LIMITS TO DISCRETIONARY DECISION-MAKING IN RAPIDLY CHANGING ECONOMIC ENVIRONMENT: FISCAL POLICY AND SPECIAL INTERESTS

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Over the last few decades, a noticeable change in the approach to stabilization policy can be observed, namely a shift from discretion to rule-based policy. Rules in economic policy ensure predictability and reduce uncertainty, help policymakers avoid short-term pressures from special interest groups, act in line with long-term objectives, and facilitate communication and increase accountability. Nevertheless, we witness major (endogenous and exogenous) shocks that require quick decisions through discretionary decision-making. Economic policymakers must respond flexibly to a rapidly changing economic environment, and discretionary decision-making in this context might be beneficial. However, a constant re-evaluation (inconsistency) of economic policy decisions and new discretionary decisions might create an unstable economic environment. Policymakers face information asymmetry in the form of incomplete or distorted information supplied by the sphere of influence (interest groups). This study investigates the relationship between institutional quality, represented by the degree of transparent lobbying as a proxy indicator of information asymmetry, and economic policy consistency, characterized by the volatility of fiscal policy discretion. We find that the higher the transparency of the lobbying environment, the lower the variability of fiscal policy's discretionary component. Understanding the determinants of fiscal policy volatility is crucial for achieving sustainable development.

DOI https://doi.org/ 10 18690/um epf 5 2024 54

ISBN 978-961-286-867-3

Keywords: fiscal policy, lobbying, discretion, information asymmetry, decision-making

> **JEL:** D72, E61



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1 Introduction

Discretionary tools shape fiscal policies, impacting sustainability. Governments must make informed choices to balance immediate needs with long-term viability, fostering economic, social, and environmental well-being. Fiscal sustainability is crucial for a government's long-term financial health. It involves maintaining public finances in a credible and serviceable position over time. Key aspects include revenues, expenditures, debt, and employee benefits, all measured in present value terms. Structural pressures, such as suburbanization, demographic changes, and business cycles, impact a government's sustainability. Sustainable fiscal development encompasses environmental, social, and economic dimensions. While short-term local budgets may use temporary measures, a fiscally sustainable budget focuses on long-term viability, minimizing economic distortion, and promoting community welfare, equity, and environmental well-being (Chapman, 2022; Pradhan, 2019).

Economic policy discussions have grappled with the tension between rules and discretion in recent decades. Policymakers face a dilemma: Should they adhere to rules-based approaches, which offer predictability and systematization, or embrace discretionary decision-making to adapt swiftly to changing economic conditions? While rules provide stability (e.g., Kydland & Prescott, 1977; Lucas, 1986; Taylor, 2011), discretion allows flexibility (e.g., Kelman, 1990; Duflo et al., 2018; Bandiera et al., 2021). However, the balance between these approaches remains delicate, especially during crises like epidemics and war. Enhancing institutional transparency could be a solution to mitigate risks. Yet, the literature lacks sufficient exploration of the link between transparency and decision-making consistency.

Our approach recognizes that information asymmetry significantly impacts economic policy consistency. Governments grapple with incomplete or distorted information from interest groups and lobbying while simultaneously exploiting this asymmetry for their own interests. To mitigate this, institutions—such as rules of the game—can minimize the impact of information asymmetry. We propose that transparency in decision-making is a crucial factor for consistent economic policy. Testing this theoretical approach using data on institutional quality and fiscal policy volatility reveals the consequences of inconsistency in economic policy.

This paper is divided into five sections. Section 2 provides the theoretical underpinning. Section 3 presents the methodology and describes the variables used. Section 4 introduces the empirical results, and Section 5 discusses the main findings and concludes the paper.

2 Theoretical Underpinning

The problem of asymmetry information is primarily linked with the agency, contract theory and the firm (Gravell & Rees, 2004), efficiency wage theory (e.g., Stiglitz 1974, 1976; Akerlof & Yellen 1986, 1990; Greenwald & Stiglitz 1988), credit markets and its implications for macroeconomic (Stiglitz & Weis, 1992). Later the literature also has started to cover the problem of imperfect/asymmetric information in economic policy, e.g., Mirrlees (1971), Baron and Myerson (1982), mainly in regulation as well as in taxation (e.g., Stiglitz 2002; Shapington and Stiglitz 1987; Lafont and Tirole 1993). Agur et al. (2021) have provided a foray into the intersection between the political economy factors and dynamic consistency problems of financial regulation, which have been examined separately in the previous literature. The information asymmetry with which the model works is on the side of the public, as it has a minimal overview of the healthy condition of the financial sector. The results confirm that policy credibility may fail, and welfare may decline due to the interaction between time inconsistency and political motivations. Like private actors in contractual relationships, governments also encounter information gaps when designing policies and remedies. In essence, attempts to rectify market failures or undesirable allocations may not only fall short of the mark but could potentially exacerbate the initial inefficiency or socially adverse outcomes. Stiglitz (2017) concludes that the problem is not just information asymmetry but mainly its endogeneity and underlines the relevance of institutions and the rules of the game. However, it is essential to note that the government, as a rule-maker, may follow the same patterns in seeking re-election and set or bend the rules to suit its interests.

Dynamic inconsistency vs rules-based decision-making is a common problem for economic policymaking. Inconsistency undermines credibility and the systems in which decision-making or judgments are made. Bandiera et al. (2021) outline that rules limit the government's ability, as an agent, to pursue its private interests at the expense of taxpayers and point out that the risk of misuse of discretionary instruments, especially in the case of weak institutions or external shocks, remains

high. And they further clarify that the flexibility of the rules consists, among other things, of the relaxation of transparency rules, including rules for a transparent decision-making process. On the other hand, discretion allows the government to use its knowledge of the context to respond quickly to unforeseen changes. Our approach builds upon the rational expectations of economic agents, but we place renewed emphasis on the context of information asymmetry compared to previous approaches in the literature. Asymmetric information, which typically favours the agent, can give rise to two primary challenges for the principal: adverse selection (related to hidden information) and moral hazard (related to hidden actions). Consequently, we posit that information asymmetry significantly influences economic policy decisions. To address this, enhancing the institutional environment's quality—particularly through transparency in decision-making—can mitigate information gaps and bolster the credibility of government decisions regarding economic policies and objectives.

In this paper, we restrict economic policy to fiscal policy, and from this perspective, we understand credibility as the low volatility of fiscal policy. We consider institutional quality (IQ) as a proxy for information asymmetry — the higher the IQ, the lower the information asymmetry. We narrow down institutional quality to transparency in decision-making, which we assess using a set of measures that regulate/constrain economic policy decision-makers (the decision sphere) and economic policy influence holders (the sphere of influence).

3 Methodology and Data

In this study, we delve into discretionary policy, specifically emphasizing fiscal policy and its associated variables. To account for the impact of the business cycle, we adjust these variables and investigate their relationship with institutional quality. Our analysis builds upon prior research (Laboutková et al., 2020; Šimral and Laboutková, 2021; Laboutková and Vymětal, 2023), highlighting transparent decision-making rules as key indicators of institutional quality. Notably, decision-making processes, including policy implementation and realization, are often influenced by specific interests, such as lobbying. Considering these, we have identified 16 measures enhancing transparent decision-making and collected unique data. These 16 measures with 121 measurable indicators are grouped in the *catalogue of transparent lobbying environments* (CTLE). The obtained data is the result of the transparent

lobbying assessment according to CTLE for six countries in Central and Eastern Europe. The selection of Austria, the Czech Republic, Hungary, Poland, Slovakia, and Slovenia is based on a unique historical background (Habsburg legacy) but with varying institutional qualities were intentionally chosen. However, a small number of countries have shown limits for the demonstration of statistical links with fiscal policy volatility. In addition, the Czech Republic and Slovenia had to be excluded from the set of countries because equation (1) does not seem suitable for these countries' data. Another limitation is the static nature of the data; the data collection took place on time in the fourth quarter of 2019. Refer Table 1 for details.

Table 1: Descriptive Statistics

V ariable	No. of. obs.	Mean	Standard deviation	Min	Max	Type of transformation over the time window	Source
	7	Variable	es inclu	ided in	the esti	mation of the f	iscal policy rule
F ¹ - General government primary net lending/borrowing	297	-0,82	3,36	- 29,29	4,98	Not applicable	International Monetary Fund, World Economic Outlook Database
F ² - General government net lending/borrowing	297	0,17	0,72	-6,43	4,06	Not applicable	International Monetary Fund, World Economic Outlook Database
F ⁴ - General government revenue	297	42,45	6,77	22,43	56,36	Not applicable	International Monetary Fund, World Economic Outlook Database
F ⁵ - General government revenue	297	45,17	7,31	24,20	64,91	Not applicable	International Monetary Fund, World Economic Outlook Database
Output gap	297	-0,99	3,15	13,16	7,95	Not applicable	Output gaps according to the European Union's Commonly Agreed Methodology
General government gross debt	297	68,32	38,45	6,16	211,90	Not applicable	International Monetary Fund, World Economic Outlook Database

	Variables included in the estimation of the volatility of fiscal policy discretion								
Life expectancy	224	79,67	2,82	73,96	83,20	Average	World Bank, World Development Indicators		
Investment to expenditure	224	0,02	0,02	-0,02	0,07	Average	Authors calculation		
CTLE - lobbyists	6	0,26	0,25	0,04	0,58	Level at time 2019	Laboutková et al. (2020)		
CTLE - targets of lobbying	6	0,48	0,16	0,22	0,71	Level at time 2019	Laboutková et al. (2020)		
CTLE - sunshine principles	6	0,57	0,11	0,41	0,71	Level at time 2019	Laboutková et al. (2020)		
CTLE - monitoring and sanctioning	6	0,30	0,17	0,13	0,53	Level at time 2019	Laboutková et al. (2020)		
CTLE - total	6	0,40	0,11	0,29	0,55	Level at time 2019	Laboutková et al. (2020)		
Parliamentary election years	297	-	-	-	-	Not applicable	University of Gothenburg, Quality of Government (QoG)		
Membership in EU	297	-	=	-	=	Not applicable			

To uncover the significance of the quality of the decision-making process in minimizing unwanted discretionary fiscal behaviour, we use Angello and Sousa's (2014) econometric model. We partially modify variables to capture the quality of the decision-making process better and, in our view, have the potential to influence governments' fiscal behaviour.

(1)
$$\Delta F_t = \alpha + \gamma \Delta F_{t-1} + \delta GAP_t + \Gamma Z_t + \zeta_t^F$$

where F_t denotes the primary real budget balance or its components (real government revenue or real government spending), GAP_t is the output gap (to eliminate the impact of cyclical movements in revenue and expenditure), and Z_t is a vector of control variables, including typically a time trend and inflation. We consider general government gross debt and general government gross debt squared. Parameter α is a constant, γ captures the persistence of the fiscal policy instrument, δ tracks the responsiveness of fiscal policy to the business cycle, Γ is the vector of coefficients associated with the control variables, and ζ_t^F represents the discretionary component of the fiscal policy.

To estimate the standard deviations of the discretionary component for variable F, we consider real general government budget deficit, revenue, and expenditure, for consecutive, non-overlapping three-year periods from 2012 to 2020. Following Angello and Sousa (2014), we use the below model.

(2)
$$\sigma(\zeta_{i,t}^F) = \beta_0 \sigma(\zeta_{i,t-1}^F) + Y_{i,t} \beta_1 + \beta_2 Le x_{i,t} + X_{i,t} \beta_3 + v_i + \varepsilon_{i,t}$$

where $\sigma(\zeta_{i,t}^F)$ is the standard deviation of the fiscal policy component of countries for the three-year non-overlapping period, $Y_{i,t}$ is the set of political and institutional variables, and $X_{i,t}$ is the set of macroeconomic variables, such as general government gross investment in non-financial assets as a percentage of general government expenditure and membership in the Eurozone. Variable $Lex_{i,t}$ denotes life expectancy at birth. The vector $\boldsymbol{\beta} = (\beta_0, \beta_1, \beta_2, \beta_3)$ includes all parameters to be estimated, ν_i accounts for fixed effects, and $\varepsilon_{i,j}$ is an independent and identically distributed error term.

Similar to Angello and Sousa (2014), we eliminated the correlation between countries and exploratory variables and used the generalized method of moments (Holtz-Eakin et al., 1988) to estimate the following equation. In practice, we use the R software (Chaussé, 2010).

$$(3) \qquad \Delta\sigma\left(\zeta_{i,t}^{F}\right) = \beta_{0}\Delta\sigma\left(\zeta_{i,t-1}^{F}\right) + \Delta Y_{i,t}^{'}\beta_{1} + \beta_{2}\Delta Lex_{i,t} + \Delta X_{i,t}^{'}\beta_{3} + \Delta\varepsilon_{i,t}.$$

The periods are 2012–2014, 2015–2017, and 2018–2020. This reduces the number of observations in the second step, and thus, the number of possible choices of variables or regressors. These periods are relatively stable; therefore, we considered a constant as one parameters of the model.

4 Results

The provided econometric analysis has proved our hypothesis that the higher quality of the institutional environment demonstrated by greater transparency in decision-making reduces the information asymmetry and thus enhances the consistency of government decision-making regarding their economic policies. In this case, we have examined the volatility of fiscal policy instruments through the variables corresponding to catalogue of transparent lobbying environments.

The empirical findings validate the established hypothesis across the examined countries: greater transparency in the lobbying environment (as indicated by a higher CTLE score) corresponds to a higher quality institutional environment characterized by transparent decision-making processes (addressing who, why, and how). Specifically, this relationship is associated with reduced variability in the discretionary component of fiscal policy. Notably, this effect extends to key fiscal indicators, including primary net lending/net borrowing, general government revenue, and government total expenditure. Measures related to lobbyists and monitoring/sanctions significantly impact government revenues and expenditures. However, the hypothesis remains inconclusive for the categories of lobbied and sunshine principles.

Furthermore, our analysis reveals substantial persistence in fiscal policy volatility, as evidenced by the statistically significant coefficient associated with the lagged dependent variable. This persistence underscores the importance of inertia in the budgetary process and supports the use of a dynamic panel data model.

We also included another possible factor in our analysis, life expectancy, which is insignificant in a small sample of countries and behaves as a constant. However, a certain fraction of volatility does not change over a given period, and we express this stability using a constant term in our model, preferring life expectancy. Furthermore, we find that investment expenditure ratio is a significant economic variable with a statistically significant effect on volatility when excluded for total government expenditure in the baseline model.

The analysis of fiscal policy volatility was more extensive. We also added the other political factors of Eurozone membership and parliamentary election years to our models to control for their impact on the decision-making process. Our findings reveal no statistically significant associations.

5 Discussion and Conclusions

On the revenue side of the state budget, this dynamic often manifests through establishing various tax exemptions. A wealth of studies (e.g., Cao et al., 2018; Clausing, 2016; Devereux et al., 2008; Richter et al., 2009; Romero, 2019) supports the notion that tax exemptions incentivize lobbying efforts by interest groups aiming

to influence tax policy in their favour. Meanwhile, on the expenditure side, this phenomenon is evident in sectoral policies, where lobbying pressure seeks subsidies to bolster specific industries—a form of rent-seeking behaviour (Buchanan, Tollison & Tullock, 1980).

Moreover, the opacity of lobbying behaviour significantly impacts the efficiency of public procurement, a major component of discretionary government expenditure. When decision-making lacks transparency, corruption opportunities arise, particularly in public procurement.

However, well-set lobbyist regulations must also be complemented by an effective enforcement system. The results show that weak sanctions or insufficient compliance monitoring with established rules lead to higher volatility of discretionary fiscal policy.

The outcomes suggest that measures to ensure a transparent lobbying environment and, consequently, transparency in the decision-making process must be approached comprehensively, as it is clearly shown that their combination and logical interdependence significantly impact the fiscal policy setting. In a weakly regulated lobbying environment, lobbyists exploit this information asymmetry to their advantage.

The disadvantage is the one-shot data collection. In the next research stage, we can employ additional institutional quality indicators offering a more extended time series, such as Worldwide Governance Indicators and a more significant number of countries to test possible links at a robust level.

Acknowledgment

This work was supported by Czech Science Foundation: [Grant Number No. GACR 22–03636S] Aggregation of Methodologies Based on Economic Data.

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