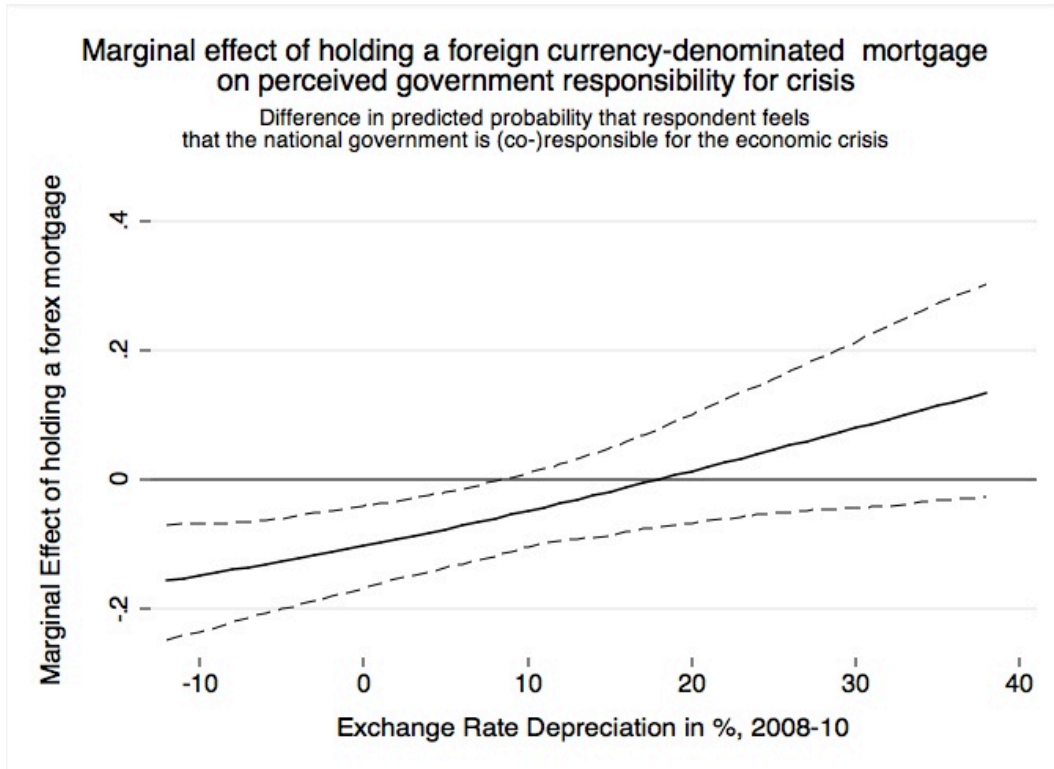
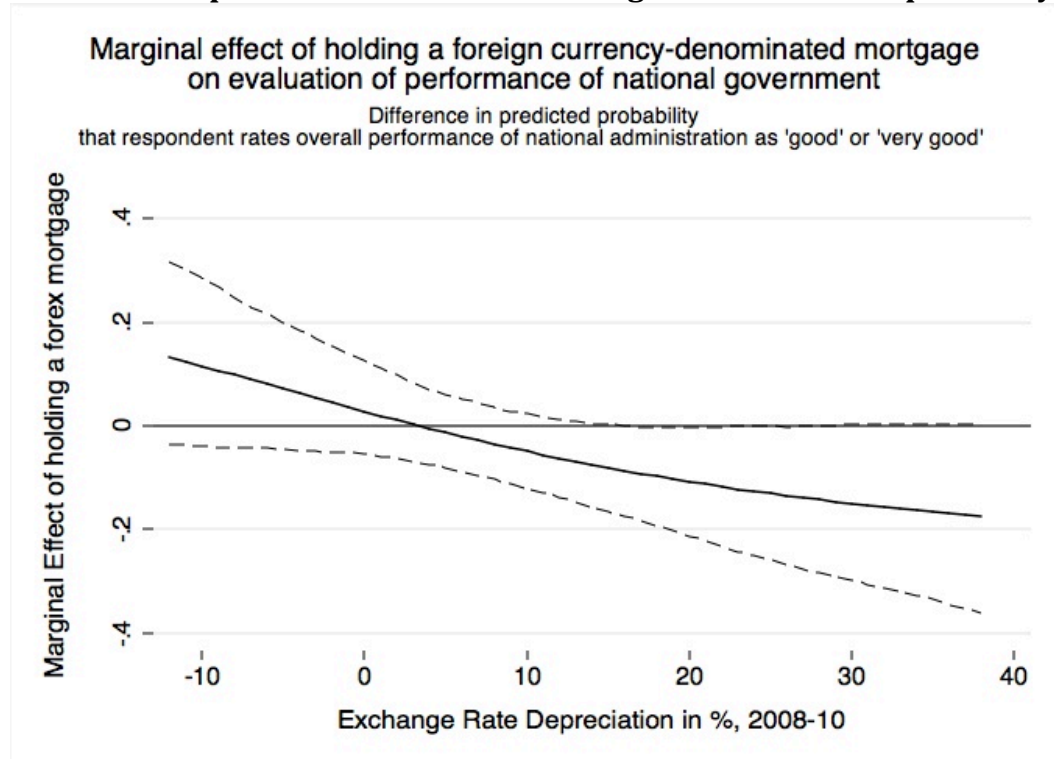


Figure 1c Overall performance of the national government in the past two years



context in which he lives.¹⁶ Moreover, figure 1c demonstrates that these effects carry over to individuals' assessment of the national government's overall performance over the past two years, and hence the period during which the economic crisis peaked. Here, holders of forex mortgages are up to nearly twenty percentage points less likely to positively assess their government's performance when this government has allowed the exchange rate to substantially depreciate over the course of the crisis than respondents who do not exhibit such a high vulnerability to external adjustment.

Overall, these findings present strong support for the argument that respondents' vulnerability to external adjustment depends to a significant degree on the composition of their balance sheets, and foreign-currency denominated debt in particular. When balance sheets contain large positions denominated in foreign currency, changes in the exchange rate have immediate and substantial effects on individuals' financial viability. Not surprisingly and in line with the first hypothesis developed above, they evaluate their personal situation and their government's performance accordingly. Exchange rate policies that hurt voters vulnerable to external adjustment result in much more pessimistic outlooks amongst these voters. Moreover, and in line with the second hypothesis, this pessimism has political consequences. Individuals with a high vulnerability to external adjustment, measured by the presence of a foreign-currency denominated mortgage, hold a more negative view of the government's performance if this government allows the exchange rate to depreciate. Given that the research program on "economic voting" has shown that such negative assessments directly affect individuals' voting behavior, the results imply that democratic governments who disregard the (financial) vulnerabilities of

¹⁶ The predicted probability of holding the government (co-)responsible increases by 28 percentage points when moving the exchange rate change from the minimum (12% appreciation) to the maximum (38% depreciation).

their voters when faced with the choice of how to respond to balance-of-payments problems run the risk of losing votes at the next election.

3.2 The Prevalence of Foreign-Currency Debt and the Choice Between Internal and External Adjustment

The micro-level analysis has demonstrated that the personal vulnerability of voters and the adjustment strategy chosen by the government can have substantial electoral consequences. For this reason, rational policymakers should anticipate these effects and consider vulnerable voters' policy preferences when deciding on how to respond to balance-of-payments problems (see also Walter 2011, 2008). As a result, although democratic policymakers have traditionally had little incentive to adjust internally because of the high political costs associated with implementing this painful policy strategy, governments in countries with a high level of foreign-currency denominated debt now have considerable incentives to implement this adjustment strategy, because the alternative, external adjustment, is likely to generate even higher political costs. The choice of different adjustment strategies should be related to the particular distribution of vulnerabilities amongst the countries' voters. This means that in countries with a high proliferation of foreign-currency denominated private debt we should see a higher willingness to implement internal adjustment, whereas those countries characterized by a more "traditional" vulnerability profile in which voters are less vulnerable to exchange-rate depreciation, should be more likely to respond to balance-of-payments pressures with external adjustment (hypothesis 3).

The last section in this paper presents some preliminary evidence testing this hypothesis. Looking at the country-level, it examines to what extent the national prevalence

of foreign-currency denominated debt is related to the choice of national adjustment strategies in response to balance-of-payments problems. For this purpose, it once more focuses on the experience of transition economies during the recent global financial and economic crisis. The expectation is that European governments should have chosen their macroeconomic responses to the crisis with an eye towards their electorates' specific vulnerability profiles.

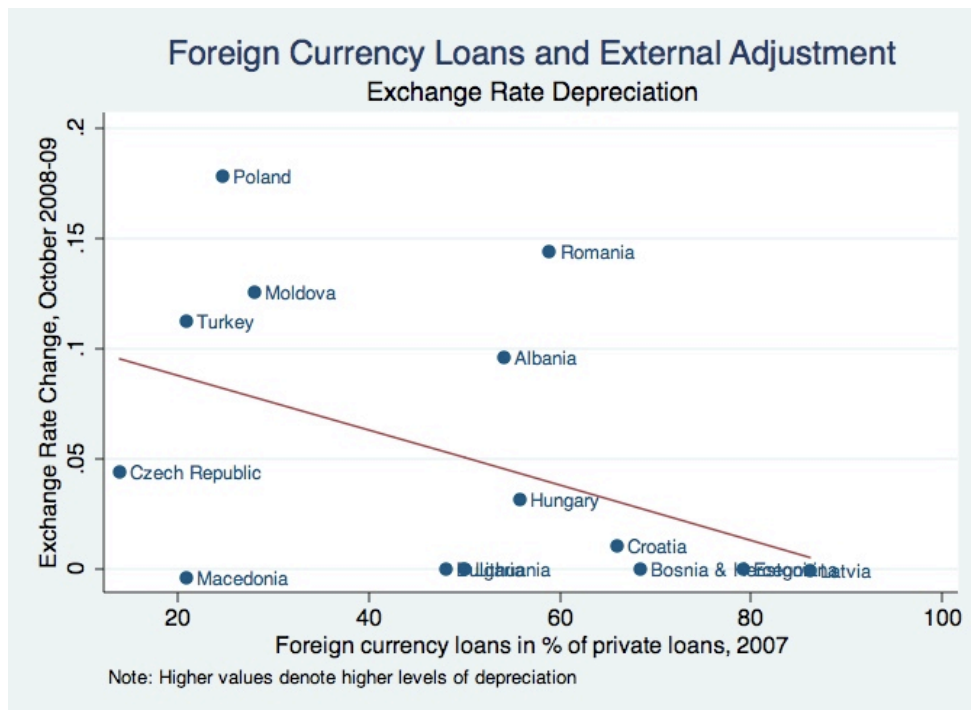
To test this prediction, I look at the country-level relationship between voters' vulnerability to external adjustment and the extent to which governments engaged in external and internal adjustment. To measure the vulnerability of national electorates to foreign-currency denominated debt, I use the percentage of foreign-currency denominated loans to non-bank borrowers, i.e. consumers and non-financial firms in 2007, the year before the global economic crisis hit the region (the data are taken from Brown et al. 2009b: tables 1 and 2; and where this data is not available ECB 2011).¹⁷ This data shows that there is a lot of variation in how common such loans have become. It ranges from countries like the Czech Republic, in which foreign-currency denominated loans constitute a minority of all loans (13.9% of all loans were denominated in foreign currencies in 2007) to countries like Latvia, where most loans (86.1%) were denominated in foreign currencies, such as Euros or Swiss francs in 2007. Higher values in this variable thus constitute a higher level of average vulnerability of a country's voters to external adjustment, i.e. a depreciation of their country's currency.

To gauge national adjustment strategies in response to the balance-of-payments problems, which became pressing during the global financial crisis, I look at the behavior of the exchange rate during the first 12 months of the crisis to determine the degree of

¹⁷ The ECB data only includes euro-denominated loans.

external adjustment. It is operationalized as the change in the monthly nominal exchange rates with the Euro between October 2008 and October 2009.¹⁸ Higher levels of depreciation imply more external adjustment. Since internal adjustment involves a contraction of the domestic economy, I proxy the extent of this adjustment strategy by looking at the growth reversal in the year 2009 relative to the pre-crisis growth rate (Connolly 2012) and the change in the national unemployment rate in percentage points between 2008 and 2009 (Eurostat 2012). A collapse of economic growth and a substantial increase in unemployment indicate that the government has implemented an internal adjustment strategy. All three variables exhibit substantial variation, indicating that adjustment strategies to the global economic crisis varied widely across the region.

Figure 2a Foreign Currency Debt and External Adjustment



¹⁸ As before, data are from the ECB and from the Central Bank of Slovenia

The argument suggests that a higher vulnerability to depreciation, as reflected by a higher incidence of foreign-currency denominated debt, should be associated with lower levels of external adjustment, but higher levels of internal adjustment, and vice versa. Figures 2a-c show the relationship between the national prevalence of foreign-currency denominated debt and the three indicators for external and internal adjustment.

Figure 2a looks at external adjustment. It shows that in line with expectations, the exchange rate depreciated less in countries in which large portions of domestic debt are denominated in domestic currency.¹⁹ Most notably, the Baltic Republics (Estonia, Latvia, and Lithuania, where at least half of all loans in 2007 were denominated in foreign currencies kept their exchange rates stable, foregoing the opportunity to adjust externally. Figures 2b and 2c show that these are also the countries, who most aggressively pursued internal adjustment, despite its very high cost on the domestic economy. In all three countries, growth collapsed by over twenty percent and unemployment increased by between eight and almost ten percentage points.²⁰ The evidence presented here suggests that this unusual and painful adjustment path was only possible because external adjustment would have inflicted even greater pain on voters.²¹

Figures 2b and 2c also show that those countries, in which the exposure to foreign-currency denominated debt was comparatively low, experienced a much less severe contraction of the domestic economy. This suggests that in these countries, the traditional argument has more traction than when faced with the need to adjust in order to rebalance a country's balance of payments, democratic policymakers are more likely to adjust

¹⁹ This bivariate relationship is almost statistically significant ($p=0.108$). This result also squares with previous studies which find that severe currency mismatches in balance sheets make depreciation less likely (Hall 2005; Woodruff 2005; Walter 2008).

²⁰ The increase in unemployment is even higher when a longer time period (e.g. 2007-2010) is considered.

²¹ The pursuit of internal adjustment was also facilitated by the fact that all countries had a clear exit strategy in the form of joining the eurozone.

Figure 2b Foreign Currency Debt and Internal Adjustment (Growth Reversal)

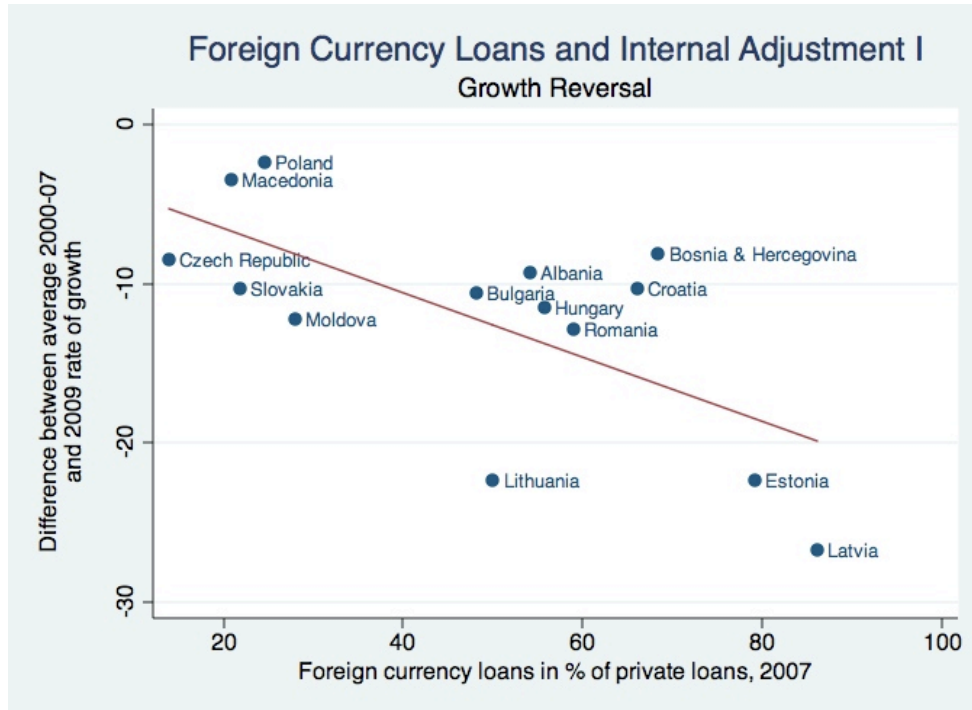
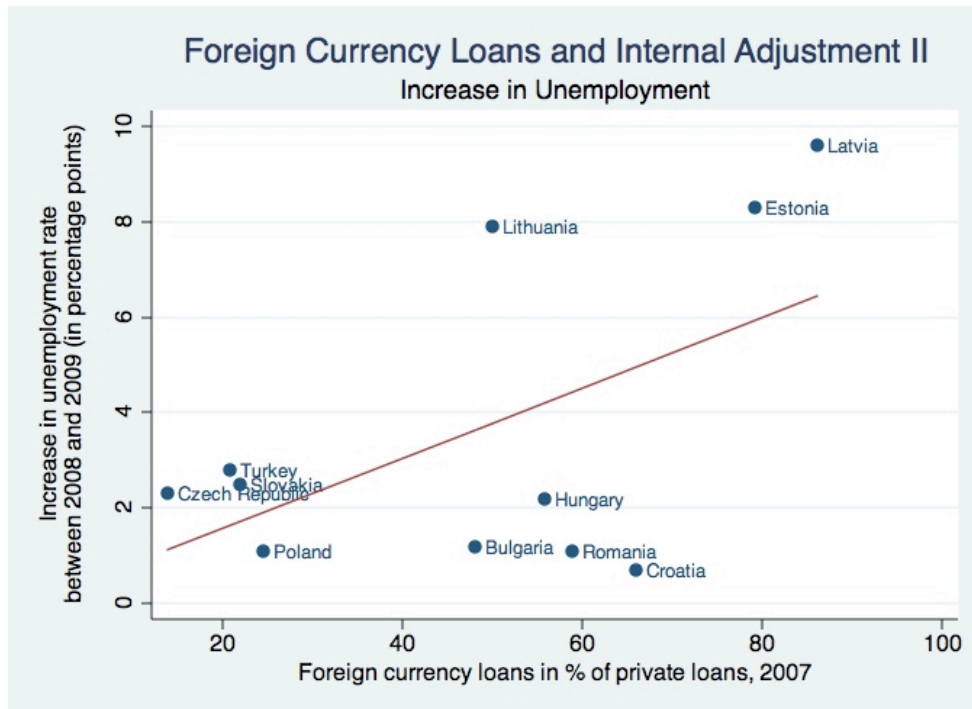


Figure 2c Foreign Currency Debt and Internal Adjustment (Unemployment)



externally rather than internally in order to avoid the painful consequences of domestic contraction for voters.

Overall, this evidence supports the argument that policymakers take the distributional consequences of different adjustment strategies and the vulnerabilities of their electorates into account when deciding about how to adjust.

4 Conclusion: How Voters Evaluate Internal and External Adjustment

This paper has argued that the choice of adjustment strategies to balance-of-payments problems are influenced by how these policies affect the electorate. This is because both internal and external adjustment have significant distributional consequences, which drive voters' policy preferences and their willingness to reelect the incumbent. Since incumbent governments anticipate these effects, they take voters' vulnerabilities into account when deciding how to adjust their macroeconomic policies. While this argument is not new, I have argued that financial globalization has altered the distributional effects so profoundly that the traditional hallmark of the politics of adjustment – democratic policymakers don't adjust internally – holds no longer true. Rather, in countries where foreign-currency denominated debt is widely common, voters have become so vulnerable to a depreciation to the currency that they are more willing to endure the pain of internal adjustment rather than suffer the consequences of external adjustment.

Using a twofold empirical strategy, this paper has examined this argument. Using survey data from individuals in 25 transition countries living through the 2008-10 global economic and financial crisis, it has shown that individuals are well aware of the

distributional consequences of macroeconomic policy adjustment and evaluate their governments accordingly. In countries that had let the exchange rate depreciate, respondents repaying a foreign-currency denominated mortgage were significantly more worried about the repercussions of the crisis and more critical of the government than those less exposed to exchange rate adjustment. This finding demonstrates clearly that balance sheet concerns have turned into an important source of vulnerability. Voters and firms who have borrowed in foreign currency are particularly concerned about and hurt by external adjustment, while those who are indebted in domestic currency are harmed by and worried about a tight of monetary policy.

Finally, the macro-level analysis showed that the choice of adjustment strategies is indeed related to the electorate's vulnerability profile. Policymakers governing over an electorate with a high exposure to foreign currency debt were more likely to adjust internally rather than letting the exchange rate depreciate. In contrast, those countries in which such financial concerns were less relevant pursued the traditional path of devaluing rather than imposing the pain of a contracting domestic economy on voters.

Overall, the empirical evidence lends strong support to the argument that not only real, but also financial vulnerabilities influence how voters are affected by internal and external adjustment. In particular, the results emphasize that in financially open countries, balance sheet effects are an important determinant of voters' vulnerabilities and, as a consequence, their policy preferences about macroeconomic adjustment. This finding is important, because most previous research on the distributional effects of external adjustment has predominantly focused on its real effects. This paper presents strong evidence that voters' exposure to foreign currency-denominated debt not only shape their policy evaluations of these adjustment strategies, but also government policies in response

to balance-of-payments problems. Thus, the internationalization of finance has created both constraints but also opportunities for policymakers interested in pursuing the painful path of “internal adjustment”.

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