

Idealistic and Realistic Democratic Evaluation Mechanisms in an Open Economy*

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Abstract

We argue that in the complex environment of open economies with multiple policymaking institutions, citizens make systematic attribution errors when evaluating government performance. Our analysis of Great Britain, a critical case study for a widely accepted idealistic democratic evaluation mechanism, shows that citizens evaluations of governments are based on beliefs rather than evidence of the impact of economic, and particularly fiscal policy. These findings support a realistic democratic evaluation mechanism taking into account that citizens draw incorrect conclusions about the competency of policymakers. This is because the public does not adequately consider the constraints and complex processes in open economies.

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1 Introduction

In response to the threat that the real economy would slide into a serious recession in 2008, many governments initiated stimulus packages of unprecedented size. As an example, long before the financial meltdown of Fall 2008, the American government enacted a \$168 billion fiscal package in February 2008. In a congressional hearing on October 20, 2008, Federal Reserve Chairman Ben Bernanke said that “consideration of a[nother] fiscal package by the Congress seems appropriate” because it might be “effective at promoting economic growth and job creation.”¹ European Union countries followed suit and are planning a fiscal stimulus package that sums up to €130 billions. As the President of the European Commission Manuel Barroso said, “fiscal policy should be used to support economic activity” with the goal “to beat the recession.”²

These examples reflect two commonly accepted characteristics about economic policymaking in democratic countries. First, governments are aware of the concerns and fears of citizens about future economic developments and respond by taking the appropriate economic policy decisions, not only during emergency periods, but also in non-emergency cases. This idea is implicit in all models assuming that democratic governments are responsive to popular concerns, models that assume elected officials implement policies that are in the interest of the public or specific constituencies (e.g., Stimson, MacKuen and Erikson, 1995; Soroka and Wlezien, 2005).

Second there is a belief by policymakers and maybe by the public that these policy choices are effective and have the intended impacts on the real economy. As the comments above indicate, this belief is particularly prevailing with respect to fiscal policy, and it exists despite the increasing international economic constraints that countries now face. Governments are believed now to have many instruments, which they can use to generate distinct economic outcomes even in economically open countries (Frieden, 1991; Clark and Hallerberg, 2000; Mosley, 2000). This belief lays

¹See Chairman Bernanke’s statement before the Congressional Budget Committee http://budget.house.gov/hearings/2008/10.20.2008_Bernanke_Testimony.pdf.

²See President Barroso’s speech at the Globalisation Council in Lisbon on November 21, 2008 <http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/08/636&format=PDF&aged=0&language=EN&guiLanguage=en>.

the foundation for an idealistic democratic evaluation mechanism in contemporary democracies with open economies: citizens can easily and properly evaluate governments by observing policy choices and simple macroeconomic aggregates.

We contend that the role of citizens in this evaluation process is more ambiguous. Due to the complexity of economic processes in open economies, citizens have difficulty assessing the effects of the international constraints that governments now face. Evaluations based on policy choices and economic developments lead to incorrect conclusions about the competency of the government because they are grounded in inadequate assumptions about the impact of their government's policies on the domestic economy. The prevalence of partisan biases, "systematic attribution errors" (Bartels, 2002; Achen and Bartels, 2004*a,b*, 2006), and other problems suggest that citizens are not ideal democrats. This perspective of a more realistic democratic evaluation mechanism—where voters are 'myopic', 'amnesic', or 'naive'—is the more accurate (Chappell and Keech, 1990).

Our empirical analysis of Great Britain using a general open political economy framework covers multiple economic policy fields and distinguishes between different institutional settings. It thus accounts for all major, possible channels that connote evaluation and representation in macroeconomic policy neglected by previous research (Sattler, Freeman and Brandt, 2008). Our results are consistent with the realistic, but not with the idealistic democratic evaluation mechanism. They show that citizens reward the government for its responsiveness to their concerns about future economic developments, although policy changes do not have a lasting effect on the real economy. Evaluations thus are based on beliefs rather than evidence about the impact of economic, and particularly fiscal policy (Drazen, 2000, 238-246). Therefore we conclude that the great hopes of governments and the public in the recent fiscal stimulus packages are premature. Politically, these actions are comprehensible, however, because governments can benefit from their activism, at least in the short- and medium run. The political recovery of British Prime Minister Gordon Brown in late 2008, a politician whose political survival was seriously threatened early that year, is an example of this logic.

2 Idealistic and Realistic Evaluation in Open Economies

2.1 The Limits of the Idealistic Mechanism

A fundamental idea in empirical democratic theory is that in democratic countries voters evaluate governments based on policy choices, and therefore governments are responsive to voters. Models of government popularity establish the link between policies and outcomes, and evaluations via public opinion about government performance (Clarke et al., 2004; Erikson, MacKuen and Stimson, 2002; Dorussen and Taylor, 2002). Related research shows that governments are responsive to public opinion. It establishes an important component of a democratic evaluation mechanism (Stimson, MacKuen and Erikson, 1995; Erikson, MacKuen and Stimson, 2002; Wlezien, 2004; Soroka and Wlezien, 2005). For this evaluation mechanism to work, it is sufficient that voters base their judgments on simple information about their social well-being. Citizens do not need to understand how exactly policies and outcomes are related because improvement or deterioration in social conditions essentially reveals whether or not a government has done a good job during the past term (e.g., Fiorina, 1981).

With respect to economic policy, the evaluation and responsiveness models are grounded in an implicit assumption that we are challenging here. For evaluations and responsiveness to be meaningful, government policy must be *effective* and have the desired impact on economic outcomes. This allows citizens to evaluate governments based on policy choices and economic results. Although this is rarely spelled out explicitly, the link between policy and economic outcomes is fundamental to democratic political economy. If policy effectiveness was not possible then voters would reward and punish the government for outcomes that are beyond its control. Such a behavior would not square with the ideal democratic citizen who engages in consistent, continuous evaluation of government performance and economic outcomes.

The assumption that economic policy is effective may be justified in democracies with closed economies, but it is not obvious that it is also valid in open economies. Following the prevailing view, one might conclude that the evaluation-responsiveness mechanism also works well in democ-

racies with open economies. Governments in open economies still have enough instruments available to generate distinct economic outcomes—inflation, growth, and deficit targets—particularly through a combination of exchange rate policy with the appropriate fiscal and monetary policies. This means that governments still are responding effectively to citizens’ evaluations, satisfying demands from citizens, or stimulating economic growth, possibly at the expense of price stability, according to the partisan preferences of governments.

There are good reasons to be skeptical about the existence of this evaluation-responsiveness nexus in today’s economically open democracies. First, there is evidence that the constraints due to globalization are particularly severe on those policy areas that define the evaluation mechanism discussed above. Mosley (2000) finds that the room to maneuver in general still exists, though her survey also shows that financial market participants do care considerably about particular features of fiscal and monetary policy.³ More than 70% of them mentioned inflation and the fiscal deficits as indicators that they continuously monitor, and more than 90% of those who mentioned these two indicators said that they were important (Mosley, 2000, 748, Table 1). These data indicate that aspects of fiscal and monetary policies, which are critical to macroeconomic management and the democratic evaluation mechanism, may be more constrained than often assumed.

Second, the growing influence of international economic factors increases the complexity of economic processes. This complexity complicates the proper evaluation of governments. For instance, models of political business cycles in open economies rely on rather complex arguments about the interaction of fixed or flexible exchange rates with monetary and fiscal policies that vary depending on the institutional setting i.e., whether a central bank is independent and not (Clark and Hallerberg, 2000). It is unlikely that voters are either aware of the details of these economic mechanisms or take them into account when evaluating governments. Instead, it is plausible that citizens continue to evaluate governments in the usual manner i.e., they simply observe policy choices and outcomes instead of comprehending the causal mechanisms within the open economy.

³The market participants interviewed in Mosley’s study were government bond and equity market traders that decide over medium- to long-term investments.

Third, changing institutional settings complicate the simple evaluation-responsiveness mechanism outlined above. Unlike in the 1970s and 1980s, when the elected governments controlled most central banks in the industrialized world, today these banks are independent. Currently the elected governments have little or no direct control over monetary policy.⁴

2.2 A Realistic Evaluation Mechanism for Open Economies

The popular democratic evaluation mechanism outlined at the beginning of this section needs further elaboration before it can be applied to contemporary industrialized democracies with open economies. We contend that the ‘classic’ mechanism does not work well in the current, new open economy setting. Due to the constraints that policymakers face in an open economy and voters’ potential failure to accurately link policies to outcomes, it is possible that “systematic attribution errors” (Bartels, 2002; Achen and Bartels, 2004*a*, 2006) occur when citizens evaluate government performance. Specifically, citizens hold governments responsible for (good and bad) economic developments that in the open economy governments actually are not able to influence. The government thus is responsive to changes in public opinion despite the fact that its policies have little or no lasting effects on the real economy.

The key aspect of this evaluation-responsiveness relationship is the manner in which citizens evaluate governments in a complex open economy environment. Clearly if voters are not able to complete the causal chain, they do not work out the details about the economic mechanisms that connect international demand and supply of tradeable goods, short- and long-term capital flows, exchange rates (fixed or flexible) to domestic economic policy choices and easily observable macroeconomic indicators, like inflation and economic growth. Similarly, they do not follow foreign economic policies in great detail, although these policies nowadays have a strong influence on domestic economic developments (e.g., Cushman and Zha, 1997; Kim, 2001). Globalization then does not affect voters’ responsibility attributions in economic policy, although personal character-

⁴Trying to establish the ideal evaluation mechanism through this kind of economy policy therefore is likely to produce negative results (Sattler, Freeman and Brandt, 2008).

istics, e.g. partisan cues, age and knowledge level, shape citizens' beliefs about the government's room to maneuver (Hellwig, Ringsmuth and Freeman, 2008). In other words, voters continue to rely on economic developments to judge government performance as they did in closed economies, but in open economies, governments are not responsible for those developments.⁵

How do governments behave in this setting? Independent of the exact mechanisms within the open economy and the true effects of policy, it is wise for any government to be responsive to popular evaluations to be reelected. Thus, with respect to policy responsiveness, not much has changed compared to the closed economy situation. We expect that governments closely observe public opinion to judge popular satisfaction with economic developments and to assess which economic policies voters prefer. If voters fear that negative economic shocks will lead to lower economic growth with negative implications for income and unemployment, then governments should take measures to stimulate growth. If voters are concerned about rising inflation, governments should take measures to increase price stability. Voters observe these actions and reward the government for responding to their worries. Ostensibly, there is an evaluation-responsiveness mechanism that looks similar to the one in a closed economy. In the open economy, however, there may be little or no link between public policy and macroeconomic outcomes.

What policy measures the government takes depends on the institutional setting. When the government controls both fiscal and monetary policy, the two kinds of policy may reinforce each other. Governments may use a combination of monetary and fiscal policies to respond to the public. When politically insulated (technocratic) central bankers control monetary policy, the connection between popular evaluations and monetary policy should diminish or even disappear. Although delegation to an independent central bank helps solve the "time-consistency problem" and hence enhances economic efficiency, it should reduce monetary responsiveness to citizens' evaluations of government.

⁵This is particularly plausible when we recognize that even highly sophisticated models in political science do the same and assume rather than show that the hypothesized policy effects on the economy in fact exist (Clark and Hallerberg, 2000).

Central bank independence also may constrain the government's ability to choose fiscal policies. Monetary policy exclusively focused on price stability may reduce the effectiveness of fiscal policy. When the government increases the budget deficit to satisfy the demands for a fiscal stimulus, a conservative central bank tightens monetary policy to fight inflationary expectations. This contractionary monetary policy reduces economic growth and diminishes fiscal policy effectiveness. Responsiveness in economic policy then is limited because the government's capacity to react to changes in popular evaluations is constrained. Once more, citizens may not be able to comprehend this and nonetheless credit (blame) their elected officials for outcomes that are beyond those officials' control.⁶

Economic policy room to maneuver and effectiveness also is likely to be reduced for other reasons. Mosley (2000) and other researchers have emphasized the growing importance of price stability because increasing capital flows restricts the unconstrained use of economic policy instruments (Cukierman, 2007, 12).⁷ While monetary policy is constrained and preoccupied with price stability, fiscal policy may be slow to adjust to public opinion. For example, in some systems of fiscal governance, changes in fiscal policy require an extended, public negotiation process. Economic agents can anticipate the outcomes of this policy process and have enough time to adjust to the new policy. The effect of these fiscal policy changes thus is likely to be small and short-lived. Fiscal policy adjustments, like greater spending, may help to mitigate the negative effects of re-

⁶An exemplary analysis of the connection between monetary and fiscal policy is Dixit and Lambertini (2003). They make no provision for popular evaluation of monetary and fiscal policies. The preferences of strategic actors—the central bank and government fiscal authority—do not depend on the public's evaluations of the macroeconomy.

⁷There are different interpretations of the strength of international constraints. Researchers found that, despite international constraints, tax rates and size of spending have not decreased, suggesting that these constraints are small (Garrett and Mitchell, 2001; Swank and Steinmo, 2002). It is equally plausible that the status quo of the pre-globalization era persisted because governments are simply trapped between the interests of capital owners and the demands from domestic constituencies facing greater risk from international competition (Genschel, 2002). The latter interpretation of these results is not consistent with the prevailing room to maneuver thesis. More recent research shows that there is considerable pressure on fiscal policy if the strategic interaction of tax competitors is modeled appropriately (Basinger and Hallerberg, 2004).

cessions on society through transfers and other instruments, but it is unlikely to have a sustainable impact of growth itself.

The implication is a less idealistic and more realistic description of the contemporary democratic evaluation mechanism. We expect that responsiveness also exists in economically open democracies, especially in fiscal policy. There also should be some feedback from policy to evaluations because voters appreciate the government's responsiveness. Causal relationships that look like a mechanism implicitly underlying the idea of economic voting and policy responsiveness research exists. But policy *effectiveness* and therefore a crucial part of a true and meaningful democratic evaluation mechanism is likely to be missing.

3 Empirical Models of the Idealistic and Realistic Mechanisms

3.1 A General Open Political Economy Framework

To assess the full cycle between democratic evaluations, policy responsiveness and effectiveness, we construct an empirical model that encompasses the three essential parts of an open political economy. The polity reflects how citizens *continuously* assess economic outcomes of government policies. It is represented by different parts of public opinion, specifically vote intentions (v_t), approval of the chief executive's work (a_t), and national economic and personal financial expectations (ne_t and pe_t). We also include a deterministic counter to account for electoral dynamics. The open economy is divided into domestic and international sectors to model the economic interdependence of contemporary democracies, the former represented with d superscripts, the latter, with i superscripts. The domestic and international economic variables are domestic and international prices and output (p_t^d, p_t^i, y_t^d and y_t^i), foreign economic policy (r_t^i), and an exchange rate (e_t). The model includes a domestic government consisting of two distinct actors, a monetary and a fiscal policy authority conducting monetary and fiscal policy (r_t^d and g_t). Depending on central bank independence, the polity and the economy are expected to receive different weights in the monetary and fiscal reaction functions.

The framework subsumes and extends research in political science and economics. The polity in our framework includes the most important components of existing models of economic evaluations of governments and government popularity in general (Erikson, MacKuen and Stimson, 2002; Clarke et al., 2004; Sanders, 1991, 2005). Government behavior has been addressed by research on representation in economic policy which links policy outcomes to public opinion (Stimson, MacKuen and Erikson, 1995; Wlezien, 2004; Soroka and Wlezien, 2005). We extend this literature by attempting to connect policy to economic outcomes. This is the part of the evaluation mechanism that has not been explicitly modeled in previous research. This nexus between policy and outcomes coincides with research from New Open Macroeconomics that analyzes policy effects and interdependencies in open economies (Obstfeld and Rogoff, 1995; Cushman and Zha, 1997; Kim, 2001). Our framework thus accounts for international factors that have been omitted from political models of economic policymaking despite a general consensus that globalization has important effects on domestic policymaking.

3.2 Empirical Models

To assess the causal relationships between the variables in the open political economy framework, we construct a Bayesian, structural simultaneous equation model (Brandt and Freeman, 2006, forthcoming). This model treats most variables as endogenous, except elections. The model takes the following form:

$$A_0 Y_t + \sum_{j=1}^p A_j Y_{t-j} = D Z_t + \epsilon_t, \quad \epsilon_t \sim N(0, I) \quad (1)$$

for $t = 1, \dots, T$. A_0 is an 12×12 matrix that defines the contemporaneous relationships among the endogenous variables and Y_t is a 12×1 vector of endogenous variables at time t . The vector Y_t contains the polity, policy, and open economy variables discussed previously. The A_j matrices contain the 12×12 matrices of the structural coefficients for the lagged endogenous variables Y_{t-j} at lag $t - j$, Z_t is a 2×1 matrix of the exogenous electoral counter and a constant, D is a 12×2

matrix of the structural coefficients for the exogenous variables (election counters), and ϵ_t is a 12×1 vector of normal i.i.d. structural shocks.

To draw inferences about the causal relationships among the endogenous variables in Y_t , we need to impose restrictions (a ‘structure’) on the contemporaneous relationships among the variables, A_0 (Brandt and Freeman, forthcoming). In other words, we need to make assumptions which endogenous variables influences another within the same time period, and which do not. We will use monthly data to estimate the model, which means that the A_0 matrix specifies how the endogenous variables influence each other *within* the same month. Imposing restrictions on the contemporaneous relationships does not exclude the possibility that variables can influence each other with a lag or delay. We do not impose restrictions on the lagged relationships among the endogenous variables, which are captured by the matrices $A_j, j = 1, \dots, p$.

To model the different, possible evaluation mechanisms, we impose different assumptions about the contemporaneous relationships among public opinion, economic and policy variables. The contemporaneous relationships *across* the polity and the economy change according to the nature of the democratic evaluation mechanism, but the contemporaneous relationships *within* the polity and the economy are fixed for the different democratic evaluation models. Thus, we focus on the intersections between the polity and the economy and partition the A_0 matrix and Y_t vector into four parts for the exposition of the different structural models that represent our proposed theoretical mechanisms. These partitions describe the endogenous relationships among the economic and polity variables in our model. We do this by partitioning the A_0 matrix and Y_t as follows:

$$A_0 Y_t = \left[\begin{array}{c|c} A_0^E & A_0^{PE} \\ \hline A_0^{EP} & A_0^P \end{array} \right] \left[\begin{array}{c} Y_t^E \\ Y_t^P \end{array} \right] = \left[\begin{array}{c} A_0^E Y_t^E + A_0^{PE} Y_t^P \\ A_0^{EP} Y_t^E + A_0^P Y_t^P \end{array} \right], \quad (2)$$

where the vectors Y_t^E and Y_t^P are the variables for the economy and polity in Y_t ,

$$Y_t^E = [e_t \ r_t^d \ r_t^i \ g_t \ p_t^d \ y_t^d \ p_t^i \ y_t^i] \quad (3)$$

$$Y_t^P = [ne_t \ pe_t \ a_t \ v_t] \quad (4)$$

The matrices A_0^E and A_0^P capture the contemporaneous relationships *within* the economy and the polity, respectively. The matrix A_0^E describes how the economic and economic policy variables react to each other within the same month. The matrix A_0^P indicates how the public opinion variables respond to each other within the same month. The contemporaneous relationships among the variables within the polity and the economy are fixed for all models. The matrices A_0^E and A_0^P thus are the same for the idealistic and the realistic evaluation models. The justifications for their structures are discussed in detail in the Appendix.

The matrices A_0^{PE} and A_0^{EP} represent the contemporaneous relationships across the polity and the economy. The A_0^{PE} matrix describes contemporaneously how politics affects the economy, or how economic and policy variables react to changes in opinion variables. The A_0^{EP} matrix reflects how the economy contemporaneously affects politics, i.e., how political opinion variables react to changes in the economy and economic policy. So consider these as the first superscript contemporaneously causes the second—in a very specific way. These two matrices differ for the different evaluation models and we discuss them in detail below.

The idealistic democratic evaluation mechanism implies that the government infers from public opinion what citizens expect in terms of economic policy and adjusts policy accordingly. Monetary and fiscal policy variables thus should respond immediately to changes in national economic and personal financial expectations, prime minister approval and vote intentions. In our model, this policy responsiveness is captured in the matrix A_0^{PE} . The submatrix for the $A_0^{EP}Y_t^P$ relationships for our model in equation (2) are given by

$$\begin{aligned}
A_0^{PE} Y_t^P &= \begin{bmatrix} \alpha_{PE,1} & \alpha_{PE,2} & \alpha_{PE,3} & \alpha_{PE,4} \\ \alpha_{PE,5}^M & \alpha_{PE,6}^M & \alpha_{PE,7}^M & \alpha_{PE,8}^M \\ 0 & 0 & 0 & 0 \\ \alpha_{PE,9}^F & \alpha_{PE,10}^F & \alpha_{PE,11}^F & \alpha_{PE,12}^F \\ 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \end{bmatrix} \begin{bmatrix} ne_t \\ pe_t \\ a_t \\ v_t \end{bmatrix} \\
&= \begin{bmatrix} \alpha_{PE,1}ne_t + \alpha_{PE,2}pe_t + \alpha_{PE,3}a_t + \alpha_{PE,4}v_t \\ \alpha_{PE,5}^Mne_t + \alpha_{PE,6}^Mpe_t + \alpha_{PE,7}^Ma_t + \alpha_{PE,8}^Mv_t \\ 0 \\ \alpha_{PE,9}^Fne_t + \alpha_{PE,10}^Fpe_t + \alpha_{PE,11}^Fa_t + \alpha_{PE,12}^Fv_t \\ 0 \\ 0 \\ 0 \\ 0 \end{bmatrix}. \tag{5}
\end{aligned}$$

Equation (5) captures the contribution of the four polity variables to the equations eight economic variables in (3). The first four economic are the exchange rate (e_t), domestic monetary policy (r_t^d), foreign monetary policy (r_t^i) and domestic fiscal policy (g_t). Note that none of the domestic polity variables contemporaneously enter the equations for foreign monetary policy. All four of the polity variables (potentially) contemporaneously affect the exchange rate, domestic monetary policy, and fiscal policy equations.⁸

In the matrix in equation (5), the second and fourth rows reflect how the public opinion variables affect monetary and fiscal polices, respectively. The coefficients $\alpha_{PE,5}^M$ through $\alpha_{PE,8}^M$ are the coefficients on national economic expectations, personal financial expectations, chief executive approval and vote intentions, respectively, in the monetary reaction function. The coefficients $\alpha_{PE,9}^F$ through $\alpha_{PE,12}^F$ are the coefficients on the same variables in the fiscal policy reaction function equation. In other words, the coefficients capture how monetary and fiscal policies react to public opinion within the same month. Finally, the first row of matrix A_0^{PE} indicates how the exchange rate responds to the public opinion variables. Following Bernhard and Leblang (2006) who find that political evaluations and exchange rate movements are causally related, we leave the

⁸The economy influences policy through matrix A_0^E which is discussed in the Appendix.

parameters in this row unrestricted.

In institutional settings where the elected government does not control monetary policy, domestic interest rates should not react to public opinion because the conservative central bank exclusively focuses on price stability. In our model, this means that the coefficients in equation (5) are restricted as follows:

$$\alpha_{PE,5}^M = \alpha_{PE,6}^M = \alpha_{PE,7}^M = \alpha_{PE,8}^M = 0. \quad (6)$$

At the same time, we would expect that fiscal responsiveness increases when the central bank does not respond to public opinion. The government then resorts to its only remaining economic policy instrument—fiscal policy—to respond to citizens’ evaluations. In other words, the coefficients $\alpha_{PE,9}^F$ through $\alpha_{PE,12}^F$ are expected to be non-zero when the bank is independent and zero when it is directly responsible to elected officials. Another possibility is that there is a missing link at the very beginning of the democratic evaluation mechanism, and fiscal policy is not responsive at all. This may be because the economic constraints in open economies are large and do not allow the government to react to opinion. In this case, the coefficients on the opinion variables in the fiscal reaction function in equation (5) are zero as well, or

$$\alpha_{PE,9}^F = \alpha_{PE,10}^F = \alpha_{PE,11}^F = \alpha_{PE,12}^F = 0. \quad (7)$$

The second step of the democratic evaluation mechanism examines how citizens and hence public opinion reacts to government policy and the economy. The contemporaneous reactions of the public opinion equations to economic policy are captured in the A_0^{EP} submatrix of equation (2). We specify the relationships in A_0^{EP} as

$$\begin{aligned}
A_0^{EP} Y_t^E &= \begin{bmatrix} 0 & \alpha_{EP,1}^M & 0 & \alpha_{EP,5}^F & 0 & 0 & 0 & 0 \\ 0 & \alpha_{EP,2}^M & 0 & \alpha_{EP,6}^F & 0 & 0 & 0 & 0 \\ 0 & \alpha_{EP,3}^M & 0 & \alpha_{EP,7}^F & 0 & 0 & 0 & 0 \\ 0 & \alpha_{EP,4}^M & 0 & \alpha_{EP,8}^F & 0 & 0 & 0 & 0 \end{bmatrix} \begin{bmatrix} e_t \\ r_t^d \\ r_t^i \\ g_t \\ p_t^d \\ y_t^d \\ p_t^i \\ y_t^i \end{bmatrix} \\
&= \begin{bmatrix} \alpha_{EP,1}^M r_t^d + \alpha_{EP,5}^F g_t \\ \alpha_{EP,2}^M r_t^d + \alpha_{EP,6}^F g_t \\ \alpha_{EP,3}^M r_t^d + \alpha_{EP,7}^F g_t \\ \alpha_{EP,4}^M r_t^d + \alpha_{EP,8}^F g_t \end{bmatrix}. \tag{8}
\end{aligned}$$

Equation (8) represents the contribution of the two policy variables (r_t^d and g_t) to the equations for the four political variables in (4): national economic expectations (ne_t), personal financial expectations (pe_t), chief executive approval (a_t) and vote intentions (v_t), respectively. None of the coefficients on policy in the public opinion equations is restricted to be zero. Both policy variables (potentially) contemporaneously affect the public opinion.

The second and fourth columns of matrix A_0^{EP} that make equation (8) indicate how the four opinion variables react to monetary and fiscal policy. The coefficients $\alpha_{EP,1}^M$ through $\alpha_{EP,4}^M$ reflect how monetary policy changes influence national economic expectations, personal financial expectations, chief executive approval and vote intentions, respectively. The coefficients $\alpha_{EP,5}^F$ through $\alpha_{EP,8}^F$ show how fiscal policy affects the same public opinion variables. As an example, $\alpha_{EP,4}^M$ is the coefficient on domestic monetary policy, r_t^d , in the vote intention function. It tells us how vote intentions change within the same month when domestic monetary policy changes.

The democratic evaluation mechanism implies that citizens observe government policy and reward the government with more support if they like the government's policy choices. In our model, this means that the coefficients in A_0^{EP} should be unrestricted allowing the opinion variables to respond to the two policy variables, as shown in equation (8). But with central bank independence, citizens should take into account that the elected government is not responsible for monetary policy decisions. In this case, monetary policy should not affect evaluations because informed voters are

aware of the monetary policy constraints of the elected government. This means that the following restrictions hold:

$$\alpha_{EP,1}^M = \alpha_{EP,2}^M = \alpha_{EP,3}^M = \alpha_{EP,4}^M = 0. \quad (9)$$

when the bank is autonomous. Another possibility is that voters in economically open democracies believe that international economic factors constrain economic policy. Governments are unable to influence economic developments. Hence a response of policy to evaluations would be meaningless. Informed voters in open economies anticipate this and do not evaluate governments based on fiscal policy choices because they are aware that in this situation, it is not possible to hold the government responsible for the fiscal policy constraints that governments face. This means that opinion variables do not respond to the fiscal policy variable, or that in equation (8),

$$\alpha_{EP,5}^F = \alpha_{EP,6}^F = \alpha_{EP,7}^F = \alpha_{EP,8}^F = 0, \quad (10)$$

for the opinion variables' contemporaneous responses to the fiscal variables.

3.3 Estimation and Testing

A Bayesian estimator is used to estimate the model in equation (1), subject to the identification restrictions in equations (5) and (8). We then use the results to evaluate whether the hypotheses about 1) monetary policy being unaffected by public opinion (equation 6), 2) fiscal policy being unaffected by public opinion (equation 7), 3) public opinion being unaffected by monetary policy (equation 9), and 4) public opinion being unaffected by fiscal policy (equation 10). The evaluation of the hypotheses is done using Bayes factors, computed from the posterior distribution of the models' parameters.

To test the extant theories we outlined above, we estimated four Bayesian structural vector autoregression (B-SVAR) models. The first of these is the Full Representation Model that allows

for contemporaneous feedback from monetary and fiscal policy to the public opinion measures and vice versa. This model uses the specification based on equations (5) and (8). The second, Monetary Representation Model allows only for contemporaneous effects of public opinion in monetary policy, but not fiscal policy. This imposes the restrictions in equations (7) and (10). The third, Fiscal Representation Model allows only for contemporaneous effects of public opinion in fiscal policy, but not monetary policy. This imposes the restriction in equation (6) and (9). Finally, we estimate a model that allows for No Representation by imposing all four sets of restrictions on the A_0 matrix.

The Bayesian estimation methods for B-SVAR models have been well described elsewhere, and the interested reader should consult Waggoner and Zha (2003*a,b*) and Brandt and Freeman (2006, forthcoming). The only issues specific to the implementation of the Bayesian estimation here are 1) the specification of the prior, and 2) the characterization of the posterior sample. The prior employed for our models is a Sims-Zha prior for a structural VAR (Sims and Zha, 1998; Brandt and Freeman, 2006). This prior is centered on a random walk model (though the posterior need not be) and assumes that higher order lag terms have smaller variances than lower ordered lag terms. These prior beliefs are specified using a series of seven hyperparameter values.⁹ The values chosen have been validated elsewhere as being robust and generating sensible posterior results that are not overly sensitive in this application (e.g., Sattler, Freeman and Brandt, 2008; Sims and Zha, 1998; Cushman and Zha, 1997).

Our final results are based on a posterior sample drawn via a Gibbs sampling method for B-SVAR models (Waggoner and Zha, 2003*a*). The burn-in for the sampler was 10,000 draws, which were discarded before drawing a final posterior sample of 25,000 draws, which passes standard convergence diagnostics. All of the results reported below are based on this posterior sample.

Finally, to compare our four models we computed the log marginal data density for each of the models. This is the log posterior density measure for a specified model (Full Representation, Monetary Representation, etc.) in a given sample period. It is used to assess whether the model

⁹Specifically, we set the hyperparameter values at $\lambda_0 = 0.6$, $\lambda_1 = 0.1$, $\lambda_3 = 1$, $\lambda_4 = 0.1$, $\lambda_5 = 0.05$, $\mu_5 = \mu_6 = 5$.

generated the sample. Log marginal data density values can be compared to generate Bayes factors which measure the relative evidence or weight that should be given to a model in comparison to another, exactly like a likelihood ratio statistic in frequentist analyses (Kass and Raftery, 1995).

4 Application to a Critical Case: Great Britain

4.1 Background

To test the arguments about responsiveness, representation and effectiveness in an open economy, our analysis has to account for three important characteristics of a country. First, citizens must be able to assign policy choices to specific political actors to properly evaluate the government's performance. Second, the number of pivotal actors in the economic policymaking process should be small so governments can be quickly and visibly responsive to public opinion. Third, the country's economy should be open to trade and financial flows during the period of analysis to evaluate the impact of the international economy on domestic responsiveness and representation.

The United Kingdom is a country that meets all three requirements implying that the idealistic democratic evaluation mechanism should work well, if it holds empirically. If we cannot find empirical evidence for this mechanism in the UK, it is unlikely that it could work elsewhere. Clarity of responsibility is very high because the UK is governed by a single-party government that can design economic policy without interventions by other pivotal actors (Powell and Whitten, 1993). The shift to central bank independence in 1997 also allows us to test under different institutional settings the changing role of monetary and fiscal policy in the democratic evaluation mechanism.

Importantly, the UK case allows us to assess whether the high expectations that policymakers and the public have for fiscal policy are warranted. The UK is an example of fiscal delegation (Hallerberg and Von Hagen, 1999, 223). It has had strong finance ministers who took orders from prime ministers. The degree of fiscal transparency is also high.¹⁰ British governments thus should

¹⁰The UK ranks with France near the top of the Open Budget Index for the world's governments (The Economist, October 28, 2006: 114; Alt and Lassen (2006)).

be able to use fiscal policy to respond quickly to political evaluations and then effectively stimulate the economy. The role of fiscal policy becomes even more central when we take into account that monetary policy in liberal market economies, like Britain, may not be fully effective (Iversen, 1998*a,b*), an aspect that previous research has neglected (Sattler, Freeman and Brandt, 2008).

We use monthly data from 1984:4 to 2006:9 for our analyses.¹¹ The four public opinion indicators for ne_t , pe_t , a_t , and v_t are the standard measures used in studies on government popularity.¹² As proxies for international economic variables, we use time series for the United States. This choice is motivated by the international dominance of the U.S. economy and the strong economic ties between the U.S. and the UK during our period of analysis from 1984 to 2006. Economic output, price levels and the exchange rate are measured using Indices of Industrial Production, Consumer Price Indices and the $\$/\pounds$ exchange rate. Foreign and domestic monetary policies are represented by U.S. and British short-term interest rates.¹³

Following a number of political scientists (e.g., Hallerberg and Von Hagen, 1999; Clark and Hallerberg, 2000; Alt and Lassen, 2006; O'Mahony, 2008), fiscal policy is measured as the level of public sector debt. This public sector debt index is based on the debt level reported by the government at the beginning of the sample period. We construct a monthly indicator of government debt using data on the public sector net cash requirement. The net cash requirement indicates the amount that the British government borrows from investors to finance the difference between public sector expenditures and receipts.

¹¹The analysis starts when the British economy is fully open to trade and finance (Quinn, 2000). The start date is also constrained by the availability of an appropriate fiscal measure, which begins in 1984.

¹²The political data are from MORI, except personal expectations that are from Gallup and YouGov. The Gallup data for personal expectations are available until October 2003 only. YouGov began collecting this series in 2002. For information how the Gallup and YouGov series are combined, consult Sanders (2005, 69-70). We thank Harold Clarke for kindly providing these series.

¹³The economic data are from the IMF's International Financial Statistics, the U.S. Bureau of Labor Statistics and the U.K. Office for National Statistics.

4.2 Model Discrimination

For a first test how the democratic evaluation mechanism works, we estimate and compare the four different structural models derived in Section 3.2 for two different time periods. To account for the changing role of fiscal and monetary policy under different institutional settings, we split the sample into a Tory period (1984:4–1997:4) when the Bank of England was directly responsible to elected officials, and a Labour period (1997:5–2006:9) when the Bank was independent.

Our benchmark model is the Full Representation Model, which represents the idealistic democratic evaluation mechanism. If the idealistic mechanism holds empirically, then the Full Representation Model should fit the data best because the idealistic mechanism requires that the government is responsive to public opinion, and citizens reward the government for its appropriate policy choice. Evidence in favor of the Full Representation Model is necessary, but it is not sufficient for an acceptance of the idealistic evaluation mechanism. A full validation of the idealistic mechanism requires that all relevant causal linkages can be established, especially the connection between policy and the real economy. This causal inference will be the focus of the next section. If the No Representation Model performs better than the Full Representation Model, this would be a strong indication that the idealistic mechanism is not appropriate. The Monetary and Fiscal Representation Models examine the differences in democratic evaluations before and after the change in central bank independence.

Table 1 shows the log marginal data densities (MDD) for the four models in the two subsamples. Larger values indicate that the model fits the data better. The difference of the log MDDs for two models is the log Bayes' factor measuring the posterior odds of one model versus another. We estimate the log Bayes' factor of the benchmark versus an alternative model by subtracting the log MDD of the respective alternative model in rows two through four of Table 1 from the log MDD of the Full Representation model in the first row. Positive (negative) values of the Bayes' factor favor the benchmark model (alternative model).

[Table 1 about here.]

The evidence from the log MDDs favors the Full Representation Model. In both periods, this model shows considerably higher log MDD values than the No Representation Model. The log Bayes' factors are 72 for the Full versus the No Representation Model in the Tory period and 59 for the same pairing, in the Labour period. The Full Representation Model also performs better than the Monetary and Fiscal Representation Models with log Bayes' factors of 19 and 21 for the Tory period, and factors of 25 and 23 for the Labour period, all in favor of the Full Representation model. A log Bayes factor value of absolute value 2 is considered "moderate" evidence for a model (Kass and Raftery, 1995).

The strong differences in log Bayes' factors for the two partial representation models across periods confirms our expectations about the changing role of policy instruments. In the Tory period, the log Bayes' factor for the Monetary versus the Fiscal Representation Model is 2 indicating that before 1997, monetary policy played a major role for the democratic evaluation mechanism in economic policy. The log Bayes' factor for the same model pair shrinks to a value of -2 in the Labour period. This documents that monetary policy lost its predominant role in an evaluation chain and fiscal policy became significantly more important after the institutional change in 1997 when monetary policy was delegated to a politically insulated Bank of England.

We conclude from this that a democratic evaluation mechanism can exist, which resembles the idealistic mechanism. But the analysis in this section does not uncover the causal chain proposed by the idealistic evaluation mechanism. This mechanism is complete *only if the causal linkage between public opinion and economic policy works through the real economy*, i.e., if the impact of policy on the real economy is substantial and lasts for several periods. If the real economy is largely unaffected by economic policies, the ideal evaluation mechanism does not exist. The realistic evaluation mechanism then is a better account of the political economy. The next section examines whether the underlying causal mechanism in fact corresponds to the idealistic view of democratic evaluations.

4.3 Causal Inference

The dynamics of the Full Representation Models for the Tory versus Labour periods can be evaluated using impulse response functions (IRFs). IRFs display the responses to a standardized shock in each variable in each equation over time. These impulse response functions are computed from the reduced form representation of the two Full Representation models, one each for the Tory and Labour periods, subject to the initial identification of the contemporaneous effects in A_0 . The IRFs presented here are computed from the fitted B-SVAR models and summarized with likelihood-based error bands (Sims and Zha, 1999; Brandt and Freeman, 2006). The responses are mean estimates over 12 months with 68 percent likelihood-based posterior confidence intervals.¹⁴

The analysis of political and economic accountability concerns a subset of the $12 \times 12 = 144$ impulse responses for each B-SVAR model. These subsets are: 1) Fiscal and monetary policy reactions to citizens' economic expectations; 2) public responses, specifically vote intentions and prime minister approval, to monetary and fiscal policy shocks; 3) reactions of the real economy to fiscal and monetary policy shocks, and 4) reactions of the public to shocks to the real economy. The first two sets of IRFs show how governments and the public interact directly with each other in the responsiveness–evaluation mechanism. The last two sets of IRFs analyze whether evaluating governments based on real economic developments is complete.

For each of these four sets of IRFs, the Tory and Labour period responses from the Representation Model are presented together. The Tory period (1984:4-1997:4) Full Representation Model responses are represented with solid lines with 68 percent error bands. The Labour period (1997:5-2006:9) Full Representation model responses are depicted as dashed lines with 68 percent error bands. We normalize the signs of the shocks to the equations in the IRFs to reflect key aspects of the debate about the government's willingness and ability to satisfy public preferences about

¹⁴The responses are based on the 25000 draws from the posterior distribution of the model. The likelihood-based error bands are from the eigendecomposition of each IRF, which accounts for the serial correlation of the responses. The eigendecomposition's first component of each IRF shock-response combination is used to compute the width of the error bands. These first components explain 85–99% of the variation in the responses over 12 months.

economic policy.¹⁵ We start our evaluation chain with an analysis how governments react when citizens become dissatisfied, or the effect of negative political shocks to the fiscal and monetary policy equations (r_t^d and g_t). We then analyze how positive policy shocks affect the responses in the polity and the economy. The shocks have the same signs across periods.

Figure 1 shows the responses of the UK interest rates (r_t^d) and UK fiscal policy index (g_t) to negative shocks in economic expectations. These responses are the reactions to one standard deviation *declines* in national economic and personal financial expectations. Overall, fiscal and monetary policies react to changes in national economic expectations more than to personal financial expectations in both the 1984-1997 and 1997-2006 periods. A decline in national economic expectations leads to a decrease in interest rates in both periods, which means that the central bank attempts to stimulate the economy when economic prospects for the whole country worsen. The reverse happens for personal expectations shocks, which lead to higher interest rates in in the Tory period, but no significant interest rate changes in the Labour period.

[Figure 1 about here.]

The size of the response of the central bank to shocks in economic expectations diminishes slightly after the Bank of England was granted independence. The reaction of monetary policy to a decline in national economic expectations largely remains the same in the Tory to the Labour period. But the response of interest rates to personal expectations in the Tory period reduces to the negligible amount of less than 0.025 percentage point change in the Labour period.

The responses of the fiscal policy index to shocks in economic expectations yield similar results. The impact of a standard deviation negative shock in national economic expectations in the Tory period is a decrease in government spending by an initial 2 percent decaying over 12 months. A one standard deviation negative shock in national economic expectations in the Labour period increases fiscal debt almost by an initial 4 percent, decaying more slowly over 12 months. The

¹⁵The full pattern of the signs for the 12 equations of the B-SVAR model is (+, -, +, -, +, +, +, +, +, +, +, +). The order of equations is ($e_t, r_t^d, r_t^i, g_t, p_t^d, y_t^d, p_t^i, y_t^i, ne_t, pe_t, a_t, v_t$). A + (-) means that shocks enter the respective equation positively (negatively).

conclusion from this response is that fiscal policy became more responsive to changes in national expectations after 1997, since the magnitude of the response is larger and decays more slowly. The negative response of fiscal policy to a negative shock in personal expectations is present in both periods. The fiscal responses to personal expectations hardly differ in size across the two periods, but are very small and significantly smaller than the responses to national expectations.

These results generate three conclusions. First, the government is responsive to citizens. Moreover, fiscal and monetary policies primarily react to indicators about the country's overall economic welfare and less to opinions about individuals' personal well-being. Second, there was a shift from monetary to fiscal policy after the Bank of England gained independence. This is consistent with the idea that the government had to rely on fiscal policy rather than monetary policy after the Bank of England became independent. Third, Tory and Labour governments used fiscal policy differently. While Tory governments decreased debt when citizens became less satisfied with the economy, Labour governments did the opposite. This confirms the view that different ideas guided the economic policies of the different governments. In response to public dissatisfaction with economic developments Tory governments tried to spur economic growth with orthodox fiscal policies, while Labour governments used an expansionary fiscal strategy.

Figure 2 shows the responses of the political variables, prime minister approval (a_t) and vote intentions (v_t), to policy innovations in interest rates (r_t^d) and fiscal policy (g_t). The policy shocks enter all equations as positive one standard deviation changes in the two samples. Surprise increases in interest rates lead to no significant response in prime ministerial support in the Tory period and to higher PM support in the Labour period, although the latter is rather small. Vote intentions respond in a different fashion: positive shocks in interest rates increase vote intentions for the government party in the Tory period and have a negligible impact on vote intentions in the Labour period. Overall, this means that the effect of interest rates on government support is weaker in the latter period, presumably because citizens know that elected officials enjoy less control over monetary policy.

[Figure 2 about here.]

The responses of vote intentions and approval to fiscal policy shocks are shown in the second column of Figure 2. Shocks to these two equations again are fiscal expansions in both periods. So a surprise expansion in fiscal policy generates a decline in prime ministerial support in the Tory period because voters expect a more orthodox fiscal policy from the Tory government in times when the budget deficit is already high and perceived as a problem. In the Labour period, an unexpected fiscal expansion increases prime ministerial support because citizens reward fiscal expansions by the Labour government, especially in a period where the deficit is not a serious problem. This supports the argument that the impacts of fiscal policy are inverted in the Labour versus Tory periods since contractions (expansions) in fiscal policy generate different approval responses across the two periods. Overall, we conclude from these findings that citizens observe policy choices by the government and take them into account when evaluating the government's performance. This is consistent with the findings from the model fit analysis and confirms that some form of democratic evaluation mechanism is at work.

The response of vote intentions to fiscal shocks is similar in both periods: vote intentions decline when there is a fiscal expansion. This is not consistent with *standard* expectations for the Labour period. It may however be an expectational response. Given the UK history with inflation, voters may be skeptical of fiscal stimuli and thus punish the government at election time. Note, however that the response is never more than a whole point decline in vote intentions over 12 months. These unexpected impulse responses indicate that the detailed mechanisms underlying the Full Representation Model may not correspond to the idealistic view and require more elaboration.

Figure 3 shows the UK real economy (y_t^d and p_t^d) responses to positive innovations in monetary and fiscal policy.¹⁶ Although we find that policy shocks influence output and prices, these effects are tiny. A one standard deviation change in the policy variables does not cause a visible change in price levels for monetary policy and a change of about 0.08 percent – a maximum – for fiscal policy over 12 months. There is no noticeable change in output in response to monetary policy shocks.

¹⁶In Figure 3, the error bands cannot be distinguished from the modal impulse response because of the very small confidence interval around the response.

The Full Representation models suggest that policy was largely ineffective and that the governments' capacities to shape real economic outcomes were limited. The magnitudes of the impacts of fiscal and monetary policy innovations are very small. The governments' policy innovations have virtually no impact on the real British economy. This result refutes the idea that representation in economic policy was meaningful in the sense that the government's responsiveness had any real economic impact.¹⁷

[Figure 3 about here.]

Figure 4 shows the final part of the accountability chain, the impacts of positive shocks to the domestic real economy (p_t^d and y_t^d) on the vote intention (v_t) and prime ministerial approval (a_t) equations. Overall the responses of these variables to real economic developments are fairly weak. The reaction of prime ministerial approval to changes in prices is statistically insignificant in both periods. The reactions of these equations to industrial production shocks are very small and do not exceed 0.1 percentage points in either period. The effect of industrial production on approval is only statistically significant during the first three to four months. We see similar results for the impact of the real economy on vote intentions. Prices have small effects on vote intentions during both periods. Domestic output shocks have no sizeable effects in either period.¹⁸

[Figure 4 about here.]

Figure 5 presents the estimated densities of the reduced form electoral trend variable in each equation. These allow us to assess competing claims about electorally induced policy cycles in

¹⁷Over 92% of the forecast variation in y_t^d and p_t^d are due to their *own* innovations in both sample periods (results not reported). Fiscal and monetary policy innovations explain at most 0.5% of the variation in these two variables in the Tory period and at most 1.6% of the variation in both variables in the Labour period. So there is strong evidence that the results in Figure 3 are trivial in the UK economy.

¹⁸In the Tory period, the decompositions of the forecast variance (not reported) show that interest rate and fiscal shocks generate at most 10% and 67% of the variance in a_t and 0.2% and 52% of the variance in v_t . In the Labour period, the decompositions of the forecast error variance show that the interest rate and fiscal shocks generate at most 0.2% and 81% of the variance in a_t and less than 0.1% and 62% of the variance in v_t . These results are consistent with the shift from monetary to fiscal policy tools after 1997.

economically open democracies. For most of the Tory period the UK had a dependent central bank, capital mobility, and a flexible exchange rate. According to Clark and Hallerberg (2000) we should find pre-electoral monetary effects only.¹⁹ The results for the monetary and fiscal policy equations are consistent with this prediction; the coefficient in the interest rate equation indicates that in the run up to elections Tories lowered interest rates while they made no changes in fiscal policy. This is inconsistent with O'Mahony's (2008) results predicting that because of Britain's trade openness and flexible exchange rates, pre-electoral fiscal expansions should occur. The results for the Labour period are also inconsistent with O'Mahoney's argument. There also is evidence of pre-electoral monetary effects in the Labour period, an anomalous rise in interest rates. Because the Bank of England is independent in this period of capital mobility and flexible exchange rate, Clark and Hallerberg (2000) predict neither kind of effect.

[Figure 5 about here.]

Overall the empirical results from our open political economy framework raise serious doubts about the adequacy of the idealistic evaluation mechanism in contemporary democracies. We are able to confirm the presence of a causal linkage from public opinion to economic policy and back to opinion as the literature on government popularity and representation in economic policy suggests. This is consistent with our result from the previous section that the Full Representation Model fits the data best. This model, however, does not capture a major implication of the idealistic evaluation mechanism, i.e. the existence of the crucial link between policy and economic outcomes. Our results are not consistent with the full implications of the idealistic evaluation mechanism in macroeconomic policy because the link between economic policy and real economic development is missing. This implies that citizens reward or punish the government for policy choices that do not have the anticipated effects. Citizens who evaluate governments based on real economic

¹⁹According to the index by Reinhart and Rogoff (2004), the UK had flexible exchange rates between 1984 and September 1990; relatively fixed exchanges between September 1990 and the end of 1992; and then flexible exchange rates until 2001.

developments, such as inflation or growth, systematically hold their government responsible for outcomes that it is unable to change (see Drazen, 2000, 238-246).

The realistic evaluation mechanism outlined earlier accounts for this finding. The negligible effect of economic policies on output and prices in our open economy model suggests that economic openness seriously constrains the government's capabilities to manage the economy. The complexity of these open economic processes make it difficult, if not impossible, for citizens to properly trace the effect of their government's policy choices through the economy. Thus, citizens take a shortcut and reward the government for macroeconomic policy choices without noticing that their evaluations rest on a fallacy that policies have the expected real effect.

5 Conclusion

Policymakers and maybe the public have high expectations in economic policy instruments, particularly in fiscal policy when they face the threat of recessions. The British Prime Minister Gordon Brown, for instance, has been at the frontier of European chief executives who have designed massive fiscal stimulus packages during the second half of 2008. Yet, our results for Great Britain suggest that PM Brown's actions may not have the effects that he desires and also advocates in public. Instead, the fiscal packages may have little or no real impact on economic growth and real economic performance in general. Even if there was a small effect, the packages certainly will not "beat the recession", as the President of the EU Commission Barroso hopes. These findings lead to a tricky situation for governments even if they are responsive to concerns from citizens about future economic performance.

The good news for policymakers is that citizens will reward them for taking these actions although the fiscal packages may not be as useful as generally claimed. The bad news is that, when fiscal policy instruments do not work and the recession deepens, voters are likely to hold policymakers responsible for the bad economic performance although it is beyond politicians' control. In both cases, citizens' behavior is not consistent with an idealistic democratic evaluation mech-

anism that is based on the idea that voters either make informed choices or do not need to know more about the economy than observing policies and outcomes. The evaluation mechanism that we found rather corresponds to a realistic view that takes into account that economic processes in open economies are highly complex. Because these processes are difficult for citizens to understand, democratic evaluations in macroeconomic policy may lead to systematic attribution errors and to incorrect conclusions about the competency of their government.

Future research on the British case should analyze additional micro- and macro-level factors bearing on the evaluation/representation debate. Surveys that more fully probe citizens' understanding and evaluation of the macroeconomic policymaking over time and as a consequence of party and institutional changes should be conducted. Eventually — when longer time series are available — we should break the opinion variables into partisan and demographic groupings. This would allow us to better evaluate heterogeneous evaluations of policy and policy outcomes. At the macro-level, the new work on policy diffusion might be incorporated by including U.S. policy variables in the model of Swank (2006). This would help us gauge whether policy changes abroad affected policy choices and outcomes in economically open democracies, conceivably altered the room to maneuver in countries like Britain.

Finally, additional cases should be studied. The first step is to analyze the democratic evaluation mechanisms in countries where there still is some a moderate level of clarity of responsibility and policy transparency like the U.S.. Recent research suggests that, unlike their British counterparts, a majority of Americans believe in their government's capability to manage economic developments (Hellwig, Ringsmuth and Freeman, 2008). Building and analyzing a B-SVAR model for the American political economy will provide a test of these beliefs. Our time series model also should be integrated more fully with a political, dynamic stochastic general equilibrium model of the UK (Freeman and Houser, 1998; Houser and Freeman, 2001). This will allow for deeper historical and policy counterfactual analyses.

A Appendix

Deriving the different, theoretically motivated structural relationships for the endogenous variables in the polity and the economy in A_0 , relies on existing research in political science and the new open macroeconomics. The submatrices of equation (2) define the political and economic relations in A_0^P and A_0^E .

For the polity we expect that contemporaneous national economic expectations affect personal economic expectation, but not vice versa. This is because aggregate welfare should affect individual well-being, but individual financial wealth does not matter for the whole country. The two economic expectations variables together affect approval to the chief executive and vote intentions for the government (Sanders, 1991; MacKuen, Erikson and Stimson, 1992; Clarke and Stewart, 1995). We treat executive approval as weakly exogenous to vote intentions. This is consistent with testing results from previous research (Clarke and Stewart, 1995; Clarke, Ho and Stewart, 2000); it is theoretically plausible because citizens are more likely to vote for a government if they are satisfied with its executive. In contrast, the performance of the chief executive should not depend contemporaneously on the percentage of citizens who want to vote for the government.

This reasoning yields the following matrix for the contemporaneous relationships within the polity. The A_0^P submatrix from from equation (2) is lower-triangular when the variables in Y_t^P are ordered as shown in equation (4):

$$A_0^P Y_t^P = \begin{bmatrix} \alpha_{P,1} & 0 & 0 & 0 \\ \alpha_{P,2} & \alpha_{P,3} & 0 & 0 \\ \alpha_{P,4} & \alpha_{P,5} & \alpha_{P,6} & 0 \\ \alpha_{P,7} & \alpha_{P,8} & \alpha_{P,9} & \alpha_{P,10} \end{bmatrix} \begin{bmatrix} ne_t \\ pe_t \\ a_t \\ v_t \end{bmatrix} \quad (11)$$

For example, the coefficient $\alpha_{P,7}$ shows how national expectations (ne_t) affects vote intentions (v_t) within the same month. This coefficient is not restricted to zero because we expect that that national economic expectations have a contemporaneous effect on vote intentions. In contrast, the coefficient in the first row of the last column is restricted to zero, which means that we assume that vote intentions (v_t) do not influence national expectations (ne_t) within the same month for the

reasons discussed in the previous paragraph.

The contemporaneous relationships within the economy are based on the assumption that the international economy affects the domestic economy, but not vice versa (Cushman and Zha, 1997). Moreover, for contemporaneous relationship within the real economy, we assume an upper triangular relationship between prices and output proposed by Sims and Zha (2006) and Cushman and Zha (1997). Unlike the exchange rate, which adjusts to all variables immediately, the real economy reacts to the other variables with a delay in our model. Finally, economic policy reflects information about prices and output with a delay. But it can reflect exchange rates and foreign economic policy instantaneously. Policy thus reacts to the latter variables within the same month, but not to the former. These assumptions follow research on simultaneous equation models in economics (op. cit.)

This yields the following matrix A_0^E in the upper-left corner of equation (2). The vector Y_t^E in equation (3) shows the ordering of the economic and policy variables in the model.

$$A_0^E Y_t^E = \begin{bmatrix} \alpha_{E,1} & \alpha_{E,2} & \alpha_{E,3} & \alpha_{E,4} & \alpha_{E,5} & \alpha_{E,6} & \alpha_{E,7} & \alpha_{E,8} \\ \alpha_{E,9} & \alpha_{E,10} & \alpha_{E,11} & \alpha_{E,12} & 0 & 0 & 0 & 0 \\ \alpha_{E,13} & 0 & \alpha_{E,14} & 0 & 0 & 0 & 0 & 0 \\ \alpha_{E,15} & \alpha_{E,16} & 0 & \alpha_{E,17} & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & \alpha_{E,18} & \alpha_{E,19} & \alpha_{E,20} & \alpha_{E,21} \\ 0 & 0 & 0 & 0 & 0 & \alpha_{E,22} & \alpha_{E,23} & \alpha_{E,24} \\ 0 & 0 & 0 & 0 & 0 & 0 & \alpha_{E,25} & \alpha_{E,26} \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & \alpha_{E,27} \end{bmatrix} \begin{bmatrix} e_t \\ r_t^d \\ r_t^i \\ g_t \\ p_t^d \\ y_t^d \\ p_t^i \\ y_t^i \end{bmatrix} \quad (12)$$

As an example, the coefficient $\alpha_{E,2}$ indicates how domestic monetary policy (r_t^d) affects the exchange rate (e_t) within the same month. The coefficient $\alpha_{E,3}$ shows how international monetary policy (r_t^i) influences the exchange rate within the same month.

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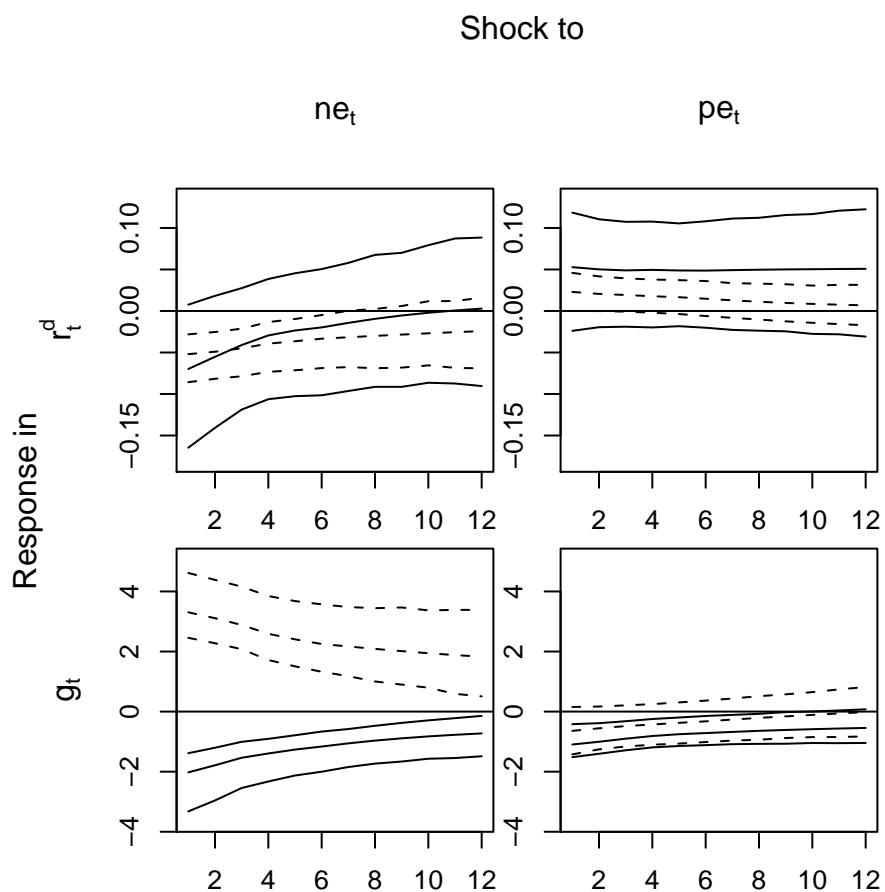


Figure 1: Responses of the UK fiscal policy index (g_t) and UK interest rates (r_t^d) to negative shocks in national economic (ne_t) personal financial (pe_t) expectations. Solid (dashed) lines are responses for the 1984-1997 (1997-2006) sample. Error bands are 68% posterior credible intervals, computed using eigendecomposition methods.

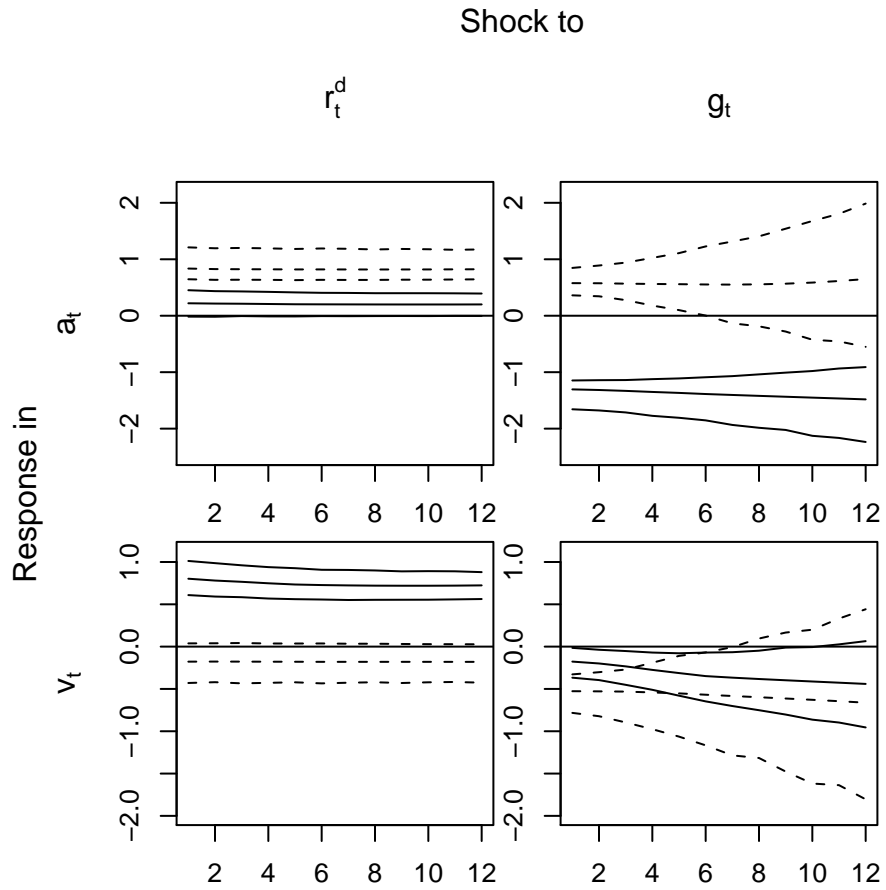


Figure 2: Responses of approval (a_t) and vote intentions (v_t) to positive UK fiscal policy index (g_t) and UK interest rates (r_t^d) shocks. Solid (dashed) lines are responses for the 1984-1997 (1997-2006) sample. Error bands are 68% posterior credible intervals, computed using eigendecomposition methods.

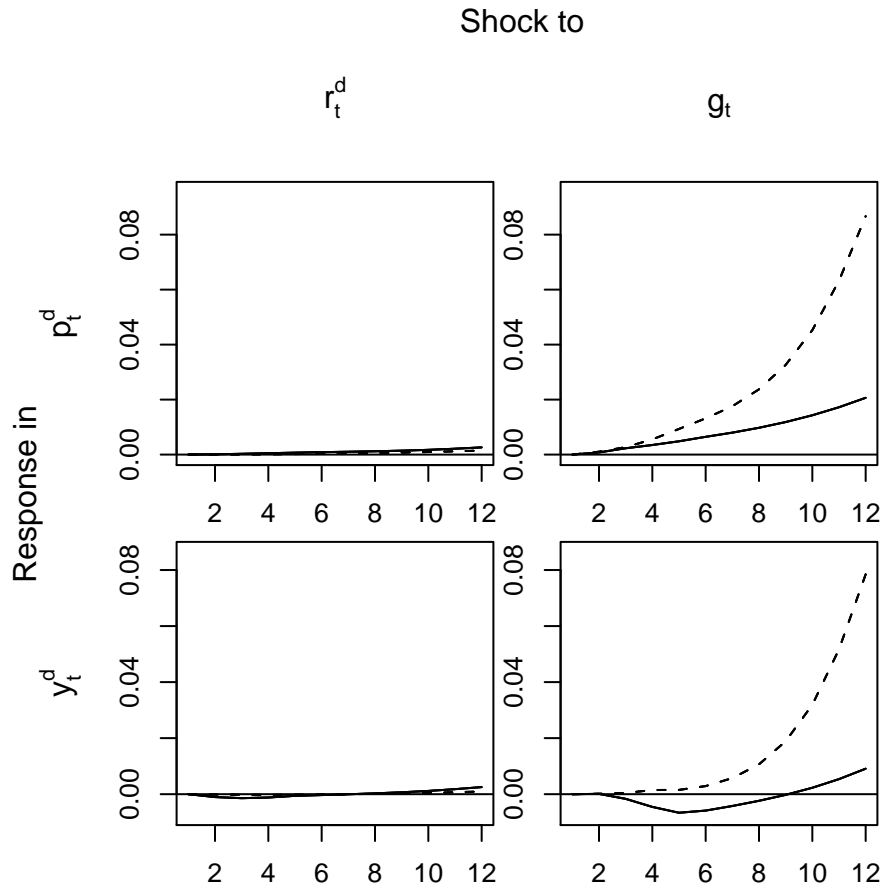


Figure 3: Responses of the UK real economy (p_t^d and y_t^d) to positive UK fiscal policy index (g_t) and UK interest rates (r_t^d) shocks. Solid (dashed) lines are responses for the 1984-1997 (1997-2006) sample. Error bands are 68% posterior credible intervals, computed using eigendecomposition methods.

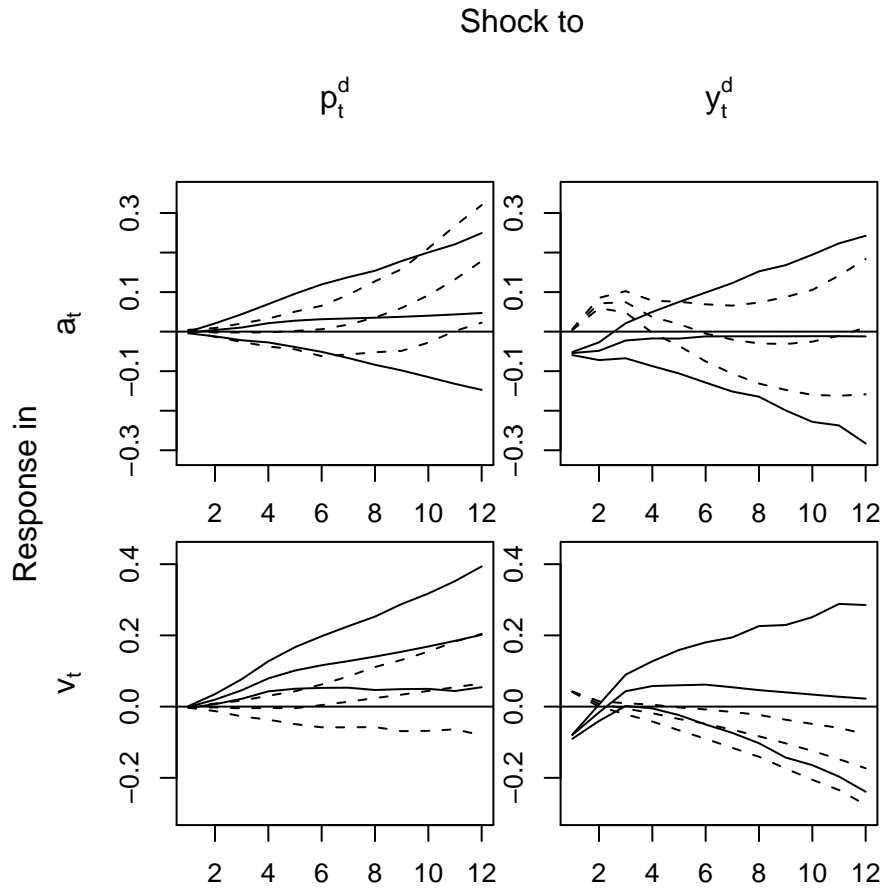


Figure 4: Responses of approval (a_t) and vote intentions (v_t) to positive UK real economy price (p_t^d) and output (y_t^d) shocks. Solid (dashed) lines are responses for the 1984-1997 (1997-2006) sample. Error bands are 68% posterior credible intervals, computed using eigendecomposition methods.

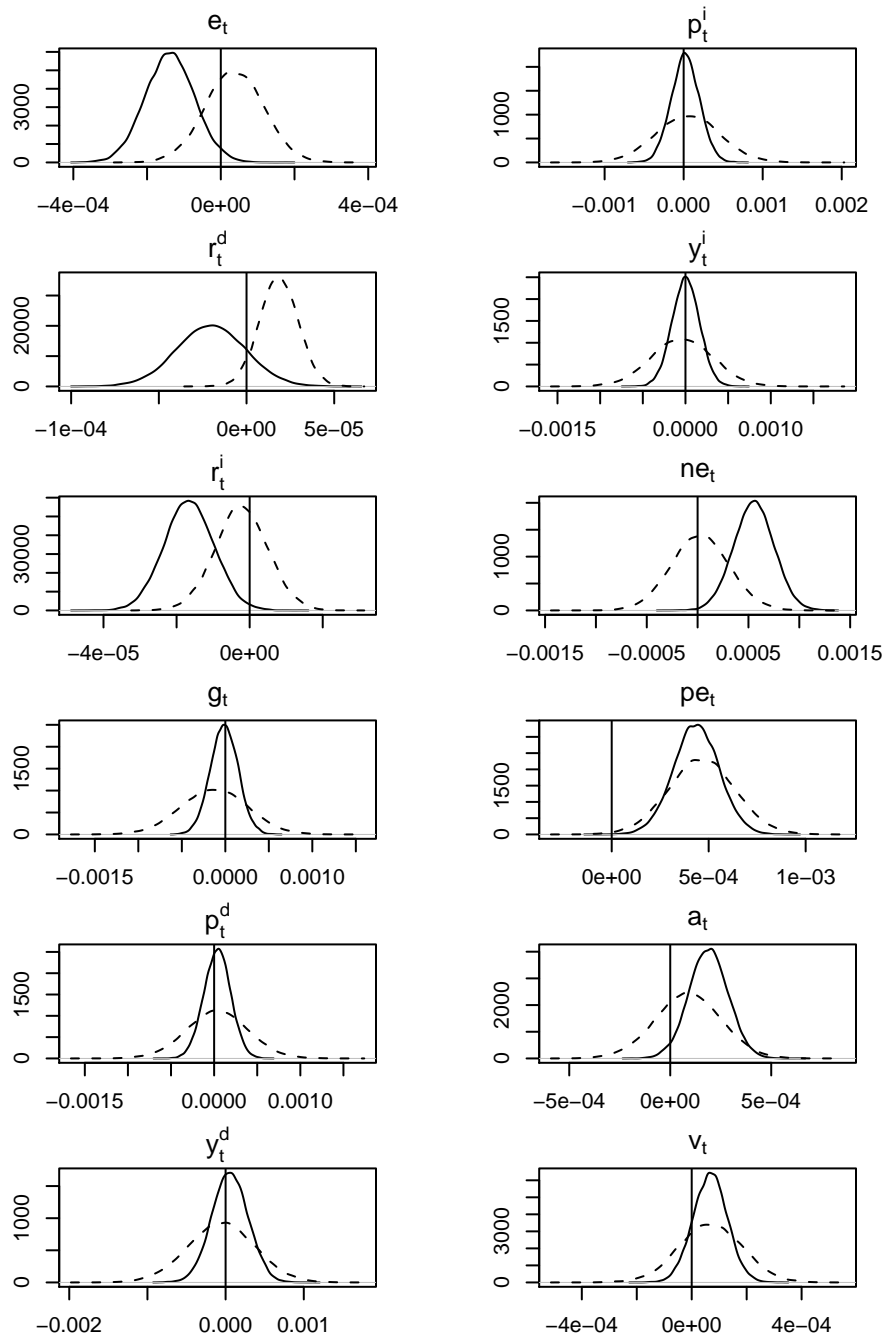


Figure 5: Election coefficient densities for each equation. Solid (dashed) lines are for the 1984-1997 (1997-2006) sample.

Table 1: Log Marginal Data Densities (MDD) for the four B-SVAR Models in the Tory and Labour Periods

Model	Sample Period	
	Tory (1984:4-1997:4)	Labour (1997:5-2006:9)
Full Representation	2727	1076
Monetary Representation	2708	1051
Fiscal Representation	2706	1053
No Representation	2655	1017

Log MDD measures the log posterior probability that the model explains the data. Larger values indicate that the model fits the data better.