Robust Determinants of Government Expenditures: a Model Averaging Approach[°]

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Abstract: Existing theoretical and empirical evidence on the determinants of government expenditure is inconclusive. We posit that the main cause of this problem is theory uncertainty, which arises due to the fact that the different theories imply different mutually compatible and interrelated mechanisms. This article investigates twelve different hypotheses involving a rich set of alternative determinants and theories, using a model averaging methodology to account for theory uncertainty. We use data for 'total general' and 'central' government expenditure as well as various expenditures categories for more than 80 countries. We find strong evidence that (i) more decentralized countries have smaller central public goods expenditures, that (ii) land area increases general government expenditure, while (iii) population decreases both general and central government expenditures and mainly public goods, and that (iv) both the portion of the population over 64 and urbanization affect government expenditures positively, mainly through social protection. Also we find (v) a positive effect of globalization, not through the Rodrik (1998) 'compensate hypothesis', but through the economic and business environment that is needed because of the increased globalization and that (vi) FDI increases government size through social protection and public goods contrary to arguments for a government size reduction in order to increase competitiveness and attract FDI. Additionally, (vii) countries with a presidential system tend to have smaller 'general' and 'central' government expenditures. Finally, (viii) we find evidence against Wagner's law.

Keywords: *Public Spending, Bayesian Model Averaging*

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I. Introduction:

The recent global economic crisis has generated an intense debate among policy makers and academics about the size of government as a means to restore debt sustainability, long-term growth, and stability. Surprisingly, despite the large theoretical and empirical literature on the determinants of government size, the results are mixed. We posit that the main cause of this problem is model uncertainty arising from theory uncertainty. By theory uncertainty we mean that any given theory of government expenditure does not logically exclude other theories from also being relevant and therefore, there is no a priori justification for focusing on a specific subset of determinants.[1]

In particular, economic theory has proposed a wide range of alternative theories and hypotheses that determine government size. We collected the twelve most important hypotheses: (i) the centralization hypothesis (Brennan and Buchanan (1980)) suggests that increased fiscal decentralization will lead to less total government spending; (ii) the conflict hypothesis (Eterovic and Eterovic (2012)) suggests that a country, which faces either an internal or an external conflict increases its government size in order to deal with those conflicts; (iii) the country size hypothesis (Alesina and Wacziarg (1998)) suggests that less populated countries may have a larger share of government in GDP; (iv) the democracy hypothesis (Alesina and Wacziarg (1998)) suggests that democracy positively affects government size; (v) the demographic hypothesis (Cassette and Paty (2010), Ferris, Park and Winer (2008)) suggests that demographic characteristics such as the share of dependent individuals less than 15 or more than 64 years old, urbanization, and population growth can affect government size; (vi) the fractionalization hypothesis (Alesina et al. (2003)) suggests that governments, have a much more difficult task in achieving consensus for redistribution to the needy in a more fractionalized society; (vii) the geography and climate hypothesis (Gallup et al. (1999)) suggests that country characteristics such as a tropical climate, coastal regions and regions linked to coasts by ocean-navigable waterways and the number of neighboring states sharing a border with the country play a role in determining government size; (viii) the globalization hypothesis (Garrett (1995) and Schulze and Ursprung (1999)) has an ambiguous effect on government size, on one hand suggests an increase in government size in order to for the losers of globalization to be compensate and on the other hand suggests a decrease in government size in order to increase the competitiveness of the economy; (ix) the income inequality hypothesis (Meltzer and Richard (1981)) may generate demand for more redistribution and larger government; (x) The macroeconomic hypothesis (Rodrik (1998), Zakaria and Shakoor (2011)) suggests that macroeconomic characteristics such as debt, FDI, and inflation affect government size; (xi) the political institution hypothesis (Eterovic and Eterovic (2012), Baraldi (2008), Shelton (2007)) suggests that political characteristics such as political competition, a presidential regime, majoritarian electoral systems and political rights affect government size; and (xii) the Wagner's law hypothesis suggests that economic development increases government size.

To deal with this issue we employ Bayesian Model Averaging (BMA), which constructs estimates that do not depend on a particular model specification but rather use information from all candidate models. In particular, it amounts to forming a weighted average of model specific estimates where the weights are given by the posterior model probabilities. BMA has been widely applied in growth regressions and has proven to be particularly useful in identifying robust growth determinants (e.g., Brock and Durlauf (2001), Fernandez, Ley, and Steel (2001), Sala-i-Martin, X. and Doppelhofer, G. and Miller, R. (2004), Durlauf, Kourtellos, and Tan (2008), and Masanjala and Papageorgiou (2008)).

[1] The term theory uncertainty was first coined by Brock and Durlauf (2001) in the context of growth regressions.

Our main results are: (1) more decentralized countries have smaller central public goods expenditures, (2) country size, measured by land area, increases general government expenditure, while measured by population, decreases both general and central government expenditures, and mainly public goods, (3) both the portion of the population over 64 years old and urbanization affect government expenditures positively, mainly through social protection, (4) a positive effect of globalization, but not through the Rodrik (1998) compensate hypothesis, but through the economic and business environment that is needed due to the increased globalization, (5) FDI increases government size, through social protection and public goods (opposite results than the idea of government size reduction to increase competitiveness and to attract FDI), (6) countries with a presidential system tend to have smaller general and central government expenditures and (7) evidence against Wagner's law.

The paper is organized as follows. Section II describes the various government expenditures' hypothesis and presents the empirical literature. Section III describes the Bayesian Model Averaging methodology. Section IV describes the data. Section V investigates the robust determinants of government expenditure using BMA analysis, and Section VI concludes.

II. Literature Review

i. The 'Centralization Hypothesis'

The centralization hypothesis can be divided into three sub-hypotheses. First, the Wallis and Oates decentralization hypothesis (Wallis and Oates (1988)) suggests that an increase in fiscal decentralization will lead to an increase in the size of lower-level government (state and local) and to a decrease in the size of higher-level government. The reason is the high degree of competition in taxation among the different levels of government. Second, the Brennan/Buchanan decentralization hypothesis (Brennan and Buchanan (1980)) suggests that an increase in fiscal decentralization will lead to less total government spending. Finally, the Brennan/Buchanan collusion hypothesis (Grossman and West (1994)) suggests that it is possible that the component governments in a federal system may collude to organize a cartel-like arrangement in order to circumvent the competitive influences of fiscal federalism. In this case the size of each level of government will increase. In terms of the empirical evidence on the centralization hypothesis Marlow (1988) [US; 1946-1985; OLS] finds an inverse relation between the share of state and local expenditure in the share of government expenditures to GNP. Using the same methodology and data as Marlow, Grossman (1989) confirms the results of Marlow, but additionally he finds a positive coefficient for collusion, using as a proxy the share of federal grants-in-aid in total state and local government receipts. Jin and Zou (2002) [32 industrial and developing countries; 1980-1994; fixed effects and the feasible generalized least squares method], find that expenditure decentralization leads to smaller national governments, larger subnational governments, and larger aggregate governments; revenue decentralization increases subnational governments by less than it reduces national governments, hence leads to smaller aggregate governments; and vertical imbalance tends to increase the sizes of subnational, national, and aggregate governments. Baskaran (2011) [18 OECD countries; 1980-2000; fixed effects] finds a positive coefficient for both the subnational share of total government expenditures and revenues on public expenditures.

ii. The 'Conflict Hypothesis'

The conflict hypothesis (Eterovic and Eterovic (2012)) suggests that a country, which faces either an internal or an external conflict increases its government size in order to deal those conflicts. This increase is due to defense and/or public order and safety expenditures. Eterovic and Eterovic (2012) [86 countries;

1960-2004; fixed effects] find a positive coefficient for the armed conflict dummy. Interestingly, Ferris, Park and Winer (2008) [Canada; cointegration and error-correction model] find that the period between the two World Wars and the period after WWII (peaceful periods) negatively affect the government size.

iii. The 'Country Size Hypothesis'

In order to explain the relationship between country size and government size, Alesina and Wacziarg (1998) state that when there are fixed costs (establishing a set of institutions, a legal, monetary, and fiscal system) and economies of scale linked to partial or complete non-rivalry in the supply of public goods, less populated countries may have a larger share of government in GDP. Additionally, the costs of public goods grow less than proportionally to the size of the population. On the other hand, countries with very big territorial size may have bigger government size because of the fixed cost in different, remote regions. Nevertheless, Alesina and Wacziarg (1998) [more than 130 countries; 1985-1989; OLS], find a negative coefficient for population in all specifications. Other articles that lead to the same conclusion are Benarroch and Pandey (2008) [119 countries; 1970-2000; fixed effects]. On the other hand, Grossman (1989) and Epifani and Gancia (2009) [127 countries; 1950-2000; fixed effects], show that population has a positive effect on government size. Finally, using land area to proxy country size Adsera and Boix (2002) [65 countries; 1950-1990; OLS] and Rodrik (1998) [125 developed and developing countries; 1985-1989 and 1990-1992; OLS] find a positive effect of country size on government size.

iv. The 'Democracy Hypothesis'

Alesina and Wacziarg (1998) state that democracy positively affect government size. The main reason is the "fixed" cost in building democratic institutions, the presence of many pressure groups and the existence of social and redistribution policies. Additionally, Shelton (2007) states that democracy affects not only the size, but also the composition of government expenditure. In the existing literature, in articles like Alesina and Wacziarg (1998) and Epifani and Gancia (2009), democracy has a positive effect on government size. On the other hand, Adsera and Boix (2002) find a negative coefficient for the democratic index.

v. The 'Demographic Hypothesis'

Countries with high share of dependents, i.e. individuals less than 15 or more than 64 years old, have higher government size, mainly through education, health and social protection expenditures. Additionally the share of the population over 65 constitutes an interest group with high political power (Cassette and Paty (2010)). Ferris, Park and Winer (2008) suggest that, as urbanization increases, a greater demand for government services is expected if education and health are mainly public responsibilities. On the other hand if higher education and healthcare are largely private, the opposite is expected. Finally population growth needs to be tested to see not only if the country size matters, but if variations in country size affect government expenditure. In the case of dependency ratio the vast majority of articles, like Rodrik (1998) and Shelton (2007) [101 countries; 1970-2010; random effects and between estimator] find out that the dependency ratio positively affects the government expenditure while Dreher (2006) [30 OECD countries; 1970-2000; GMM estimator] and Gemmell, Kneller and Sanz (2008) [25 OECD countries; 1980-1997; time-series cross-section error correction model] find an insignificant coefficient. In literature the effect of urbanization is ambiguous. Alesina and Wacziarg (1998), Benarroch and Pandey (2008) and Rodrik (1998) conclude that urbanization negatively affects government size while Aidt and Jensen (2009) [10 western European countries; 1860-1938; fixed effects], Jin and Zou (2002) and Kimakova (2009) [87 countries; 1980-2003; fixed, random effects and GMM estimator] conclude that urbanization affects it positively.

vi. The 'Fractionalization Hypothesis'

According to Alesina et al. (2003) governments, have a much more difficult task achieving consensus for redistribution to the needy in a fractionalized society. Alesina and Wacziarg (1998) find a negative coefficient for the fractionalization index on government size, Alesina et al. (2003) [103 countries; cross section least square], find an insignificant coefficient and Gregorini and Longoni (2009) [70 developed and developing countries; 1970- 2005; random effects], find a positive coefficient.

vii. The 'Geography and Climate Hypothesis'

Based on Gallup et al. (1999), geography and climate affect government expenditure through economic development because government acts as a social welfare provider when the country's citizens are negatively affected. Tropical countries tend to have higher disease burdens and limitations on agricultural productivity. Also relative to hinterlands, coastal regions and regions linked to coasts by ocean-navigable waterways are strongly favored in development. Finally, the greater the number of neighboring states sharing a border with the country the greater will be the government expenditure in order to deal with possible external threats or illegal migration.

viii. The 'Globalization Hypothesis'

Globalization hypothesis can be divided into two schools of thought, based on Garrett (1995) and Schulze and Ursprung (1999). One supporting the 'compensate hypothesis' and one supporting the 'efficiency hypothesis'. Under the compensate hypothesis, globalization increase inequality and economic insecurity. From the demand side of the political market this creates incentives for government to compensate the losers from globalization, mainly through income transfer programs and economic policy activism. Under the efficiency hypothesis, government spending reduces the competitiveness of national producers in international goods and services markets. From the supply side of the political market this creates incentives for the government to reduce economic policy activism to promote competitiveness in order to keep mobile capital within national borders. One of the first articles that find a positive effect of globalization on government size is Cameron (1978) [18 countries; 1960-1975; OLS. Alesina and Wacziarg (1998), Rodrik (1998), Shelton (2007) and Epifani and Gancia (2009), among other, find a positive effect of trade openness. One of the first articles that find a negative effect of globalization on government size is Cusack (1997) [16 OECD countries; 1955-1989; pooled least square panel]. Garrett and Mitchell (2001) [18 OECD countries; 1961-1993; pooled least square panel] and Adsera and Boix (2002), among other, find a negative effect of trade openness.

ix. The 'Income Inequality Hypothesis'

The standard argument that links income inequality and government size is based on political economy and in particular on majority voting. Inequality may generate demand for more redistribution and a larger government since the median voter has less income than the mean, which creates an incentive to vote for more redistribution (Meltzer and Richard (1981)). In contrast, when majority voting models account for capital market imperfections - for example, borrowing constraints that affect human capital decisions - inequality may negatively affect redistribution (e.g., Saint-Paul (1994) and Bénabou (1996, 2000)). Similarly, it is possible that poor individuals may tolerate high levels of inequality or even vote for higher taxes when voting is only concerned with redistribution and ideology (Roemer (1998)), or expect that their children will have prospects of upward mobility (Benabou and Ok (2001)). Furthermore, the effect of inequality on government expenditure may also depend on the nature of redistribution and the mix of factor income taxes. If redistribution is accomplished by a public provision of goods and services rather than by transfers, higher income inequality may lead to a smaller government size in majority voting equilibrium (Grossman (2003)). The empirical literature about the effect of inequality provides

mixed results. Meltzer and Richards (1983) provide some weak evidence for the U.S. that inequality is positively related to redistribution for US time series data. However, Perotti (1996) does not find any evidence between inequality and tax rates or transfers. Bassett, Burkett, and Putterman (1999) using several alternative definitions and data sets find that the relationship is negative. They also show that this relationship weakens when one accounts for the population structure (proportion over 65). In contrast, Milanovic (2000) finds evidence for the hypothesis that higher income inequality leads to more redistribution.

x. The 'Macroeconomic Hypothesis'

Higher government debt means higher interest, higher taxes by the government in order to repay the debt, and as a result, government size increases. Additionally, Rodrik (1998) states that openness increases government spending by enhancing the economy's ability to borrow from external sources. Competition between countries in order to attract FDI leads to a reduction in taxation, mainly capital taxation. Because taxes are the main source for government spending, this competition results in government size decreases. On the other hand government size may be increased through protection programs to individuals that are negatively affected by FDI. According to Zakaria and Shakoor (2011), high inflation erodes the government's tax base both as a result of delays in tax payments and as a consequence of the shrinkage of the formal sector at the expense of the informal sector. Additionally, high inflation reduces the real value of the government revenues, thereby limiting the government's ability to spend. Rodrik (1998) finds a positive relationship between government debt and government size, while Dreher, Sturm and Ursprung (2008) [108 countries; 1970-2001; pooled least square panel] finds an insignificant coefficient. In the literature the effect of FDI is ambiguous. Liberati (2007) [18 developed countries; 1975-2005; pooled panel and random effects] finds a negative coefficient, Gemmell, Kneller and Sanz (2008) find a positive effect, while Dreher, Sturm and Ursprung (2008) find no significance. In the majority of the literature, (e.g. Rodrik (1998) and Jin and Zou (2002)) the coefficient for inflation is insignificant. But there are articles where inflation affects government size positively, like Dreher, Sturm and Ursprung (2008) and articles where inflation acts negatively like Eterovic and Eterovic (2012).

xi. The 'Political Institution Hypothesis'

Political institution hypothesis can be divided into four sub-hypothesis: political competition, political regime, electoral system and political rights. As Eterovic and Eterovic (2012) states there are at least four reasons why enhanced political competition is likely to decrease government expenditure: (1) the theory of fiscal illusion (2) enhanced political competition allows more pressure groups to be catered to in the political calculus (3) political competition enhances political accountability and (4) in societies with severe restrictions on political competition (dictatorship) political leaders need to spend substantial public funds on securing and maintaining power. As Shelton (2007) states, in presidential regimes we have the separation of powers. This leads to more competition between policy-makers and thus to smaller, more efficient government with less waste, less redistribution and lower expenditure on public goods. On the other hand in parliamentary regimes there are higher levels of public goods expenditures and more broadly targeted transfers and as a result higher government expenditure. Baraldi (2008) states that majoritarian electoral systems have smaller districts and voters select individual candidates, leading to narrowly designed redistributed programs benefiting small constituencies. Moreover majoritarian rules tend to have smaller rents for politicians and then less corruption compared to proportional rules. As Shelton (2007) states, in many countries political rights are either de jure or de facto restricted to a privileged minority. And even in the most established democracies, the overwhelming evidence is that the wealthy are more active in a wide variety of forms of political participation. As political rights get

more open more social and redistribution policies will take place. Both Baraldi (2008) [20 Italian regions; 1980-2003; 2SLS], and Eterovic and Eterovic (2012) find a negative coefficient for the political competition index. Shelton (2007) finds a negative coefficient for the presidential dummy, while Kimakova (2009) finds a positive coefficient for the parliamentary index. Baraldi (2008) and Shelton (2007) find a negative relationship between majoritarian electoral systems and government size while Gregorini and Longoni (2009) and Milesi-Ferretti, Perotti, and Rostagno (2002) [40 OECD and Latin America countries; 1991-1994; OLS] find a positive relationship between proportional electoral systems and government size.

xii. The 'Wagner's Law Hypothesis'

Wagner's law suggests that economic development increases government size. According to Wagner the main reason is that as states grow wealthier they simultaneously grow more complex, increasing the need for public regulatory and protective action to ensure the smooth workings of a modern, specialized economy. Additionally, he postulated that certain public goods, such as education and cultural enhancements, are luxury goods. In addition Shelton (2007) states that richer countries tend to have more elderly and thus tend to spend more on social security and other forms of social protection, which drives greater total spending. Cameron (1978) states that citizen's demands for services and the willingness to pay taxes are income-elastic, and therefore bound to increase with the increase in economic affluence. Among other, Adsera and Boix (2002), Garrett (2001) [113 countries; 1970-1987 and 1985-1995; OLS] and Islam (2004) [six countries; autoregressive distributed lag and FM-OLS procedures] find a positive coefficient, while Alesina and Wacziarg (1998), Epifani and Gancia (2009) and Rodrik (1998) find a negative sign for GDP per capita.

III. Methodology - Bayesian Model Averaging (BMA)[2]:

In this paper we employ the BMA approach to identify robust determinants of government expenditure. BMA estimates have the feature that they do not condition on a specific choice of determinants but rather depend on a model space whose elements span an appropriate range of determinants suggested by all twelve theories of government expenditure.

Specifically, consider the linear model

$$Y_i = \beta_0 + X'_{mi}\beta_m + e_i \tag{1}$$

where $m = 1, \dots, M$ and $i = 1, \dots, n$. X_{mi} is a set of p_m regressors chosen from a larger set of p regressors X_i and β_m is a vector of the corresponding regression coefficients. β_0 is an intercept. M is the total number of models in the model space $\mathcal{M} = \{M_1, \dots M_M\}$.

Model averaging integrates out the uncertainty over models by taking the weighted average of model-specific estimates, where the weights, $W = (w_1, \dots, w_m)$, reflect the evidentiary support for each model given the data, D. The posterior distribution of the quantity of interest, Δ, is the weighted average of model-specific posterior distribution,

$$\Pr(\Delta|D) = \sum_{m=1}^{M} \Pr(\Delta|M_m, D)\Pr(M_m|\, D) \tag{2}$$

[2] See Raftery, Madigan and Hoeting, 1997. Bayesian Model Averaging for Linear Regression Models. Journal of the American Statistical Association 92 (437) 179 – 191 and Hoeting, Madigan, Raftery and Volinsky, 1999. Bayesian Model Averaging: A Tutorial, Statistical Science 14 (4) 382 – 401

The weights are constructed to be analogous to posterior model probabilities that arise from Bayes' theorem,

$$\Pr(M_m|D) = \frac{\Pr(D|M_m)\Pr(M_m)}{\sum_{m=1}^{M}\Pr(D|M_m)\Pr(M_m)} \quad (3)$$

where $\Pr(D|M_m)$ is the integrated likelihood of model M_m and $\Pr(M_m)$ is the prior probability that M_m is the true model. We assume a uniform model prior, so the prior probability that any variable is included in the true model is 0.5. We compute a Markov Chain Monte Carlo Model Composition (MC^3).

Given the posterior model probability, the BMA estimator of β (posterior mean) is the sum of the posterior means of each model, weighted by their posterior probabilities,

$$\hat{\beta}^{BMA} = \sum_{m=1}^{M}\Pr(M_m|\,D)\,\hat{\beta}_m \quad (4)$$

The posterior variance is the sum of the posterior variances of each model, weighted by their posterior probabilities plus a term indicates how stable the estimates are across models. The first term captures the variance of the within model estimates and the second term captures the variance of model-specific estimates across models,

$$\hat{\sigma}^{2\,BMA}(\beta) = \sum_{m=1}^{M}\Pr(M_m|\,D)\,\hat{\sigma}_m^2 + \sum_{m=1}^{M}\Pr(M_m|\,D)(\,\hat{\beta}_m - \hat{\beta}^{BMA})^2 \quad (5)$$

The main tool of inference in the BMA context is the posterior inclusion probability (PIP) of each regressor. The PIP of a variable is the sum of the posterior probabilities of the models that contain the variable (for example for variable X),

$$\mu^{BMA}(\beta_X) = pr\left(\hat{\beta}_X \neq 0\middle|D\right) = \sum_{m\in M_X}\Pr(M_m|\,D) \quad (6)$$

where M_X is collection of indices for which $m \in M_X$ implies model M_m does not restrict the parameter β_X to zero. In order to interpret the statistical significance of the coefficient we follow the Kass and Raftery (1995) rules of thumb for the posterior inclusion probability (PIP). If PIP<50% there is evidence against the effect, if 50%≤PIP<75% there is weak evidence for the effect, if 75%≤PIP<95% there is positive evidence for the effect, if 95%≤PIP<99% there is strong evidence for the effect and if PIP≥99% there is very strong evidence for the effect.

IV. Data:

In order to identify the robust determinants of government expenditure we group the most common variables used in the literature, into twelve hypotheses: 'centralization', 'conflict', 'country size', 'democracy', 'demographic', 'fractionalization', 'geography and climate', 'globalization', 'income inequality', 'macroeconomic', 'political institution' and 'Wagner's law'. We end up with 23 variables. Additionally, in every model we include a constant, time effects and regional effects. We use data from 1971 to 2010. In order to avoid the business cycle we used 5-year averages for all variables (with at least two years of available observations). We ended up with eight time periods: 1971-1975, 1976-1980, 1981-1985, 1986-1990, 1991-1995, 1996-2000, 2001-2005 and 2006-2010. We use an unbalanced panel of 89 countries and 453 country-period observations. This sample refers to the model where total general

government expenditure is the dependent variable. The countries and observations vary when categories of expenditure are used.

We use several databases including Alesina, Devleeschauwer, Easterly, Kurlat and Wacziarg (2003), the Database of Political Institutions (DPI), the Democracy Time-Series Dataset (DTSD), the Freedom House (FH) database, Gallup, Sachs and Mellinger (1999), the Historical Public Debt Database (HPDD), the IMF's Government Financial Statistics database (GFS), Lane and Milesi-Ferretti (2007), the Major Episodes of Political Violence database (MEPV), Penn World Table 8 (PWT), Political Regime Characteristics and Transitions, the 1800-2013 database of the Polity IV Project (PRCT), the Polity IV Project (PIV), Solt (2009) and the World Development Indicators database (WDI).

Table 1 presents summary statistics for total expenditure and its components at both in general and central government level. General expenditures is the sum of central, state and local expenditures. Table 2 presents summary statistics for the regressors that we use when the dependent variable is the general government total expenditures. The summary statistics of the regressors when the dependent variable consists of the various component of expenditure can be found in Appendix Table 3. In Appendix Table 1 we present the countries in each model and finally, Appendix Table 2 presents the correlation matrix of the regressors when the dependent variable is the general government total expenditures.

The source for government expenditure data is GFS. The dataset contains data for 169 countries from 1972 to 2010. All data are in local currency and we divide them with the country GDP to get expenditure as a share of GDP. Government expenditures are classified in two ways: an economic classification and a functional classification. For the economic classification of expense we use expenses for Compensation of employees, Use of goods and services and Social benefits. For the functional classification of expense we use expenses for General public services, Defense, Public order and safety, Economic affairs, Housing and community amenities, Health, Recreation, culture, and religion, Education and Social protection. Finally expenditures are classified according to the level of government. We will use expenditure of the general and central government. Following Persson and Tabellini (1999), expenditure of public good is the sum of public order and safety, health and education expenditures. More information about the GFS database can be found in the Data Appendix.

For centralization we use the Federal dummy from DTSD. A basic assumption is that federal countries tend to be much more decentralized than unitary countries. Data about conflict comes from MEPV. The warfare score is the sum of magnitude score of episode(s) of international, civil and ethnic warfare involving that state in that year. The three variables take values from 1 (lowest) to 10 (highest), with 0 denoting no episodes. The combined warfare variable takes values from 0-30. We use two proxy for country size. The first is the natural logarithm of the population from PWT and second the natural logarithm of the country's land area in square kilometers from WDI. We proxy democracy using the combined polity score from PRCT. The unified polity scale ranges from +10 (strongly democratic) to -10 (strongly autocratic).

We use four proxies for country demographic characteristics, all from WDI. The share of people younger than 15 years old and older than 64 years old to the working age population, the share of urban population to total population and population growth. Data about fractionalization comes from Alesina et al. (2003). We use the linguistic fractionalization index, which is the probability that two randomly selected people from a given country will not belong to the same linguistic group. In order to test the geographical position and the climate conditions of the country we use three variables. From Gallup et al. (1999) we

use the percentage of a country's land area within 100km of an ice- free coast and the percentage of land area classified as tropical and subtropical via the in Koeppen-Geiger system. From MEPV we use the number of neighboring states sharing a border with the identified state. The most used proxy for globalization is trade openness, which is the sum of imports and exports as a share of GDP. We construct trade openness using data from PWT.

Inequality is proxied with the Gini coefficient for gross inequality (inequality before taxes and transfers) from Solt (2009). The variables we use in order to proxy the macroeconomic conditions of a country are the share of central government debt to GDP from HPDD, the natural logarithm of FDI liabilities stock from Lane and Milesi-Ferretti (2007) and inflation (based on the GDP deflator) from WDI. The political institution proxies that we use are the political competition index from PIV, the political rights index from FH and the presidential system and plurality dummy from DPI. The political competition index combines information about regulation of participation (participation is regulated to the extent that there are binding rules on when, whether, and how political preferences are expressed) and competiveness of participation (the competitiveness of participation refers to the extent to which alternative preferences for policy and leadership can be pursued in the political arena). The index ranges from 1 (Suppressed) to 10 (Institutionalized Electoral). The political rights index runs from 1 to 7, with lower numbers indicating greater political freedom. In order to test for Wagner's law we use the natural logarithm GDP per capita at current USD prices from PWT.

V. Results:

The main results are presented in Table 3 for general government and Table 4 for central government. In order to interpret the statistical significance of the coefficient we use the Kass and Raftery (1995) rules of thumb for the posterior inclusion probability (PIP). The tables present the posterior mean, the posterior standard error, PIP and significance stars.

We find some evidence for the Wallis decentralization hypothesis (Wallis and Oates (1988)) since the federal dummy shows a decrease in the size of central government. On the other hand the Brennan/Buchanan decentralization hypothesis (Brennan and Buchanan (1980)) is not supported by the results since general government expenditures are unaffected by fiscal decentralization. The federal dummy affects negatively the use of goods and services (government consumption) as well as the main public goods, education and health. This is consistent with the idea that under fiscal decentralization, the competition of the different levels of the government, make the provision of public goods more efficient.

As expected the warfare score increases defense expenditure, consistent with Eterovic and Eterovic (2012). This increase is through central government since defense expenditures are mainly provided by the higher level of government. Additionally we find a positive effect of the warfare score on economic affairs expenditures. This is not inconsistent if we understand the component of economic affairs. A big part of this category is the expenditure of administration, production and grants, loans, or subsidies to support the fuel and energy industry and communication industry. Those support defense industries.

Land area has a positive effect on general government expenditure, but not in central government expenditures. This is evidence that country size increases expenditures at lower levels of government. The components of the expenditure that are increased are compensation of public services and use of goods and services (economic classification) and general public services and economic affairs

(functional classification). Additionally recreation, culture, and religion expenditure are increase at central government. This reflect the fixed cost that need to be taken due to the size of the country. For example a big country needs more government services (set of institutions, a legal, monetary, and fiscal system) in order to cover remote and isolated regions. On the other hand, as expected, population has a negative effect on government expenditures and its components. This is due to the indivisibility of public goods and economies of scale in the supply of public goods (Alesina and Wacziarg (1998)).

The effect of democracy is a puzzle. As Alesina and Wacziarg (1998) and others state, democracy positively affects government size due to the "fixed" cost in building democratic institutions, the presence of many pressure groups and the existence of social and redistribution policies. An explanation of this is that democracy involves a broad range of concepts. The political and electoral structure, the welfare state, political rights, civil liberties and human rights are components of democracy. In Appendix Table 2 we can see that democracy is highly correlated with political competition and political rights. So the effect of democracy is channeled through those variables, which will discussed below. In Appendix Tables 10 and 11, for robustness, we run the basic model without political competition and political rights variables. Democracy has a positive effect on both general and central government expenditures and the provision of public goods (mainly education and health). All other results are robust.

The portion of the population under 15 years old leaves government expenditures unaffected. On the other hand the portion of the population more than 64 years old increases both general and central expenditures. More important is that this increase is mainly due to social benefits and social protection. This is consistent with the majority of literature as well as the Cassette and Paty (2010) explanation that the share of the population over 65 constitutes an interest group with high political power, voting for social benefits programs. The theory and the empirical evidence on urbanization is ambiguous (Ferris, Park and Winer (2008)). We find no effect on general and central expenditures. But in the various categories of expenditures we find different results. Firstly urbanization increase social protection. This is robust with the idea of a greater demand for government to compensate the losers of urbanization, mainly due to unemployment and inequality increase. This compensation is provided in the lower state of government, since social protection in central government stays unaffected. On the other hand, we find a negative effect on public goods at the general and central level. This is due to indivisibility of public goods and economies of scale in the supply of public goods. Public goods are more concentrated in urban regions and based on Alesina and Wacziarg (1998), the cost of public goods grows less than proportionally to the size of the population. Finally, population growth has a negative effect only for general government expenditure, through general public services. This is evidence of economies of scale in public service provision.

The hypothesis of fractionalization states that governments have a much more difficult task in achieving consensus for redistribution in a fractionalized society (Alesina et al. (2003)). Our results do not seem to confirm this. Linguistic fractionalization has a relative small, negative effect on central government compensation of employees and recreation, culture and religious expenditures. Government expenditure on recreation, culture, and religion includes expenditure on services provided to individual persons and households and expenditure on services provided on a collective basis. Collective basis expenditures are administration, operation, grants, loans and subsidies for broadcasting and publishing services, religious and other community services and applied research and experimental development related to recreation, culture, and religion. According to the Alesina et al. (2003) hypothesis, competition and the difficulty of achieving consensus among different linguistic groups decreases collective basis expenditures.

Based on Gallup et al. (1999) government acts as a social welfare provider when the country's citizens are negatively affected by geographical and climate conditions. In order to confirm this we would expect a negative coefficient for coastal areas and a positive coefficient for tropical and subtropical regions, on government expenditure, especially for social protection. Our results are inconsistent with this hypothesis. Area within 100km of a coast has positive effect on the compensation of employees and general public services. One explanation is that coastal regions and regions linked to coasts by ocean navigable waterways are strongly favored in development which need public regulatory. The final geographic variable is the number of neighboring states. This variable has a positive effect on general government social benefits and on central government compensation of employees, social benefits, health and social protection. Those are inconsistent with the hypothesis of increasing government expenditure, and mainly defense and public order and safety, due to possible external threats. One explanation is that the greater the number of neighboring countries the greater is migration from those countries. This can increase the public sector through the establishment of institutions like migration office. Social benefits and social protection includes protection in the form of cash benefits and benefits in kind to persons who are socially excluded or at risk of social exclusion such immigrants. Finally health can serve as social provision to immigrants.

Our results do not support the compensate hypothesis, that government expenditures (mainly social protection) are increased due to the increased inequality and economic insecurity that results from globalization. Also the efficiency hypothesis, that governments reduce economic policy activism to promote competitiveness in order to keep mobile capital within national borders, is not supported. Our results show that globalization affects positively, general and central compensation of employees, public order and safety, economic affairs and housing and community amenities. The increased compensation of employees can be explained by the establishment of institutions that increase competitiveness, promote globalization, regulate and protect workers and companies related to the trade of goods and services. Public order and safety contains, among other, police services and law court expenditures. Increased globalization, increases the need of a safe environment (ports, airports, etc) as well as a legal environment which can resolve legal issues among the globalization participants. Economic affairs contains expenditures for administration, regulation, operation, grants, loans and subsidies for general economic, commercial, and labor affairs, agriculture, forestry, fishing, and hunting, fuel and energy, mining, manufacturing, and construction, transport, communication. Those sectors cover the majority of trade in goods and services. So, as globalization increases, it is not a surprise that economic affairs expenditures are increased. An indirect effect of globalization is the increase in investment in the real estate sector, from new business and housing to newly developed areas. In order for the government to increase the attractiveness of those area increase the housing and community amenities expenditures.

The gross gini income inequality coefficient has a positive effect on compensation of employees and public order and safety expenditures. The effect on compensation of employees occurs at the lower level of government; there is no effect on the central level of the government. Our results are not consistent with either, Meltzer and Richard (1981) majority voting hypothesis or the SaintPaul (1994) and Bénabou (1996, 2000) capital market imperfections hypothesis. One channel that is robust with our results is based on Alesina and Rodrik (1994) and Alesina and Perotti (1996) who argued that a more unequal society can cause social tension and political instability. This will increase both the public order and safety expenditures and the compensation of employees.

Higher debt affects positively general and central government expenditures. The main reason is the high interest payments that result. A category of the economic classification of the expenses is interest pay (not show). Interest pay is positively affected by debt. Also use of goods and services, general public services and defense are positively affected, both at general and central level. A sub-category of general public debt is public debt transactions, which includes both interest payments and expenses for underwriting and floating government loans. Additionally loans increase the capability of government for use of goods and services, especially for defense expenditures. Our results are inconsistent with the idea of government size reduction in order to increase competitiveness to attract FDI. The results show a positive relation between FDI liabilities and both the general and central government expenditures. At a local level we find an increase in social benefits which is consistent with the idea of protection programs to individuals that are negatively affected by FDI (this is significant for the general but not for the central level). Additionally, we find an increase in public goods expenditure (health, education, etc). This can be explained as a long-run compensation or as a way of increasing human capital. Finally, we find no effect of inflation on government expenditures, a result that is robust with the vast majority of the empirical literature.

Our results do not follow the Eterovic and Eterovic (2012) political competition hypothesis of a negative effect. We find that political competition has a positive effect only on general and central public order and safety expenditures. One reason for this might be that due to the increase in political competition more pressure groups emerges, but all with different needs and demands. Public order and safety (police, fire protection, and law courts) is a public good that is demanded by the vast majority of the pressure groups and voters. This is not true for other expenditures like health, education, social protection etc. We find strong evidence for Shelton (2007) presidential regime idea, of more efficient government with less waste. This is true for non-public goods expenditures like use of goods and services, general public services, housing and community amenities and recreation, culture and religion expenditures for both the general and central level. We can conclude that, even with the separation of powers, public goods (public order and safety, health and education) stay unaffected. The plurality dummy shows evidence against the Baraldi (2008) idea that states with majoritarian electoral systems have smaller government size. Shelton (2007) state that as political rights get more open, more social and redistribution policies will take place. Under this we would expect a negative effect on social benefits and social protection (lowest numbers indicating greater political freedom). We did not find evidence of this. We find that as political rights increase, only health expenditures increase, both at the general and central level.

The result of GDP per capita contradicts Wagner's law. We find an insignificant effect in all government expenditure components. One explanation is based on Shelton (2007). He states that richer countries have a bigger fraction of people more than 64 years old. This category demands more social protection. So GDP per capita increase social protection through the demographic characteristic of the fraction of people more than 64 years old. This is robust with our results.

In order to test the robustness of our results we run 4 different specifications. The first one, presented in Appendix Tables 4 and 5, uses a ten year average technique for all variables instead of a five year average technique. In this specifications we have 4 periods, 1971-1980, 1981-1990, 1991-2000 and 2001-2010. The second one, presented in Appendix Tables 6 and 7, runs a cross section model. For each country we average all variables across the whole period 1971-2010. In Appendix Tables 8 and 9 we run the baseline model using all variables lagged by one period. Finally, in Appendix Tables 10 and 11 we run the baseline model, removing highly correlated variables. We remove population growth which has a correlation coefficient of 0.783 with the share of the population under 15, political competition and

political rights which have a correlation coefficient of 0.945 and -0.918 respectively with the democracy score and the OECD dummy which has a correlation coefficient of 0.756 with GDP per capita. In all cases the results of the baseline model seem to be robust.

In Appendix Tables 12 and 13 we present the least squares estimation for the best model, based on posterior model probability, for total expenditures and its component. The variables in every model are robust with the results discussed above. In Appendix Graphs 1-3 we present the graphical representation of our results. In Appendix Graph 1, we have the variable inclusion and sign in the 500 top models. The important part in this graph is that the robust variables do not alternate sign. In Appendix Graphs 2 we have the prior and posterior model size distribution. As we discuss in the methodology section, with K-independent variables we have 2^K possible variable combinations. Using a uniform model prior, the common prior model probability is 2^{-K} and a prior expected model size is K/2. For every model, the prior expected model size is bigger than the posterior model size distribution, which is symmetric around the mean posterior model size. This implies that BMA puts more importance on parsimonious models. In Appendix Graph 3, we have the posterior model probabilities. This graph shows that for all models the correlation of the analytical (exact) and the Markov Chain Monte Carlo posterior model probabilities is very high implying that we have a convergence between the two.

VI. Conclusion:

This paper identifies the robust determinants of government expenditure and its various economic and functional classifications by taking into account a number of theories that have been advanced in the literature. We consider twelve competing hypotheses: centralization, conflict, country size, democracy, demographic, fractionalization, geography and climate, globalization, income inequality, macroeconomic, political institution, and Wagner's law. Theory uncertainty refers to the idea that any given theory of government expenditure may not necessarily exclude other theories from also being relevant and therefore, there is no a priori justification for focusing on a specific subset of determinants. To deal with this issue we employ Bayesian Model Averaging (BMA) which constructs estimates that do not depend on a particular model specification but rather uses information from all candidate models. In particular, it amounts to forming a weighted average of model specific estimates where the weights are given by the posterior model probabilities.

The main results are: (1) more decentralized countries have smaller central public goods expenditures, (2) country size, measured by land area, increases general government expenditure, while measured by population, it decreases both general and central government expenditures, and mainly public goods, (3) both the portion of the population over 64 and urbanization affect government expenditures positively, mainly through social protection, (4) we find a positive effect of globalization, but not through the Rodrik (1998) compensate hypothesis, but through the economic and business environment that is needed due to the increased globalization, (5) FDI increases government size through social protection and public goods (opposite results with the idea of government size reduction in order to increase competitiveness to attract FDI), (6) countries with a presidential system tend to have smaller general and central government expenditures and (7) there is evidence against Wagner's law.

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Table 1: Summary statistics for total expenditures and its component used in this study, both in general and central government level

	Observations	Mean	Std. Dev.	Min	Max
General Government					
Total expenditures	453	0.296	0.144	0.060	0.794
Compensation of employees	431	0.087	0.042	0.001	0.216
Use of goods and services	431	0.054	0.034	0.004	0.342
Social benefits	280	0.075	0.073	0.000	0.269
General public services	375	0.072	0.039	0.011	0.263
Defense	362	0.023	0.023	0.001	0.243
Public order and safety	282	0.013	0.007	0.000	0.037
Economic affairs	372	0.044	0.022	0.004	0.163
Housing and community amenities	371	0.010	0.009	0.000	0.080
Health	377	0.031	0.026	0.001	0.156
Recreation, culture, and religion	356	0.005	0.005	0.000	0.035
Education	378	0.041	0.020	0.002	0.148
Social protection	374	0.074	0.077	0.000	0.324
Public Goods	378	0.081	0.046	0.005	0.215
Central Government					
Total expenditures	453	0.251	0.107	0.048	0.735
Compensation of employees	430	0.068	0.041	0.001	0.214
Use of goods and services	430	0.043	0.031	0.003	0.319
Social benefits	280	0.066	0.065	0.000	0.249
General public services	371	0.067	0.036	0.011	0.203
Defense	362	0.023	0.023	0.001	0.247
Public order and safety	268	0.010	0.007	0.000	0.037
Economic affairs	368	0.036	0.020	0.004	0.163
Housing and community amenities	367	0.006	0.006	0.000	0.048
Health	373	0.023	0.020	0.000	0.090
Recreation, culture, and religion	347	0.003	0.004	0.000	0.027
Education	373	0.030	0.018	0.001	0.148
Social protection	360	0.065	0.061	0.000	0.233
Public Goods	373	0.060	0.035	0.004	0.213

Table 2: Summary statistics for the regressors that are used when the dependent variable is the general government total expenditures

	General Government Observations = 453			
Variable	Mean	Std. Dev.	Min	Max
Federal dummy	0.243	0.429	0.000	1.000
Warfare score	0.631	1.676	0.000	13.000
Land area	12.574	1.836	6.507	16.035
Population	16.567	1.385	13.749	20.819
Democracy score	4.650	6.440	-10.000	10.000
Dependency share <15	0.555	0.228	0.207	1.062
Dependency share >64	0.120	0.070	0.043	0.331
Urbanization	0.569	0.232	0.070	1.000
Population growth	0.017	0.011	-0.005	0.056
Linguistic fractionalization	0.359	0.294	0.012	0.923
Area within 100km of coast	0.443	0.364	0.000	1.000
Tropical and subtropical area	0.455	0.420	0.000	1.000
Number of neighboring states	3.029	2.177	0.000	9.000
Trade openness	0.691	0.509	0.097	4.094
Gross inequality	46.717	8.025	31.166	70.998
Central government debt	0.607	0.406	0.029	4.075
FDI liabilities	8.654	2.281	2.971	14.901
Inflation	0.302	1.465	-0.051	18.719
Political competition index	7.238	3.200	1.000	10.000
Presidential systems	0.472	0.491	0.000	1.000
Plurality systems	0.624	0.482	0.000	1.000
Political Rights index	2.836	1.867	1.000	7.000
GDP per capita	7.991	1.551	4.866	11.325
OECD	0.352	0.476	0.000	1.000
East Asia & Pacific	0.143	0.351	0.000	1.000
Europe & Central Asia	0.267	0.443	0.000	1.000
Latin America & Caribbean	0.227	0.420	0.000	1.000
Middle East & North Africa	0.091	0.287	0.000	1.000
North America	0.035	0.185	0.000	1.000
South Asia	0.055	0.229	0.000	1.000
Sub-Saharan Africa	0.181	0.385	0.000	1.000
1971-1975 period	0.082	0.274	0.000	1.000
1976-1980 period	0.106	0.308	0.000	1.000
1981-1985 period	0.124	0.330	0.000	1.000
1986-1990 period	0.135	0.342	0.000	1.000
1991-1995 period	0.155	0.362	0.000	1.000
1996-2000 period	0.155	0.362	0.000	1.000
2001-2005 period	0.155	0.362	0.000	1.000
2006-2010 period	0.091	0.287	0.000	1.000

Table 3: General government's results using Bayesian Model Averaging. All regressions include a constant, time effect and regional effect. Posterior standard errors in parenthesis. Posterior Inclusion Probability (PIP) in brackets. * if 75%≤PIP<95%, ** if 95%≤PIP<99% and *** if PIP≥99%

	Total Expenditures	**Compensation of employees**	**Use of goods and services**	**Social benefits**	**General public services**	**Defense**	**Public order and safety**
Centralization							
Federal dummy	0.000	0.000	-0.001	0.001	0.003	-0.001	0.000
	(0.002) {0.043}	(0.002) {0.066}	(0.004) {0.182}	(0.003) {0.119}	(0.006) {0.308}	(0.002) {0.193}	(0.001) {0.235}
Conflict							
Warfare score	0.002	0.000	0.001	0.001	0.000	0.003 ***	0.001
	(0.003) {0.302}	(0.000) {0.088}	(0.001) {0.457}	(0.002) {0.194}	(0.000) {0.062}	(0.001) {1.000}	(0.000) {0.741}
Country size							
Land area	0.018 ***	0.008 **	0.005 *	0.000	0.008 ***	0.000	0.000
	(0.004) {1.000}	(0.002) {0.975}	(0.002) {0.937}	(0.001) {0.066}	(0.002) {0.996}	(0.000) {0.088}	(0.000) {0.400}
Population	-0.040 ***	-0.010 ***	-0.008 **	-0.011 *	-0.002	0.000	0.000
	(0.006) {1.000}	(0.002) {1.000}	(0.002) {0.987}	(0.004) {0.938}	(0.003) {0.341}	(0.000) {0.085}	(0.000) {0.094}
Democracy							
Democracy score	0.003	0.000	0.000	0.000	0.000	0.001	0.000
	(0.002) {0.656}	(0.000) {0.068}	(0.001) {0.232}	(0.000) {0.104}	(0.000) {0.068}	(0.001) {0.574}	(0.000) {0.139}
Demographic							
Dependency share <15	0.010	0.002	0.004	0.000	0.005	0.003	-0.004
	(0.032) {0.132}	(0.007) {0.087}	(0.013) {0.147}	(0.007) {0.067}	(0.015) {0.160}	(0.009) {0.170}	(0.005) {0.423}
Dependency share >64	0.718 ***	0.000	0.140 *	0.597 ***	0.000	0.066	0.002
	(0.147) {1.000}	(0.012) {0.050}	(0.088) {0.802}	(0.078) {1.000}	(0.018) {0.066}	(0.062) {0.636}	(0.007) {0.126}
Urbanization	0.001	0.000	0.004	-0.002	0.000	0.031 **	-0.009 **
	(0.008) {0.046}	(0.003) {0.050}	(0.010) {0.198}	(0.009) {0.098}	(0.004) {0.058}	(0.010) {0.972}	(0.003) {0.984}
Population growth	-1.382 *	0.009	0.011	-0.016	-0.841 **	0.008	0.003
	(0.724) {0.869}	(0.066) {0.063}	(0.070) {0.073}	(0.101) {0.076}	(0.296) {0.967}	(0.054) {0.077}	(0.019) {0.080}
Fractionalization							
Linguistic fractionalization	0.001	0.000	0.003	-0.001	0.000	0.000	0.000
	(0.007) {0.074}	(0.002) {0.049}	(0.006) {0.192}	(0.004) {0.081}	(0.002) {0.058}	(0.001) {0.059}	(0.001) {0.158}
Geography and climate							
Area within 100km of coast	0.000	0.025 **	-0.001	-0.006	0.024 **	0.000	-0.003 *
	(0.004) {0.051}	(0.008) {0.972}	(0.003) {0.085}	(0.010) {0.303}	(0.009) {0.964}	(0.002) {0.109}	(0.002) {0.772}

Table 3: General government's results using Bayesian Model Averaging. All regressions include a constant, time effect and regional effect. Posterior standard errors in parenthesis. Posterior Inclusion Probability (PIP) in brackets. * if 75%≤PIP<95%, ** if 95%≤PIP<99% and *** if PIP≥99%

	Total Expenditures		**Compensation of employees**		**Use of goods and services**		**Social benefits**		**General public services**		**Defense**		**Public order and safety**	
Tropical and subtropical area	0.000		-0.035 ***		0.000		0.001		0.001		0.015 *		-0.007 ***	
	(0.004)	{0.052}	(0.007)	{1.000}	(0.002)	{0.061}	(0.004)	{0.071}	(0.004)	{0.099}	(0.006)	{0.938}	(0.002)	{1.000}
Number of neighboring states	0.000		0.000		0.000		0.007 **		0.000		0.000		0.000	
	(0.001)	{0.063}	(0.001)	{0.198}	(0.000)	{0.047}	(0.002)	{0.988}	(0.000)	{0.087}	(0.000)	{0.207}	(0.000)	{0.498}
Globalization														
Trade openness	0.005		0.016 *		0.004		0.000		0.007		0.003		0.004 ***	
	(0.012)	{0.199}	(0.006)	{0.929}	(0.006)	{0.384}	(0.004)	{0.102}	(0.008)	{0.473}	(0.004)	{0.465}	(0.001)	{0.996}
Inequality														
Gross inequality	0.000		0.001 **		0.000		0.000		0.000		0.000		0.000 ***	
	(0.001)	{0.342}	(0.000)	{0.989}	(0.000)	{0.639}	(0.000)	{0.085}	(0.000)	{0.114}	(0.000)	{0.063}	(0.000)	{0.999}
Macroeconomic														
Central government debt	0.035 **		0.000		0.009 *		0.000		0.030 ***		0.011 **		0.001	
	(0.012)	{0.959}	(0.001)	{0.052}	(0.006)	{0.775}	(0.002)	{0.080}	(0.005)	{1.000}	(0.003)	{0.988}	(0.001)	{0.535}
FDI liabilities	0.023 ***		0.000		0.001		0.007 *		0.003		0.000		0.000	
	(0.004)	{1.000}	(0.001)	{0.092}	(0.002)	{0.277}	(0.003)	{0.888}	(0.003)	{0.503}	(0.000)	{0.086}	(0.000)	{0.201}
Inflation	0.000		-0.001		0.000		0.000		0.002		0.000		0.000	
	(0.001)	{0.100}	(0.001)	{0.458}	(0.000)	{0.048}	(0.000)	{0.083}	(0.002)	{0.553}	(0.000)	{0.112}	(0.000)	{0.142}
Political institution														
Political competition index	0.002		0.000		-0.001		0.000		0.000		0.000		0.001 *	
	(0.003)	{0.316}	(0.001)	{0.113}	(0.002)	{0.203}	(0.001)	{0.085}	(0.000)	{0.089}	(0.000)	{0.114}	(0.000)	{0.889}
Presidential systems	-0.045 **		-0.004		-0.020 ***		0.001		-0.025 ***		-0.001		0.000	
	(0.014)	{0.982}	(0.006)	{0.347}	(0.005)	{0.993}	(0.003)	{0.093}	(0.005)	{1.000}	(0.003)	{0.214}	(0.000)	{0.061}
Plurality systems	-0.009		0.001		0.000		-0.010		0.000		-0.001		0.000	
	(0.012)	{0.426}	(0.003)	{0.162}	(0.001)	{0.060}	(0.008)	{0.714}	(0.001)	{0.047}	(0.002)	{0.152}	(0.000)	{0.065}
Political Rights index	-0.001		0.000		0.000		-0.002		0.000		0.002		0.000	
	(0.003)	{0.119}	(0.001)	{0.092}	(0.001)	{0.067}	(0.003)	{0.409}	(0.001)	{0.106}	(0.002)	{0.383}	(0.000)	{0.129}
Wagner's law														
GDP per capita	-0.001		0.000		0.002		0.001		-0.001		0.000		0.000	
	(0.005)	{0.093}	(0.001)	{0.088}	(0.004)	{0.302}	(0.003)	{0.125}	(0.003)	{0.160}	(0.001)	{0.113}	(0.000)	{0.076}

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	Economic affairs		Hous. and commu. amenit.		Health		Recrea., culture, and relig.		Education		Social protection		Public Goods	
Centralization														
Federal dummy	0.001		-0.001		0.000		0.000		0.000		0.000		0.000	
	(0.002)	{0.129}	(0.002)	{0.475}	(0.001)	{0.060}	(0.000)	{0.064}	(0.001)	{0.056}	(0.001)	{0.057}	(0.001)	{0.064}
Conflict														
Warfare score	0.002	*	0.000		0.000		0.000		0.000		0.000		0.000	
	(0.001)	{0.927}	(0.000)	{0.064}	(0.000)	{0.054}	(0.000)	{0.072}	(0.000)	{0.101}	(0.000)	{0.065}	(0.000)	{0.090}
Country size														
Land area	0.007	***	0.000		0.000		0.000		0.002		0.000		0.003	*
	(0.001)	{1.000}	(0.000)	{0.189}	(0.001)	{0.231}	(0.000)	{0.099}	(0.001)	{0.687}	(0.000)	{0.071}	(0.002)	{0.790}
Population	-0.007	***	0.000		-0.008	***	-0.002	***	-0.007	***	0.000		-0.017	***
	(0.001)	{1.000}	(0.000)	{0.100}	(0.001)	{1.000}	(0.000)	{1.000}	(0.001)	{1.000}	(0.001)	{0.123}	(0.002)	{1.000}
Democracy														
Democracy score	0.001		0.000		0.000		0.000		0.001	*	0.000		0.000	
	(0.001)	{0.620}	(0.000)	{0.366}	(0.000)	{0.068}	(0.000)	{0.154}	(0.000)	{0.845}	(0.000)	{0.092}	(0.001)	{0.280}
Demographic														
Dependency share <15	0.000		0.000		0.007		0.001		0.006		-0.005		0.012	
	(0.004)	{0.073}	(0.002)	{0.068}	(0.012)	{0.327}	(0.002)	{0.150}	(0.011)	{0.286}	(0.015)	{0.139}	(0.022)	{0.304}
Dependency share >64	0.067		0.001		0.034		0.002		0.001		0.645	***	0.015	
	(0.051)	{0.711}	(0.006)	{0.083}	(0.043)	{0.451}	(0.006)	{0.154}	(0.008)	{0.060}	(0.070)	{1.000}	(0.042)	{0.160}
Urbanization	-0.032	**	0.000		-0.020	*	0.000		0.000		0.048	**	-0.017	
	(0.009)	{0.990}	(0.001)	{0.054}	(0.009)	{0.909}	(0.001)	{0.078}	(0.002)	{0.062}	(0.016)	{0.966}	(0.017)	{0.569}
Population growth	-0.017		-0.002		-0.011		-0.002		-0.024		-0.395		-0.057	
	(0.068)	{0.094}	(0.016)	{0.053}	(0.057)	{0.078}	(0.010)	{0.070}	(0.083)	{0.124}	(0.404)	{0.564}	(0.173)	{0.148}
Fractionalization														
Linguistic fractionalization	0.000		0.000		0.000		0.000		0.001		0.007		0.001	
	(0.002)	{0.076}	(0.001)	{0.079}	(0.001)	{0.065}	(0.000)	{0.055}	(0.003)	{0.194}	(0.011)	{0.342}	(0.003)	{0.085}
Geography and climate														
Area within 100km of coast	-0.001		0.000		0.000		0.000		-0.004		0.000		-0.002	
	(0.002)	{0.147}	(0.001)	{0.073}	(0.001)	{0.058}	(0.000)	{0.052}	(0.005)	{0.450}	(0.001)	{0.051}	(0.004)	{0.166}

Table 3: General government's results using Bayesian Model Averaging. All regressions include a constant, time effect and regional effect. Posterior standard errors in parenthesis. Posterior Inclusion Probability (PIP) in brackets. * if 75%≤PIP<95%, ** if 95%≤PIP<99% and *** if PIP≥99%

	Economic affairs		**Hous. and commu. amenit.**		**Health**		**Recrea., culture, and relig.**		**Education**		**Social protection**		**Public Goods**	
Tropical and subtropical area	-0.002		0.000		-0.004		0.000		0.000		-0.001		-0.005	
	(0.004)	{0.242}	(0.001)	{0.089}	(0.005)	{0.438}	(0.000)	{0.057}	(0.002)	{0.082}	(0.004)	{0.084}	(0.008)	{0.293}
Number of neighboring states	0.000		0.000		0.000		0.000		0.000		0.000		0.000	
	(0.000)	{0.065}	(0.000)	{0.239}	(0.000)	{0.116}	(0.000)	{0.141}	(0.000)	{0.052}	(0.000)	{0.090}	(0.000)	{0.084}
Globalization														
Trade openness	0.018	***	0.004	**	0.000		-0.003	**	0.000		-0.001		0.000	
	(0.004)	{1.000}	(0.001)	{0.954}	(0.001)	{0.084}	(0.001)	{0.987}	(0.001)	{0.086}	(0.003)	{0.131}	(0.002)	{0.071}
Inequality														
Gross inequality	0.000		0.000		0.000		0.000		0.000		0.000		0.000	
	(0.000)	{0.337}	(0.000)	{0.048}	(0.000)	{0.053}	(0.000)	{0.061}	(0.000)	{0.577}	(0.000)	{0.137}	(0.000)	{0.238}
Macroeconomic														
Central government debt	0.000		-0.001		0.000		0.000		0.000		0.000		0.000	
	(0.001)	{0.064}	(0.002)	{0.518}	(0.001)	{0.097}	(0.000)	{0.050}	(0.001)	{0.058}	(0.001)	{0.048}	(0.001)	{0.057}
FDI liabilities	0.000		0.001		0.006	***	0.001	***	0.003	**	0.000		0.009	***
	(0.000)	{0.055}	(0.001)	{0.652}	(0.001)	{1.000}	(0.000)	{0.996}	(0.001)	{0.961}	(0.001)	{0.063}	(0.002)	{1.000}
Inflation	0.000		0.000		0.000		0.000		-0.001		0.000		0.000	
	(0.000)	{0.146}	(0.000)	{0.104}	(0.000)	{0.048}	(0.000)	{0.043}	(0.001)	{0.487}	(0.000)	{0.070}	(0.000)	{0.063}
Political institution														
Political competition index	0.000		0.000		0.000		0.000		0.000		0.000		0.000	
	(0.001)	{0.207}	(0.000)	{0.257}	(0.001)	{0.151}	(0.000)	{0.452}	(0.000)	{0.143}	(0.001)	{0.202}	(0.001)	{0.191}
Presidential systems	-0.001		-0.005	**	0.001		-0.003	***	0.000		0.000		0.000	
	(0.002)	{0.151}	(0.001)	{0.985}	(0.002)	{0.165}	(0.001)	{1.000}	(0.001)	{0.068}	(0.002)	{0.085}	(0.002)	{0.072}
Plurality systems	0.000		0.000		0.000		0.000		-0.001		-0.003		-0.001	
	(0.001)	{0.055}	(0.000)	{0.051}	(0.001)	{0.083}	(0.000)	{0.102}	(0.002)	{0.246}	(0.005)	{0.328}	(0.002)	{0.115}
Political Rights index	0.000		0.000		-0.003	*	0.000		0.000		0.000		-0.004	
	(0.001)	{0.135}	(0.000)	{0.174}	(0.001)	{0.896}	(0.000)	{0.093}	(0.001)	{0.107}	(0.001)	{0.141}	(0.003)	{0.672}
Wagner's law														
GDP per capita	0.000		0.000		0.000		0.000		0.000		0.000		0.000	
	(0.001)	{0.072}	(0.000)	{0.120}	(0.001)	{0.129}	(0.000)	{0.068}	(0.001)	{0.095}	(0.001)	{0.063}	(0.001)	{0.084}

Table 4: Central government's results using Bayesian Model Averaging. All regressions include a constant, time effect and regional effect. Posterior standard errors in parenthesis. Posterior Inclusion Probability (PIP) in brackets. * if 75%≤PIP<95%, ** if 95%≤PIP<99% and *** if PIP≥99%

	Total Expenditures		Compensation of employees		Use of goods and services		Social benefits		General public services		Defense		Public order and safety	
Centralization														
Federal dummy	-0.021		-0.002		-0.010 *		0.000		0.002		-0.001		-0.001	
	(0.017)	{0.683}	(0.004)	{0.232}	(0.006)	{0.802}	(0.002)	{0.062}	(0.005)	{0.247}	(0.002)	{0.174}	(0.001)	{0.493}
Conflict														
Warfare score	0.000		0.000		0.000		0.001		0.000		0.003 ***		0.000	
	(0.001)	{0.116}	(0.000)	{0.057}	(0.001)	{0.131}	(0.002)	{0.327}	(0.000)	{0.063}	(0.001)	{1.000}	(0.000)	{0.332}
Country size														
Land area	0.006		0.007 **		0.001		0.000		0.008 ***		0.000		0.000	
	(0.006)	{0.590}	(0.002)	{0.988}	(0.001)	{0.273}	(0.001)	{0.088}	(0.002)	{1.000}	(0.000)	{0.096}	(0.000)	{0.165}
Population	-0.031 ***		-0.008 **		-0.004		-0.007 *		-0.008 *		0.000		0.000	
	(0.006)	{1.000}	(0.002)	{0.986}	(0.003)	{0.706}	(0.005)	{0.756}	(0.004)	{0.833}	(0.000)	{0.083}	(0.000)	{0.207}
Democracy														
Democracy score	0.003		0.000		0.001		0.000		0.000		0.000		0.000	
	(0.002)	{0.716}	(0.001)	{0.167}	(0.001)	{0.349}	(0.001)	{0.132}	(0.000)	{0.059}	(0.001)	{0.484}	(0.000)	{0.101}
Demographic														
Dependency share <15	0.004		0.002		0.003		-0.002		0.007		0.003		0.000	
	(0.019)	{0.086}	(0.007)	{0.092}	(0.009)	{0.121}	(0.010)	{0.083}	(0.018)	{0.170}	(0.008)	{0.141}	(0.001)	{0.069}
Dependency share >64	0.498 *		-0.020		0.066		0.539 ***		0.001		0.057		0.000	
	(0.220)	{0.936}	(0.046)	{0.209}	(0.072)	{0.534}	(0.077)	{1.000}	(0.018)	{0.060}	(0.059)	{0.589}	(0.003)	{0.067}
Urbanization	-0.011		-0.047 **		0.001		-0.003		0.001		0.031 **		-0.012 ***	
	(0.027)	{0.208}	(0.014)	{0.976}	(0.004)	{0.068}	(0.012)	{0.134}	(0.006)	{0.097}	(0.010)	{0.972}	(0.003)	{0.996}
Population growth	-0.389		0.008		0.012		-0.009		-0.397		0.008		0.001	
	(0.588)	{0.368}	(0.058)	{0.055}	(0.067)	{0.071}	(0.084)	{0.065}	(0.363)	{0.635}	(0.051)	{0.069}	(0.012)	{0.063}
Fractionalization														
Linguistic fractionalization	-0.003		-0.023 *		0.000		0.000		0.000		0.000		0.000	
	(0.009)	{0.112}	(0.010)	{0.919}	(0.002)	{0.047}	(0.003)	{0.075}	(0.002)	{0.054}	(0.001)	{0.049}	(0.000)	{0.060}
Geography and climate														
Area within 100km of coast	0.022		0.045 ***		-0.001		-0.008		0.035 ***		0.000		0.000	
	(0.027)	{0.484}	(0.007)	{1.000}	(0.004)	{0.154}	(0.012)	{0.419}	(0.007)	{1.000}	(0.001)	{0.079}	(0.000)	{0.080}

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	Total Expenditures	Compensation of employees	Use of goods and services	Social benefits	General public services	Defense	Public order and safety
Tropical and subtropical area	-0.027	-0.040 ***	0.000	0.001	0.000	0.015 *	-0.007 ***
	(0.022) {0.688}	(0.007) {1.000}	(0.002) {0.065}	(0.005) {0.099}	(0.002) {0.053}	(0.006) {0.946}	(0.001) {1.000}
Number of neighboring states	0.003	0.004 ***	0.000	0.006 **	0.000	0.000	0.000
	(0.004) {0.440}	(0.001) {0.993}	(0.001) {0.172}	(0.002) {0.975}	(0.000) {0.060}	(0.001) {0.225}	(0.000) {0.102}
Globalization							
Trade openness	0.008	0.024 ***	0.003	0.003	0.002	0.003	0.005 ***
	(0.015) {0.291}	(0.005) {0.996}	(0.005) {0.309}	(0.007) {0.238}	(0.005) {0.194}	(0.004) {0.427}	(0.001) {0.999}
Inequality							
Gross inequality	0.000	0.000	0.000	0.000	0.000	0.000	0.000 ***
	(0.000) {0.133}	(0.000) {0.168}	(0.000) {0.123}	(0.000) {0.117}	(0.000) {0.080}	(0.000) {0.047}	(0.000) {0.999}
Macroeconomic							
Central government debt	0.027 *	0.000	0.010 *	0.000	0.025 ***	0.011 ***	0.000
	(0.018) {0.780}	(0.001) {0.067}	(0.005) {0.879}	(0.002) {0.068}	(0.005) {1.000}	(0.003) {0.992}	(0.001) {0.194}
FDI liabilities	0.025 ***	0.000	0.002	0.003	0.007 *	0.000	0.000
	(0.006) {0.999}	(0.001) {0.066}	(0.002) {0.425}	(0.003) {0.582}	(0.004) {0.826}	(0.000) {0.071}	(0.000) {0.085}
Inflation	0.000	-0.002 *	0.000	0.000	0.000	0.000	0.000
	(0.001) {0.080}	(0.001) {0.788}	(0.000) {0.037}	(0.000) {0.066}	(0.001) {0.131}	(0.000) {0.088}	(0.000) {0.195}
Political institution							
Political competition index	0.001	0.002	-0.001	0.000	0.000	0.000	0.001 **
	(0.002) {0.205}	(0.002) {0.678}	(0.001) {0.228}	(0.001) {0.097}	(0.000) {0.062}	(0.000) {0.120}	(0.000) {0.973}
Presidential systems	-0.027 *	0.001	-0.014 *	0.001	-0.024 ***	-0.002	0.000
	(0.015) {0.827}	(0.003) {0.113}	(0.006) {0.919}	(0.003) {0.098}	(0.005) {0.999}	(0.003) {0.261}	(0.000) {0.063}
Plurality systems	-0.014	0.002	0.000	-0.002	-0.001	-0.001	-0.001
	(0.013) {0.598}	(0.004) {0.339}	(0.001) {0.052}	(0.005) {0.232}	(0.003) {0.158}	(0.001) {0.149}	(0.001) {0.654}
Political Rights index	-0.002	0.001	0.000	-0.004	0.000	0.001	0.000
	(0.004) {0.178}	(0.002) {0.170}	(0.001) {0.085}	(0.004) {0.603}	(0.001) {0.108}	(0.002) {0.269}	(0.000) {0.070}
Wagner's law							
GDP per capita	-0.019	-0.001	0.001	0.000	-0.008	0.000	0.000
	(0.017) {0.623}	(0.002) {0.127}	(0.002) {0.172}	(0.003) {0.128}	(0.006) {0.706}	(0.001) {0.130}	(0.001) {0.342}

Table 4: Central government's results using Bayesian Model Averaging. All regressions include a constant, time effect and regional effect. Posterior standard errors in parenthesis. Posterior Inclusion Probability (PIP) in brackets. * if 75%≤PIP<95%, ** if 95%≤PIP<99% and *** if PIP≥99%

	Economic affairs		Hous. and commu. amenit.		Health		Recrea., culture, and relig.		Education		Social protection		Public Goods	
Centralization														
Federal dummy	-0.001		-0.002		-0.006 *		-0.001		-0.010 ***		-0.001		-0.020 ***	
	(0.002)	{0.146}	(0.001)	{0.717}	(0.004)	{0.829}	(0.001)	{0.562}	(0.002)	{0.998}	(0.002)	{0.138}	(0.005)	{0.999}
Conflict														
Warfare score	0.002 *		0.000		0.000		0.000 *		0.000		0.000		0.000	
	(0.001)	{0.942}	(0.000)	{0.083}	(0.000)	{0.065}	(0.000)	{0.782}	(0.000)	{0.058}	(0.000)	{0.053}	(0.000)	{0.054}
Country size														
Land area	0.005 ***		0.000		-0.003 *		0.000 *		0.000		0.000		0.000	
	(0.001)	{1.000}	(0.000)	{0.124}	(0.001)	{0.852}	(0.000)	{0.774}	(0.000)	{0.139}	(0.000)	{0.091}	(0.001)	{0.096}
Population	-0.006 ***		0.000		-0.001		0.000		-0.004 **		0.000		-0.009 **	
	(0.001)	{1.000}	(0.000)	{0.308}	(0.002)	{0.464}	(0.000)	{0.334}	(0.001)	{0.980}	(0.001)	{0.128}	(0.003)	{0.981}
Democracy														
Democracy score	0.000		0.000		0.000		0.000		0.000		0.000		0.000	
	(0.000)	{0.328}	(0.000)	{0.071}	(0.000)	{0.070}	(0.000)	{0.240}	(0.000)	{0.464}	(0.001)	{0.168}	(0.001)	{0.334}
Demographic														
Dependency share <15	0.001		0.000		0.000		0.001		0.001		-0.023		0.000	
	(0.005)	{0.091}	(0.001)	{0.063}	(0.002)	{0.061}	(0.001)	{0.173}	(0.005)	{0.108}	(0.022)	{0.587}	(0.004)	{0.053}
Dependency share >64	0.027		-0.001		0.030		-0.001		-0.029		0.593 ***		0.001	
	(0.039)	{0.388}	(0.004)	{0.087}	(0.042)	{0.412}	(0.002)	{0.099}	(0.037)	{0.454}	(0.054)	{1.000}	(0.016)	{0.062}
Urbanization	-0.039 ***		0.000		-0.034 ***		0.000		-0.003		0.002		-0.051 ***	
	(0.007)	{1.000}	(0.001)	{0.059}	(0.007)	{1.000}	(0.001)	{0.243}	(0.006)	{0.266}	(0.007)	{0.149}	(0.012)	{0.999}
Population growth	-0.018		-0.001		-0.001		-0.007		-0.005		-0.032		0.001	
	(0.067)	{0.109}	(0.011)	{0.064}	(0.026)	{0.050}	(0.018)	{0.181}	(0.037)	{0.070}	(0.119)	{0.116}	(0.051)	{0.059}
Fractionalization														
Linguistic fractionalization	-0.001		-0.002		-0.007		-0.002 *		0.000		0.002		-0.002	
	(0.002)	{0.100}	(0.002)	{0.533}	(0.006)	{0.647}	(0.001)	{0.772}	(0.002)	{0.090}	(0.006)	{0.193}	(0.006)	{0.176}
Geography and climate														
Area within 100km of coast	0.000		0.000		0.003		0.000		0.000		0.002		0.004	
	(0.001)	{0.070}	(0.001)	{0.104}	(0.005)	{0.328}	(0.000)	{0.084}	(0.001)	{0.064}	(0.005)	{0.234}	(0.007)	{0.302}

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	Economic affairs		Hous. and commu. amenit.		Health		Recrea., culture, and relig.		Education		Social protection		Public Goods	
Tropical and subtropical area	-0.006		0.000		-0.010 *		0.000		-0.001		-0.017 *		-0.021 *	
	(0.006)	{0.595}	(0.001)	{0.087}	(0.006)	{0.834}	(0.001)	{0.269}	(0.003)	{0.224}	(0.009)	{0.874}	(0.010)	{0.907}
Number of neighboring states	0.000		0.000		0.003 ***		0.000		0.000		0.002 *		0.002	
	(0.000)	{0.049}	(0.000)	{0.190}	(0.001)	{1.000}	(0.000)	{0.700}	(0.000)	{0.068}	(0.001)	{0.895}	(0.001)	{0.722}
Globalization														
Trade openness	0.017 ***		0.004 ***		0.004		0.000		0.001		0.000		0.006	
	(0.003)	{1.000}	(0.001)	{1.000}	(0.005)	{0.504}	(0.000)	{0.083}	(0.002)	{0.172}	(0.001)	{0.071}	(0.007)	{0.535}
Inequality														
Gross inequality	0.000		0.000		0.000		0.000		0.000		0.000		0.000	
	(0.000)	{0.397}	(0.000)	{0.054}	(0.000)	{0.142}	(0.000)	{0.057}	(0.000)	{0.623}	(0.000)	{0.054}	(0.000)	{0.152}
Macroeconomic														
Central government debt	0.000		-0.003 *		0.001		0.000		0.000		0.001		0.000	
	(0.001)	{0.069}	(0.001)	{0.942}	(0.001)	{0.157}	(0.000)	{0.069}	(0.001)	{0.057}	(0.003)	{0.183}	(0.002)	{0.096}
FDI liabilities	0.000		0.000		0.004 **		0.000		0.001		0.000		0.008 ***	
	(0.000)	{0.051}	(0.000)	{0.281}	(0.001)	{0.986}	(0.000)	{0.113}	(0.001)	{0.562}	(0.001)	{0.123}	(0.002)	{0.991}
Inflation	0.001		0.000		0.000		0.000		0.000		0.000		0.000	
	(0.001)	{0.357}	(0.000)	{0.085}	(0.000)	{0.057}	(0.000)	{0.058}	(0.000)	{0.119}	(0.000)	{0.058}	(0.000)	{0.054}
Political institution														
Political competition index	0.000		0.000		0.000		0.000		0.000		0.001		0.002	
	(0.000)	{0.125}	(0.000)	{0.067}	(0.000)	{0.093}	(0.000)	{0.582}	(0.001)	{0.349}	(0.001)	{0.603}	(0.002)	{0.628}
Presidential systems	0.000		-0.004 ***		0.009 **		-0.003 ***		0.000		0.000		0.002	
	(0.001)	{0.055}	(0.001)	{0.997}	(0.003)	{0.971}	(0.001)	{1.000}	(0.001)	{0.085}	(0.001)	{0.059}	(0.004)	{0.220}
Plurality systems	0.000		0.000		0.000		0.000		0.000		0.000		0.000	
	(0.001)	{0.074}	(0.000)	{0.061}	(0.000)	{0.050}	(0.000)	{0.075}	(0.001)	{0.100}	(0.001)	{0.085}	(0.001)	{0.074}
Political Rights index	0.000		0.000		-0.004 **		0.000		0.000		-0.001		-0.001	
	(0.001)	{0.101}	(0.000)	{0.070}	(0.001)	{0.975}	(0.000)	{0.241}	(0.001)	{0.120}	(0.002)	{0.358}	(0.002)	{0.153}
Wagner's law														
GDP per capita	0.000		0.000		0.000		0.000		0.000		0.000		0.000	
	(0.001)	{0.069}	(0.000)	{0.107}	(0.001)	{0.108}	(0.000)	{0.119}	(0.001)	{0.098}	(0.001)	{0.089}	(0.001)	{0.062}