Influence of Government Quality on Budgetary Transparency

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Abstract: Our study investigates the influence of governance at national level on budgetary transparency for a sample of 94 countries over a period of four years (2009-2012). Macroeconomic governance dimensions are measured using the 6 World Bank indicators, namely: voice and accountability, the quality of the regulatory environment, political stability and absence of violence, rule of law, government effectiveness and control of corruption. To measure budget transparency index we used budgetary transparency (Open Budget Index) which is calculated by the International Budget Partenership. To capture the extent to which national governance affects budget transparency, we analyzed cross-temporal data series using least squares (OLS). The results of this analysis of panel type clarifies and quantifies the influence the different characteristics of national governance have on budgetary transparency. These results indicate that the relationship is statistically significant, 64% of the variation is explained by budgetary transparency dimensions of governance. We consider appropriate the efforts to foster budgetary transparency in the current global economic environment, by building new horizons for sustainable strategies to manage public resources as well as significant implications for policy makers.

Keywords: budget transparency, government policies, government quality

1. INTRODUCTION

In the knowledge economy it is declared the need for new studies in decision-making in order to support sustainability initiatives for budgetary transparency and governance. The issue of budget transparency aimed at not just one country, the action is global, having as major objective sustainable public funds.

Premchand (1993) defines budget transparency as the public availability of information on procedures on the transactions and decisions of governments. Based on empirical studies, Renzio & Masud (2011) define budget transparency as a key component in the process of governance reforms. Transparency in literature is defined as a concept ranging from aspects of information to accounting issues. Information, as part of transparency, focus more on accounting but can also be used as a mechanism of coercion (Williams, 2014). A statement in the economic environment, though not without controversy, is that "more information is always preferable to less." The trend of increasing transparency and monitoring budget is part of a wider push toward initiatives for transparency and accountability of the party ", applying", which are run by people who want to own responsibility through increased transparency and access to information (McGee and Gaventa, 2011). Budgetary transparency is the openness to the general public regarding the government structure and functions, fiscal policy intentions, public sector accounts and projects. This involves access to reliable, comprehensive, timely, understandable and comparable internationally regarding government activities undertaken within or outside the government sector, so that the electorate and financial markets can accurately assess the financial position of the Government and the true costs and benefits of government activities, including economic and social implications of current and future (Kopits & Craig, 1998). The research is divided into the following main parts: The first part presents a review of literature on budget transparency in terms of both theoretical and practical, the second part describes the research methodology and analysis model of governance quality on budget transparency and the last part includes empirical results and conclusions of the research.

2. LITERATURE REVIEW

The good governance at the national level involves accountability, transparency in economic policy making and the rule of law, while all these elements play an important role for growth and business development (Grosanu et al., 2014: 63).

The countries with a high level of budgetary transparency tend to get good results on the development and take more economic and social benefits for their citizens and tend to

be more democratic (Fukuda-Parr et al., 2011). Even when regional differences in income per capita are constant remains an association statistically significant between budgetary transparency and survival of newborns and children, the percentage of population using improved drinking water and levels of expenditure on public health and also budget transparency helps to attract cheaper international credit. Research indicates that countries with a higher level of budgetary transparency have higher credit ratings and lower credit borrowing rates (Hameed, 2011). However, budget oversight gives people the opportunity to present their views on the desirability of services and investment, and this often leads to the efficient use of public funds.

Studies in the literature have shown that transparent governance leads to sustainable public finances (Alt and Lassen 2006), to reduce sovereign borrowing costs (Glennerster and Shin, 2008) and lower levels of corruption (and Neanidis Haque, 2009). The results of empirical study of Hessami (2014), based on a set of panel data for 29 OECD countries during 1996-2009, are according to the forecast of budgeting; corruption indicators grow in tandem with illicit income shares by composition of public expenditure in the state budget. The literature on corruption has focused on developing countries, but Hessami studied the relationship between creation and extraction of illicit income from politics and bureaucracy in the rich countries of the OECD. The creation and production of illicit income in high-income countries, through composition of public expenditure are not so clear like corruption in emerging countries where officials can simply take bribes from private companies and is not always necessary to hide it. The results of this research suggest that corruption is not limited to the developing countries, but is spread throughout the world (Hessami, 2014).

In a country which is developing economically, corruption must be gradually reduced (Lindgreen, 2004). In this context, corruption disadvantage the relations between authorities, corporations and individuals, reduces the efficiency of resource allocation, increased income inequality, eroding trust in public institutions, reduce the willingness of investors to invest and encourages a culture of service weaknesses (Merwe and Harris , 2012). Based on aggregate World Bank data for 169 countries, Islam (2003) found a strong correlation between transparency (the existence of freedom of information and the regular publication of economic data state) and quality of governance. Moreover, Bellver and Kaufmann (2005) suggest, based on the results of their study of 20 countries that transparency is associated with lower levels of corruption, better indicators of socio-economic and human and greater economic competitiveness. Theoretical literature concerning connections between a free media and transparency generally revolve around a type of first agent analysis (Besley and Prat, 2006; Besley and Burgess, 2002; Prat, 2006 cited by Williams, 2014) where, with the existence of asymmetric information between government and citizens, can play the role of a free press to make governments more responsive to its citizens. Press essentially can act as a check of the type of politician because the politician actions on his own are not credible. Empirical evidence on this are relatively strong. For example, in an influential publication Besley and Burgess (2001) use the example of Indian states between 1958 and 1992 to see the link between the degree of freedom of the media in each country and the responsiveness of their government to food shortages. They noted a very clear link between press freedom and the government's response to this problem. Djankov et al. (2003) developed an indicator assumed by the media to prove that if the media is state-owned, this is associated with less freedom of the press, civil and political rights and weaker social outcomes. Grosanu et al. (2014) emphasizes that the most influential features of governance on the business environment are those related to the government's ability to formulate and implement sound policies, and the perception of the extent to which forms more or less of serious corruption are controlled in a effectively by authorized institutions of the state.

3. RESEARCH METHODOLOGY

Review of literature has guided us towards the realization of an empirical study that exposes in a new light the economic transformations, social and environmental society faces, given the links between quality of governance and budget transparency.

We introduce the research hypothesis:

The level of budget transparency in country X is positively correlated with the size of the quality of governance in the country.

The description of the variables and the data source

To measure governance at national level we used indicators of governance that measures the quality of governance through six aggregate indicators, namely: voice and accountability, political stability and absence of violence, effectiveness of government, quality of regulatory framework, rule of law and control of corruption developed based on the methodology described in "Aggregating Governance Indicators" (Kaufmann et al., 1999) and developed by the World Bank (http://info.worldbank.org). Because probabilities attached to t-student statistics that establish causal relationships of the variables included in the empirical model, for Quality Regulatory Framework have exceeded the 5% threshold, confidence thus uncertainty is high, it has been eliminated. The variables included in our study varies in the range from -2.5 (poor) to 2.5 (strong) regarding government performance and are defined as follows: *Voice and accountability* (independent variable noted with VA) - reflects the perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association and freedom of the media.

Government Effectiveness (independent variable noted with GE) - reflects the perceptions of quality of public services, the quality of the civil service and the degree of independence to political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. The rule of law (independent variable noted with RL) - reflects the perceptions of the extent to which social actors trust and respect the rules of society and, in particular, the quality of implementation of contractual provisions, property rights, the police and the courts the costs and the risk of crime and violence. Control of Corruption (independent variable noted with CC) - reflects the perceptions of the extent to which public power is exercised for private gain, including forms of low and high corruption, as well as "capture" of the state by elites and private interests. Political Stability and Absence of Violence (independent variable noted with PSV) - reflects the perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically motivated violence and terrorism. The Open Budget Index considers the budgetary transparency of the governments at national or federal level (understanding the information on revenues, expenditures and government debt) and information relating to sustainable performance (dependent variable noted with OBI). Data were entered into a database using MS Office Excel program, then imported into EViews 7 for statistical and econometrical processing.

The equation estimation:

$$OBI = C(1) + C(2)*VA + C(3)*PSV + C(4)*GE + C(5)*RL + C(6)*CC$$

It is defined the regression model and used implemented functions in E-views 7 software to achieve validation tests: Student t-test and F statistical for validation of the model, Durbin Watson statistic for primary autocorrelation errors.

For testing the hypothesis defined in the research it was selected a sample of 94 countries worldwide, with 376 observations within four years, ie 2009-2012. The selection of countries was based on 2010 OBI survey that includes 94 countries. OBI being calculated every two years, we used in 2009 data from 2010 and in 2011 data from 2012. Analyzed countries are at different stages of economic development and ensure broad geographical representation from all continents.

Descriptive analysis of data series and econometric model testing

Interpreting the results obtained in Table 1 we can see that the average and median

have close values, standard deviation (std. Dev) of data series (VA, PSV, GE, RQ, RL, CC) is small, we consider that the data are relatively homogeneous; for variable reflecting budgetary transparency is recorded greater standard deviation which can be explained by the wider range of data values. Asymmetry coefficient (Skewness) and coefficient of flatness (Kurtosis) shows a distribution close to the normal data series.

Table 1. Descriptive statistics (E-views 7)

	OBI	VA	PSV	GE	RL	CC
Mean	46.31176	-0.058294	-0.301765	-0.053353	-0.173412	-0.197118
Median	49.00000	-0.110000	-0.315000	-0.175000	-0.350000	-0.395000
Maximum	93.00000	1.750000	1.370000	2.050000	1.970000	2.460000
Minimum	0.000000	-1.860000	-2.810000	-1.490000	-1.690000	-1.420000
Std. Dev.	22.46288	0.811072	0.845608	0.797388	0.849278	0.846183
Skewness	-0.190771	0.149606	-0.309007	0.745279	0.862217	1.241439
Kurtosis	2.489682	2.397453	2.894162	2.883277	3.098977	4.133025
Jarque-Bera	5.751645	6.411700	5.569535	31.66795	42.26582	105.5194
Probability	0.056370	0.040524	0.061743	0.000000	0.000000	0.000000
Sum	15746.00	-19.82000	-102.6000	-18.14000	-58.96000	-67.02000
Sum Sq. Dev.	171053.0	223.0072	242.4029	215.5458	244.5118	242.7326

Deterministic relationship between data series express the dependence between the dependent variable OBI and independent variables - the quality of governance, see Figure 1.
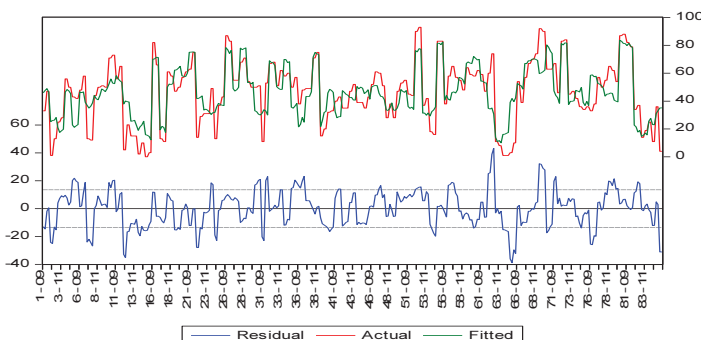

Figure 1. Real value of adjusted OBI series and series of residues

The estimation of the model parameters proposed yielded the results shown in Table 2 and attached regression equation:

OBI = 45.8397107434 + 19.5189253093*VA - 0.92515981385*PSV + 6.60346944141*GE + 13.8147532531*RL - 0.0371059004*CC

The coefficient of determination (0.641054) shows that the influence of independent variables on the dependent variable OBI is 64%. Adjusted coefficient of determination (express quality variables included in the model) suggests that information relevance of the independent variables on the dependent variable dynamic description is quite high (63%). The probabilities of the test t-Student for the independent variables coefficient are below 5% and statistical F-test = 0.000 <0.05 and thus reject the null hypothesis that the slope of the regression line is not significantly different from zero, so these exogenous variables exercises a significant influence on budget transparency.

Table 2. The results of the estimation of the regression model the of parameters

Dependent Variable: OBI				
Method: Panel Least Squares			Cross-sections included: 94	
Sample: 2009 2012 Periods included: 4			Total panel (balanced) observations: 376	
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	45.83971	0.855732	53.56786	0.0000
VA	19.51893	1.529466	12.76193	0.0000
PSV	-0.925160	1.260424	-4.700926	0.0000
GE	6.603469	2.927940	2.255330	0.0000
RL	13.81475	3.384440	4.081844	0.0001
CC	-0.03711	2.871205	-4.540639	0.0000
R-squared	0.641054	Mean dependent var		46.31176
Adjusted R-squared	0.635680	S.D. dependent var		22.46288
S.E. of regression	13.55835	Akaike info criterion		8.069372
Sum squared resid	61398.83	Schwarz criterion		8.136941
Log likelihood	-1365.793	Hannan-Quinn criter.		8.096295
F-statistic	119.3002	Durbin-Watson stat		0.211653
Prob(F-statistic)	0.000000			

4. RESULTS AND DISCUSSION

The results confirm the assumption made in research and we interpret the regression equation: As expected, the VA coefficient value has a high positive impact and indicates that an increase of one unit of VA will lead to an increase of 19.51 points of the indicator OBI; in respect of other independent variables, RL and GE, the produced coefficients are statistically significant and determines a positive (but lower than VA), which means that their increase of one unit lead with 13.81 points and 6.60 points respectively of OBI indicator. The coefficients obtained for PSV and CC variable indicates a negative impact, but not statistically significant. Overall, the model has good statistical qualities and explains 64% of variation of budget transparency. The validity of this model is supported on account of low-probabilities values, (all variables are significant at a 95% threshold) the standard error value, applied statistical tests and on the basis of determination rate which stands at 0.64. The free value term shows that the variables that were not included in the econometric model as a whole, have a positive effect on the evolution of OBI. The central argument of the empirical study is that the budgetary transparency can be supported to a large extent by the perception of the extent to which a country's citizens are able to participate in selecting their government, freedom of expression, association and the media; quality of public services, civil and policy formulation and implementation, degree of independence from political pressures and the extent to which social actors trust and respect the rules of society and, in particular, that freedom of the implementation of contractual provisions, property rights, the police and the courts, and the risk of crime and violence

5. CONCLUSION

Our research complements the statistical studies in literature that have shown that countries with a stable political environment and a government able to formulate and implement sound and transparent policies and regulations are more competitive than others and have a high level of sustainable development. To summarize our results, we emphasize that the most influential dimensions of governance over budget transparency are those related to the government's ability to formulate and implement sound policies and the credibility of the government's commitment to such policies, the perception of the extent to which social actors trust and respect the rules of society, but especially for full disclosure of all relevant fiscal information in a timely and systematic manner. In general, although there are indications that changes in the the public sector are in the right direction

to move forward, efforts should be supported in order to protect the progress made and to keep the global economy on a sustainable and transparent growth path.

Acknowledgement

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The paper is reviewed.