# Does Fiscal Transparency Matter? The Evidence from Transition Economies

Mariusz Jarmuzek

June 2006

Abstract: According to both the theory and empirical research for developed economies, when countries follow transparent fiscal policy this will contribute to better fiscal performance. Our paper examines the role of fiscal policy transparency in establishing better fiscal discipline in transition economies. The empirical investigation, which provides the core of this paper, includes an analysis of interdependences between fiscal transparency and fiscal performance. We use a comprehensive index for fiscal transparency compiled by Jarmuzek et al (2006). In order to test the impact of transparency on fiscal policy performance we base our empirical model within a framework of career-concerns with political parties. Our results suggest that fiscal transparency has not yet proved to be a very significant factor for shaping fiscal performance in transition economies. In fact, the evidence from the data shows a weak negative relationship between fiscal transparency and debt accumulation.

#### **Keywords:** fiscal transparency, fiscal policy, transition economies

#### 1. Introduction

Fiscal transparency is highly valued by international organisations such as the IMF and OECD, which in recent years have published Codes of Good Practices on Fiscal Transparency (IMF, 1998) and Best Practices for Budget Transparency (OECD, 2000). The guidelines included in both were applied in the aftermath of the Mexican and Asian crises and it is widely believed that lack of transparency was among the causes of the crises. Greater fiscal transparency has been advised by these institutions to many countries, including transition economies, as a precondition for fiscal sustainability and good governance. However, since many of these countries are subject to fiscal constraints imposed by the IMF or EU institutions some have sought to pursue creative accounting practices. Easterly (1999) discusses various cases of EU countries preparing for the adoption of the euro that have undertaken what he refers to as "illusory adjustment" to meet the Maastricht criteria, while Guerrero and Hofbauer (2001) analyse fiscal transparency performance in Latin America.

The main objective of our study is to examine whether more transparent fiscal policy is associated with superior fiscal discipline. The principal question addressed in the paper is therefore whether fiscal transparency has been an important element in establishing prudent fiscal policy in transition economies. Our contribution to the literature involves an analysis of the interactions between transparency, fiscal performance and both economic and political reforms in transition economies. To our knowledge this is the first study of this kind.

## 2. Underlying theory

Fiscal transparency can be defined as public openness about the structure and functions of government, fiscal policy intentions, public sector accounts and fiscal projections (Kopits and Craig, 1998). Such openness is essential if discipline is to be imposed on governments by making policymakers accountable for the design and implementation of fiscal policy. Transparency should then lead to better, more credible policies, to a less uncertain policy environment, to earlier and smoother fiscal policy responses to emerging economic problems and ultimately to improved economic performance (Kopits and Craig, 1998).

## 2.1 Benefits from fiscal transparency

A high degree of fiscal transparency tends to provide benefits in terms of fiscal discipline and accountability. Lack of transparency is widely recognised in the literature in relation to the impact of budget institutions on fiscal performance as a key reason for procedural difficulties (Alesina et al., 1999). This is also confirmed in studies by Alesina, Mare and Perotti (1996) on Italy and by Tanzi (1995) on OECD countries. If governments are more transparent with respect to their fiscal accounts and intentions their access to the international capital markets can be expected to be greater and, in turn, costs related to debt servicing lower (Petrie, 2003). The political economy literature suggests that fiscal transparency makes fiscal policy more accountable (Hemming and Kell, 2001). This is because when politicians are subject to certain constraints they are obliged to set targets more carefully than otherwise in order not to deviate significantly from them. Other benefits are related to the reduction of uncertainty over fiscal policy as well as earlier and smoother fiscal policy responses to any shocks that may hit economies (Petrie, 2003). Horvath and Szekely (2001) argue that a well designed medium-term fiscal framework can help to enhance the credibility of macroeconomic policies in EU accession countries. Kopits and Szekely (2002) and Feldman and Watson (2002) claim that the adoption of a medium-term budget framework by EU accession countries, which is a crucial element of transparency procedures, would encourage very important structural reforms related to EU accession.

#### 2.2 Related literature

There is extensive literature on the theoretical models related to the political and institutional aspects of fiscal policy. The framework they tend to deploy encompasses the interaction between the political and economic dimensions of fiscal policy and can be seen as an attempt to combine the two into a single explanatory framework (Alesina and Perotti, 1995). Apart from economic variables, such as average growth and initial level of debt affecting fiscal performance, politically motivated variables such as political polarisation, government structure and electoral systems, are also included (Persson and Tabellini, 1995).

The theoretical literature on the implications of fiscal transparency is not large, but is expanding fast. Much is associated with the asymmetric information models of fiscal policy developed by Rogoff (1990) and contributions made by Easterly (1999), who

adapts the Ramsey-Cass-Koopmans model to analyse the consequences of creative accounting practices in relation to the Maastricht Treaty. In a similar spirit to Easterly's approach, Milesi-Ferretti (2004) proposes a model in which the impact of fiscal transparency on government debt is considered, allowing for creative accounting practices under a fiscal policy rules regime. The author concludes that transparency sets the scope for creative accounting, as opposed to real fiscal adjustment, emphasising the role of fiscal rules in this context.

There is also a line of research linking fiscal transparency to political economy models. Shi and Svensson (2006) present a political agency model in which politicians attempt to appear competent by issuing debt and thus providing more public goods. This, of course, merely postpones payment to future periods. In the model the degree of fiscal or budget transparency determines when and how far voters can observe debt and thus the extent to which an incumbent can use debt to appear competent. Alt and Lassen (2006a) extend this model to include political parties with preferences over public spending. The first outcome suggests that transparency diminishes debt accumulation partly due to the electoral cycle, which is consistent with Shi and Svensson's model. Alt and Lassen also find that increasing political polarisation tends to increase debt accumulation (Alesina and Tabellini, 1990) and their findings confirm the model proposed by Persson and Svensson (1989), which suggests that right-of-centre governments tend to have higher deficits than do left-of-centre governments.

Besley (2005) and Besley and Smart (2003) employ a political agency model encompassing adverse selection and moral hazard to show that increasing transparency has two opposite effects on voter welfare. Greater transparency leads to the situation in which voters are better able to distinguish between good and bad politicians. However, on the contrary, increasing transparency tends to consolidate politicians in their rent-seeking. This in turn makes it harder for voters to evaluate which politicians make good decisions and which tend to make bad ones.

An interesting approach is developed by Ferejohn (1999), who examines an agency model in which transparency affects voter trust in government and thus the size of government. This model predicts that politicians who wish to increase the size of the public sector should increase transparency to make voters trust them with more resources. Prat (2005) follows Ferejohn (1999) in introducing a distinction between the effects and consequences of fiscal transparency, and actions that are required to be undertaken.

#### 3. Empirical evidence

The empirical research on fiscal transparency is limited, but also growing. Alesina and Perotti (1996) note that "the results on transparency probably say more about the difficulty of measuring it than about its effect on fiscal discipline". This is reiterated by Alesina and Perotti (1999) and subsequently by Tanzi and Schuknecht (2000).

#### 3.1 Fiscal transparency indices

One strand of the empirical literature has constructed an index measuring different dimensions of fiscal transparency. Von Hagen (1992) compiles a transparency index for eight European countries that includes measures of the following: whether the countries have special funds, whether budgets are submitted in a single document, an assessment of transparency by respondents, whether there is a link to national accounts and whether loans to non-governmental entities are included. This index is partially updated by de Haan et al. (1999). Guerrero et al. (2001) provide an index of budget transparency for five Latin American countries: Argentina, Brazil, Chile, Mexico, and Peru. The index measures, in a comparable form, the degree of accessibility and utility of information issued by national governments with respect to finances, revenues and expenditures. This is complemented by a detailed analysis of the legal framework of each of the countries' budgetary processes undertaken by a group of experts. Hameed (2005) develops an index of fiscal transparency based on the IMF's fiscal Reports on Standards and Codes (ROSC) for a broad range of countries. This index is, however, the result of assessment from different periods of time published as ROSCs. Jarmuzek et al. (2006) compile an index for transition economies based upon an independent evaluation, using also local public sources. Alt and Lassen (2006a) employ the OECD Best Practices for Budget Transparency to construct an index for 19 OECD economies.

Gleich (2003) develops an index in the spirit of von Hagen (1992) but for Central and Eastern European countries, providing quantification for budget preparation, authorisation and implementation stages. This index has been subsequently updated based on the information provided by Ylaoutinen (2004) and the IMF's fiscal ROSC reports by Fabrizio and Mody (2006). However the above-mentioned indices evaluate more budgetary procedures related to fiscal policy, which is just one dimension of fiscal transparency.

A more descriptive approach is employed by Allan and Perry (2003), who analyse fiscal transparency in EU Accession Countries. They use the IMF's ROSC to assess the current stance in relation to fiscal transparency in these economies. The paper highlights four areas that should be enhanced in terms of budgetary practices. Primarily, medium-term budgetary frameworks that can help to increase fiscal policy credibility need to be established, they argue. The other areas include comprehensive coverage of extrabudgetary activities in conjunction with strengthening and modernising government accounting and reporting systems. There is also a need to develop uniform reporting standards for the broadly defined general government as well as improve the management capacity at sub-national levels of government.

#### 3.2 Interactions of fiscal transparency

Another strand of the empirical research has been initiated by Alt, Lassen and Skilling (2002), who compile an index of fiscal transparency for the states of the US and then test empirically the influence of transparency on the scale of government and gubernatorial popularity. This methodology is followed by Alt and Lassen (2006a), who provide an index of transparency for OECD countries examining the relationship between fiscal

transparency and public debt and deficits. The results confirm the hypothesis of a positive impact of transparency on fiscal performance, even after controlling this for partisanship and polarisation. Alt and Lassen (2006b) examine the effects of fiscal transparency and political polarisation on electoral cycles in fiscal policy in 19 OECD countries, concluding that no electoral cycles are prevalent in countries with high levels of fiscal transparency. Alt, Lassen and Rose (2006) investigate the determinants of fiscal transparency using the data from the states of the USA. The results show that fiscal transparency can be associated with political competition and power sharing as well as political polarisation and past fiscal conditions.

There are also studies that investigate the interactions between budgetary procedures and fiscal performance. Gleich (2003) shows that budgetary procedures reflected in institutional arrangements adopted by Central and Eastern European countries are associated with superior fiscal discipline. Fabrizio and Mody (2006) follow Gleich (2003), but conclude that budgetary institutions are important even when politicians are representative but not disciplined, and even when long-term structural forces are not benign.

#### 4. Testing for fiscal transparency in transition economies

We aim to verify empirically the importance of fiscal transparency for fiscal performance in a group of twenty seven transition economies <sup>1</sup>. Although this group is non-homogenous, there are a number of common features. All countries are in transition from the central planning system to the market economy and have been subject to intensive structural reforms. Market economy institutions, including fiscal authorities, are either newly established or have been substantially reorganised since the collapse of the previous economic system. The empirical investigation, which provides the core of this section, includes an exposition of a fiscal transparency index and analysis of interdependences between fiscal transparency and fiscal performance.

## 4.1 Fiscal transparency index

We use an index of fiscal transparency compiled by Jarmuzek et al. (2006), which is based on the relevant official documents concerning budgetary process and fiscal policy formulation available on the relevant websites. This is a similar approach to the one adopted by Alt and Lassen (2005), who use the OECD Best Practices for Budget Transparency (OECD, 2001) for OECD countries. The reason they apply the IMF guidelines is that the OECD Best Practices cover activities related to the central government and budgetary sector, but not encompassing all fiscal activities. ROSCs seem to be more comprehensive and cover four broad areas of fiscal transparency. The first is medium-term budgeting and analysis comprising six elements focused on establishing medium-term budget frameworks. The second area is concerned with accounting and data quality and consists of two elements regarding consistency in relation to the Government

\_

<sup>&</sup>lt;sup>1</sup> The group contains Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Macedonia, Moldova, Poland, Romania, Russia, Serbia and Montenegro, Slovakia, Slovenia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan

Finance Statistics Manual (IMF, 2001) and the inclusion of extra-budgetary funds. The third group is related to extra-budget fiscal operations, including contingent liabilities, quasi-fiscal operations and the availability of data on tax expenditures. The fourth dimension of fiscal transparency is associated with intergovernmental relations encompassing limits or controls on local government debt and borrowing as well as uniform classification for the general government. They extend the IMF's ROSCs with a fifth area that emphasises the role of auditing in the budgetary process and the relative importance of the Ministry of Finance over spending ministries. The cut-off point of the assessment is June 2005.

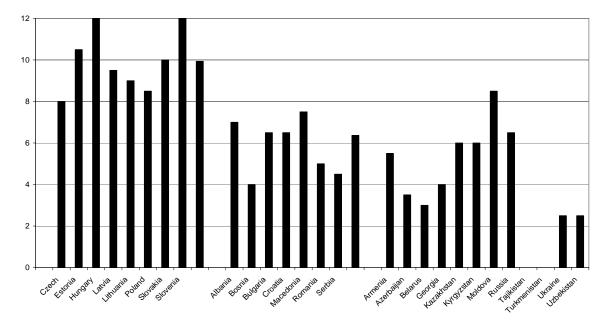
There is a clear pattern of CEE countries standing out significantly from the other two groups across all the broad categories. This seems to be a result of anchoring EU New Member States in the mechanisms governing the European Union. The accession countries were obliged to produce Pre-accession Programmes, which were subsequently followed by Convergence Programmes. According to our assessment, the Czech Republic and Poland are the least transparent economies in this group, while Hungary and Slovenia appear to be the most. The former have problems with accounting and data quality. More specifically, Poland has hardly implemented a medium-term budgetary framework, whereas the Czech Republic has some irregularities in terms of off-budgetary fiscal activities and intergovernmental relations.

The SEE countries lag behind the first group, experiencing serious difficulties in budgetary process and reporting standards. The leaders here are Bulgaria, Croatia and Macedonia. The main problem in this group is that a medium-term budgetary framework has not been advanced and there are severe irregularities in terms of extra-budgetary fiscal activities. It is surprising that Romania is not in the leading position here, given that it will probably be admitted to the European Union in the near future.

The CIS countries still have a long way to go to meet international standards. They must enhance budgetary practices and accounting procedures, as they clearly lag the above groups. Problems are identified in all the areas, signalling the need to undertake farreaching reforms. Surprisingly, Moldova appears to be comparable to the CEE group. One also has to note that Russia, Kazakhstan and Kyrgyzstan have reached a similar stage as the SEE leaders.

To summarise the fiscal transparency index we can divide countries into regional groups, which are in fact also divisions in terms of the extent to which the formulation and execution of fiscal policy is open to the general public. The CEE countries are characterised by an average index of 10, which is substantially higher than the average of 6 for SEE countries. The CIS countries perform on average worse than the SEE countries, as they score 4, but variation in this group is quite high. The illustration of the main trends underlying fiscal transparency across countries is depicted in Figure 1.

#### **Fiscal Transparency Index**



## 4.2. Interdependences between fiscal transparency and debt

The institutional approach employing the fiscal transparency index is complemented by empirical research based on a cross-section analysis. We broadly follow the methodology developed by Alesina et al. (1999) and Alt and Lassen (2005), adjusting it for the specifically transitional aspects of the analysed group of countries. We begin by describing variables used in our estimations. This is followed by a cross-sectional analysis assuming no feedback from fiscal transparency to fiscal performance. We subsequently relax this assumption by treating fiscal transparency as an endogenous variable.

#### 4.2.1 Data description

Empirical analysis is used to test the theoretical models presented by Shi and Svensson (2002), and extensions to this by Alt and Lassen (2005), in order to examine the relationship between transparency and fiscal performance, controlling also for other factors. The dependent variable in the model is general government debt, expressed as a percentage of GDP. The explanatory variables are divided into groups.

The first group stems from the theoretical model by Alt and Lassen (2005) and includes fiscal transparency, political polarisation and average frequency of right-of-centre governments. The measure of fiscal transparency is based on an index encompassing five broad categories of transparency compiled by Jarmuzek et al. (2006) with a cut-off point of June 2005. The measure of political polarisation is defined as maximum polarisation between the executive party and the four principle parties in the legislature, which is derived from the dataset compiled by Beck et al (2004). The variable for right-of-centre government is measured by the proportion of years 1995-2004 in which a right-of-centre party was in office and is calculated based on the dataset compiled by Beck et al (2004).

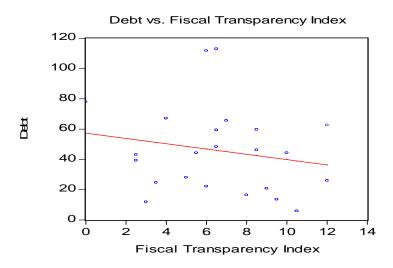
The second group is represented by economic control variables. All the variables, with the exception of initial debt, are averages over the period 1995-2004 designed to account for business cycle effects. We include the initial level of debt in 1995, as countries which had high debt in the past are more likely to have high debt in the future (Alt and Lassen, 2005). Both average economic growth over the period 1995-2004 and the average change in unemployment rate are considered. However, since both variables appear to be correlated, which would cause a problem of multicollinearity we use average economic growth.

The third group is related to economic and political variables stemming from the literature on debt accumulation. We follow Alesina and Perotti (1999), as well as Persson and Tabellini (2003), in analysing the impact of variables such as economic openness, terms of trade and income per capita.

The fourth group follows measures proposed by Hallerberg and von Hagen (1997), who emphasise the role of institutional variables such as the position of the Ministry of Finance in relation to other ministries and the role played in fiscal requirements by the Maastricht Treaty. The other variable is the EBRD transition index, which represents advances in economic reforms.

## 4.2.2 Effects of fiscal transparency

The scatter diagram of fiscal transparency against fiscal performance defined as the debt-to-GDP ratio provides some preliminary evidence that the extent to which fiscal policy is open to the general public is not strongly correlated with debt accumulation. This is depicted in Figure 2. Although the association is negative, which is in line with the theoretical models, it is weak. The outliers are Bulgaria and Kyrgyzstan. Care must be taken in interpreting the scatterplot presented in Figures 2 as it says nothing about the direction of causal impact associated with fiscal transparency and fiscal performance. The issue of potential endogeneity of fiscal transparency is discussed in detail in the next section.



We now turn to our cross-sectional model. The generic specification we use is as follows:

$$Debt = \alpha_0 + \alpha_1 \text{ political polarisation} + \alpha_2 \text{ average right-wing government}$$

$$+ \alpha_3 \text{ fiscal transparency index} + \alpha_4 \text{ initial debt level} + \varepsilon$$
(1)

In the first stage an econometric methodology employed to test the relationship between transparency and fiscal discipline is based on OLS estimations with robust standard errors. The results, shown in Table 1 in Appendix 1, do not support the predictions stemming from the theoretical models. Although the scatter diagram shows some negative relation between transparency and fiscal performance the econometric analysis provides no strong statistical evidence for the importance of fiscal transparency. The other predictions of the theoretical model by Alt and Lassen (2005) do not hold for transition economies either. The variable for right-of-centre government turns out to be statistically significant, but with a sign opposite to what the theory would suggest. This is not surprising when analysing the politics underlying transition economies. Right-ofcentre governments in this region have a generally conservative worldview when it comes to legal and religious issues, but are usually in favour of a pro-social approach when it comes to the actual conduct of economic policy. This feature clearly distinguishes politics in transition economies from that in more mature democracies. The measure of political polarisation, defined as maximum polarisation between the executive party and the four principle parties of the legislature, turns out to be statistically insignificant.

The importance of control variables for fiscal discipline varies. The initial level of debt, reflecting past policies, tends to affect the accumulation of debt in the future. Higher economic growth has no statistically significant impact on fiscal performance. We follow Alt and Lassen (2005) and conduct a robustness check of the results with respect to other controls such as openness, institutional variables and the EBRD transition index. Since the nature of our analysis is cross-sectional, the number of observation is rather limited. Therefore, we extend our basic specification by adding these variables one-by-one. They do not explain the variation in debt and the inclusion of these additional control variables does not alter the results in a significant way. The sign and extent of fiscal transparency, average right-of-center governments and political polarisation remains to a large extent the same.

Although it is not possible to interpret the value of the coefficient attached to the fiscal transparency index it makes sense to examine (i) whether fiscal transparency is statistically significant, and (ii) what is the sign of the coefficient related to fiscal transparency. In other words, the former addresses the issue of whether fiscal transparency affects fiscal performance, whereas the latter informs us if the impact of transparency on fiscal performance is positive or negative. This approach is in line with the research on central bank independence by Alesina and Summers (1991) and Cukierman (1992) as well as on the importance of institutions for economic growth by Easterly and Rebelo (1993).

## 4.2.3 Endogeneity of fiscal transparency

In our base-scenario analysis the key variable affecting debt is transparency, however one can imagine a situation in which this may also work in the opposite direction. This leads us to a very important problem of endogeneity associated with the fact that governments that tend to perform well in terms of fiscal policy are usually also more transparent, as politicians tend to want to appear successful under favourable circumstances in order to increase their chances of winning the next elections. However, this may mean that fiscal discipline in effect leads to greater transparency. Thus, there is a need to test this phenomenon empirically by estimating the system of two equations, embedding both debt and fiscal transparency as endogenous variables. In order to do so we must first define the variables that determine fiscal transparency. The candidates here are the political competition index, the rule of law and media freedom index. The idea behind political competition is that frequent political turnover encourages all political parties to implement transparent budget institutions with the intention of reducing opportunistic behaviour and debt accumulation. The measure for political competition can be past turnover, which is expected to be positively correlated with transparency. The rule of law system should also be positively correlated with openness of government regarding fiscal operations, as noted by La Porta et al. (1999). This variable is also provided by Beck et al (2004). The importance of a free media for establishing transparent fiscal policy formulation and execution in transition economies is quantified by the media freedom index compiled by the Freedom House. We also correct for potential endogeneity by including debt as an explanatory variable for transparency.

In the first stage the econometric methodology employed to test the relationship between transparency and fiscal discipline is based on OLS estimations. However, because of the aforementioned potential endogeneity we also use the two-stage least squares (2SLS) method to ensure that the estimators are consistent (Wooldridge, 2002). This method is a special case of the generalised instrumental variable estimation for systems of equations. The procedure commences with an estimation of the reduced form by OLS, which means in practice that those variables that are perceived as endogenous are regressed on all instrumental variables. The crucial condition for choosing instrumental variables is that they have to be correlated with the endogenous variables, but not with the error term of the underlying equation. However, the validity of instrumental variables can be tested if and only if the system is over-identified, which means a situation in which the number of endogenous variables is less than the total number of variables excluded from the equation under consideration. Otherwise the only one feasible option is to rely on economic theory (Verbeek, 2004). The second step is to estimate the original equations by OLS, but in this case all endogenous variables located on the right hand side are replaced with their predicted values from the reduced form. Another method applied in our econometric analysis includes estimating our model by the GMM, which takes into account the fact that there is conditional heteroskedasticity prevalent. Under these circumstances the asymptotically efficient estimator is two-step GMM (Wooldridge, 2002).

We therefore re-estimate equation (1) using both 2SLS and GMM estimators with robust standard errors. We employ as instruments for fiscal transparency the political competition index, the rule of law and media freedom index and also include the level of debt. The results are reported in Table 2 in Appendix 1. The estimated effects of fiscal transparency are similar to, although slightly stronger than, those obtained from OLS. According to estimations based on GMM, fiscal transparency becomes statistically significant although only marginally so. Average right-of-centre governments are again negatively correlated with debt accumulation, but this variable remains significant for both 2SLS and GMM. Political polarisation and real GDP growth continue to be insignificant. Excluding any of the instruments does not invalidate the results concerning transparency, but it makes the instruments weaker.

#### 5. Conclusions

The theoretical literature on the implications of fiscal transparency is not large. The common feature is that transparency tends to be associated with superior fiscal performance. The empirical literature encompasses the institutional approach, attempting to capture fiscal transparency in an index, and the analysis of interactions between transparency and fiscal performance. The results for developed countries show that fiscal transparency is an important element in establishing fiscal discipline.

The empirical analysis for transition economies provides no strong statistical evidence for the importance of fiscal transparency. This may be a result of lack of consensus among politicians to restrain fiscal policy and/or no incentives for politicians to conceal fiscal laxity. The other reason why fiscal transparency is not statistically significant may stem from difficulties in measuring fiscal transparency and the relatively short time span of the rapid structural changes that have taken place in both macroeconomic and political environments.

The other predictions of the theoretical model by Alt and Lassen (2005) do not hold for transition economies either. The variable covering average right-of-centre governments turns out to be statistically significant, but with a sign that is opposite to what the theory would suggest. This may be due to the fact that right-of-centre governments in this region tend to have rather conservative views when it comes to legal and religious issues, but are usually in favour of a more pro-social approach when it comes to implementing economic policy. This feature clearly distinguishes the politics in transition economies from those found in more mature democracies.

#### References

Alesina, A., R. Hausmann, R. Hommes, and E. Stein (1999) "Budget Institutions and Fiscal Performance in Latin America." Journal of Development Economics 59, 233-253.

Alesina, A. and R. Perotti (1999) "Budget Deficits and Budget Institutions," in J. M.

Poterba and J. von Hagen (eds.) Fiscal Institutions and Fiscal Performance, University of Chicago Press.

Alesina, A. and R. Perotti (1996) "Fiscal Discipline and the Budget Process." American Economic Review 86, 401-407.

Alesina, A., and G. Tabellini (1990) "A Positive Theory of Budget Deficits and Government Debt." Review of Economic Studies 57, 403-414.

Alesina, A. and L. Summers (1991) "Central Bank Independence and Macroeconomic Performance-Some Comparative Evidence". Journal of Money, Credit and Banking, May, 151-62

Allan W. and T. Perry (2003) "Fiscal Transparency in EU Accession Countries", IMF Working Paper, WP03/163

Alt, J. E., D. D. Lassen and D. Skilling (2002) "Fiscal Transparency, Gubernatorial Popularity, and the Scale of Government: Evidence from the States," State Politics and Policy Quarterly 2, 230-250.

Alt J.E. and D. D. Lassen, (2006a) "Fiscal Transparency, Political Parties, and Debt in OECD Countries", European Economic Review, forthcoming

Alt J.E. and D. D. Lassen, (2006b) "Transparency, Political Polarization, and Political Budget Cycles in OECD Countries", American Journal of Political Science 50, No. 3, 530-550

Alt J.E., D. D. Lassen and S. Rose (2006) "The Causes of Fiscal Transparency: Evidence from the American States", IMF Staff Papers, forthcoming

Besley, T. (2005) Principal Agents? The Political Economy of Good Government. Oxford University Press

Besley, T. and A. Smart (2003) Fiscal Restraints and Voter Welfare, Manuscript, LSE, October

Cukierman A. (1992) Central Bank Strategy, Credibility and Independence-Theory and Evidence. The MIT Press, Cambridge, MA.

de Haan, J., W. Moessen, and B. Volkerink (1999) "Budgetary Procedures -- Aspects and Changes: New Evidence for Some European Countries," in J. M. Poterba and J. von Hagen (eds.) Fiscal Institutions and Fiscal Performance, University of Chicago Press.

Guerrero J. P. and H. Hofbauer (2001) "Index of Budget Transparency in Five Latin American Coutries: Argentina, Brazil, Chile, Mexico, and Peru", International Budget Project.

Easterly, W. (1999) "When is Fiscal Adjustment an Illusion?" Economic Policy April, 57-76.

Easterly W., S. Rebelo (1993) "Fiscal Policy and Economic Growth", Journal of Monetary Economics vol. 32.

Ferejohn, J. (1999) "Accountability and Authority: Towards a Model of Political Accountability," in A. Przeworski, B. Manin and S. C. Stokes (eds.), Democracy, Accountability, and Representation, New York: Cambridge University Press.

Fabrizio, S. and A. Mody (2006) Can Budget Institutions Counteract Political Discipline?, IMF Working Paper, WP06/123

Gleich, H. (2003) Budget Institutions and Fiscal Performance in Central and Eastern European Countries, ECB Working Paper No. 215

von Hagen, J. (1992) "Budgeting Procedures and Fiscal Performance in the European Community." EEC Economic Papers 9

Hall, P., and R. Taylor (1996) "Political Science and the Three New Institutionalisms" Political Studies 936-957.

Hallerberg, M. and J. von Hagen (1997) "Electoral Institutions, Cabinet Negotiations, and Budget Deficits within the European Union." CEPR Discussion Paper 1555.

Hallerberg, M., L. Vinhas de Souza, and W. Clark (2002) "Political Business Cycles in EU Accession Countries." European Union Politics 3(2): 231-50

Hameed, F. (2005) Fiscal Transparency and Economic Outcomes, IMF Working Paper, WP05/225

Hemming R. and M. Kell (2001)"Promoting Fiscal responsibility: transparency, rules and Independent Fiscal Authorities", in: Fiscal Rules: Papers Presented at the Bank of Italy Workshop Held in Perugia, 1-3 February 2001

IMF (2001) Government Finance Statistics Manual

IMF (1998) Codes of Good Practices on Fiscal Transparency

IMF (1998) IMF Survey

Jarmuzek, M, E. K. Polgar, R. Matousek, J. Hoelscher (2006) Fiscal Transparency in Transition Economies, CASE Studies and Analyses No. 328

Kopits, G., and J. Craig (1998) "Transparency in Government Operations," IMF Occasional Paper 158.

Kopits and Szekely (2002) "Fiscal Policy Challenges of EU Accession for Central European Economies", a paper presented at the conference organised by the Austrian National Bank, Vienna, November 3-5

Laver, M. and W. B. Hunt (1992) Policy and Party Competition. New York: Routledge.

Milesi-Ferretti, G. M. (Forthcoming) "Good, Bad or Ugly? On The Effects of Fiscal Rulet with Creative Accounting." Journal of Public Economics.

OECD (1995) Budgeting for Results: Perspectives on Public Expenditure Management, Paris.

OECD (1998) Survey of Budgeting Developments -- Country Responses, PUMA/SBO(98)3/ANN.

OECD (2001) OECD Best Practices for Budget Transparency. PUMA/SBO(2000)6/FINAL, May.

Persson, T., and L. E. O. Svensson (1989) "Why a Stubborn Conservative Would Run a Deficit; Policy with Time Inconsistent Preferences." Quarterly Journal of Economics 104, 325-346.

Persson, T, and G. Tabellini (2000) Political Economics: Explaining Economic Policy, MIT Press.

Persson, T., and G. Tabellini (2003) The Economic Effect of Constitutions. MIT Press.

Petrie M. (2003) "Promoting Fiscal Transparency: The Complementary Roles of the IMF, Financial Markets, and Civil Society", IMF Working Paper, WP03/199

Pindyck, R. and D. Rubinfeld (1998) Econometric Models and Economic Forecasts, McGraw Hill

Poterba, J., and J. von Hagen (1999) "Introduction," in J. M. Poterba and J. von Hagen (eds.) Fiscal Institutions and Fiscal Performance, University of Chicago Press.

Prat, A. (2005) The Wrong Kind of Transparency, American Economic Review 95, 862-77

Rogoff, K. (1990) "Equilibrium Political Business Cycles." American Economic Review 80, 21-36.

Shi, M. and J. Svensson (2006) "Conditional Political Budget Cycles." Journal of Public Economy, forthcoming

Stasavage, D. (2003) "Transparency, Democratic Accountability, and the Economic Consequences of Monetary Institutions." American Journal of Political Science 47, 389-403.

Tanzi, V., and L. Schuknecht (2000) Public Spending in the 20th Century: A Global Perspective, Cambridge University Press

Verbeek, M. (2004) A Guide to Modern Econometrics, John Wiley and Sons

Wooldridge, J. (2002) Econometric Analysis of Cross-section and Panel Data, MIT Press

## Appendix 1

Table 1

14010 1		
	debt	debt
political polarisation	-2.59	-2.68
	(2.73)	(3.72)
right-wing government	-14.26	-14.39
	(7.00)*	(7.85)*
fiscal transparency	-0.63	0.81
	(0.76)	(0.89)
initial debt	0.83	0.83
	(0.08)***	(0.09)***
real GDP		-0.09
		(1.67)
N	27	27
adj R^2	0.88	0.87
·	·	·

Robust small-sample corrected standard errors are in parentheses. Variables that are significant at the 90% level are denoted by \*, at the 95% level by \*\*, and at the 99% level by \*\*\*.

Table2

	Debt	
	TSLS	GMM
political polarisation	-2.22	-2.01
	(4.25)	(1.67)
right-wing government	-14.19	-14.60
	(7.99)*	(7.56)*
fiscal transparency	-0.82	-1.27
	(0.98)	(0.66)*
initial debt	0.83	0.84
	(0.08)***	(0.06)***
real GDP	0.00	0.70
	(1.42)	(1.21)
N	27	27

Robust small-sample corrected standard errors are in parentheses. Variables that are significant at the 90% level are denoted by \*, at the 95% level by \*\*, and at the 99% level by \*\*\*. Instruments as reported in text.