GOVERNMENT DECENTRALIZATION AND ECONOMIC FREEDOM

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Introduction

The model of government employed by Brennan and Buchanan (1980) suggests that a revenue-maximizing "Leviathan" government will be larger if there are fewer nearby governments. If a Leviathan government raises taxes too high, then it may see diminishing revenue as taxpayers begin to avoid the taxes by moving to other jurisdictions. This paper expands the revenue-maximizing assumption to a more general power-maximizing assumption, and empirically examines the relationship between intergovernmental competition and the governmental power.

The Basic Theory

If we assume that government has an innate predisposition to grow in power and size as the Leviathan hypothesis does, then more governmental units should result in less overall government. A single monopolistic government would face minimal constraints on its ability to grow. Since human and physical capital would have no alternatives to choose from, the government would be free to raise taxes and other intrusions significantly. The only constraint to this process would the inevitable decrease in work effort associated with higher taxes and regulations.

If the number of governments to choose from increases, the those governments may engage in a competitive process of lowering taxes and regulations in an effort to encourage resources to locate in their jurisdiction. Such competition will yield less government intrusion into the economy.[1]

There are a number of complications to this basic theory to consider. First is transportation costs. Obviously, it is costly to move; this creates a wedge in this competitive process-allowing each government a certain amount of monopoly power. We should note that immigration and emigration controls of both human and physical

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capital work to increase the cost of relocating and thus contribute to the government's monopoly power. Another complication is the possibility of intergovernmental collusion. Governments, like firms, may enter into collusive compacts to keep taxes and regulations high. For example, intergovernmental grants are a way to even out taxes and spending across jurisdictions, thus reducing real competition. Finally, the decision to locate in a particular jurisdiction is not only a function of government taxes and regulations. A variety of locational rents create an opportunity for government to grow so long as the excess government cost does not exceed the value of the locational rents.

Within a nation, federalism may be a way to create intergovernmental competition. Federalism is a constitutionally designed system of government in which the powers to tax, spend, and regulate are partitioned among a large number of smaller sub-national jurisdictions. True federalism is not merely an administrative decentralization, but is a system where local units have a large amount of autonomy over their activities. This provides us with an empirically testable hypothesis: nations with a more federal system will have less total governmental intrusion than more centralized nations, ceteris paribus.[2]

Measuring Intergovernmental Competition

One way to measure the degree of intergovernmental competition within a nation is government revenue collected by the central government as a share of total government revenue — a measure of fiscal centralism. If there is only one central government in a nation, then the share would by one. Most nations, however, have many governmental units that compete internally for tax base, and would have central government shares less than one.[3]

Another method is to simply count up the number of governmental jurisdictions within a country—a measure of fiscal fragmentation.[4] All other things equal, more jurisdictions mean more competition, which should mean smaller government size.

Oates (1985) found no support for the hypothesis that fiscal centralism is positively correlated with government size across nations. Though Lawson (1992) found that fiscally fragmented nations — nations with more jurisdictions — had smaller governments than more unified governments.

Measuring Governmental Power

The standard way to measure the size of the government has been to use total government fiscal size (either revenues or expenditures) divided by gross national product. This measure certainly fits in with the revenue-maximizing model of Leviathan most often considered.

However, a broader power-maximizing model should be employed.[5] If tax revenue is assumed to be an objective of Leviathan, then the general power to control resources could also be an objective. But resources can be controlled through a variety of non-tax means. As Stigler (1971) has noted, regulations have tax-like effects. Also, government-created inflation acts like a tax on dollar-denominated assets.

In order to get a more complete measure of governmental power, this paper employs an Index of Economic Freedom constructed by Gwartney, Block and Lawson (1993). The index is designed to measure the amount of governmental infringements on the economic freedom of property owners' control over their resources. We believe the Index of Economic Freedom to be a more accurate indicator of governmental power than simply government spending.[6]

The Index of Economic Freedom measures the degree of economic freedom in five different categories : (1) money and inflation, (2) government operations and regulations, (3) takings and discriminatory taxation, (4) international trade, and (5) capital markets and interest rates. Three component variables were collected in each category; thus, fifteen variables are used to create the final index. Exhibit 1 lists the component variables used in the five categories. In all, 100 countries were rated with the Index of Economic Freedom.

Each country received a zero to ten rating based on their performance in each component. A category rating was calculated as the average of the three variables. A summary rating was then calculated based on the category ratings. Exhibit 2 shows the 1990 ratings in each of the five major areas and the overall summary index for each country.

Gwartney, Block and Lawson have found the Index of Economic Freedom to be highly correlated with economic growth during the 1970s and 1980s.

The Empirical Results

Data were collected from 77 different nations. The dependent variable used in the regressions is the Summary Index of Economic Freedom in 1990. The independent variables used in the regressions are per capita GNP (in US dollars), the urbanization rate, central government revenues as a share of total government revenue, intergovernmental grants as a share of total government revenue, and the number of governmental jurisdictions per square mile. Exhibit 3 summarizes the variables in the study. Notice that the fiscal centralism variable and the intergovernmental grants variable are available for only 41 of the 77 nations.

Exhibit 4 reports the results of two regressions. Regression 1 used the log of the Overall Summary Rating of Economic Freedom as the dependent variable.[7] The key explanatory variable is the FISCAL FRAGMENTATION variable. The model predicts a positive sign for this variable indicating that more jurisdictions (per square mile) will decrease the power of Leviathan and thus increase the Index of Economic Freedom. Per capita GNP and the urbanization rate are included as controls. The results do not support the model's hypothesis that more fragmentation yields more freedom as the coefficient is not significantly different from zero.

Regression 2 is the same as regression 1 except for the addition of the FISCAL CENTRALISM variable, and the intergovernmental grants variable, GRANTS The sample size is reduced from 77 to 41 as a result of the addition of these variables. The expected sign for both variables is negative, indicating that a more centralized government with more intergovernmental grants should have less economic freedom. Once again, the results do not support this hypothesis.

Conclusions

The hypothesis that government decentralization is a way to limit the power of government is not supported with the data at hand. Intergovernmental collusion may exist to such a great extent that even seemingly decentralized and fragmented governments, in fact, are acting in concert. Revenue sharing, intergovernmental grants and mandated expenditures may have virtually eliminated taxpayer choices within nations.[8]

Also, we must not assume that smaller local governments, even where they exist, will always act more benignly toward their citizens. Bolick (1988) outlines numerous cases where local governments have restricted freedom. In the United

States, "states' rights" arguments have mainly been used to restrict freedom, not sprotect it.

The constraining of Leviathan cannot apparently be achieved by simply creating more administrative units of government. Real intergovernmental competition, the kind that might limit governmental growth, is more complex and difficult to maintain than by simply creating 50 states or for that matter 100 or a 1000 states within a nation.

It may appear to some that the finding of this paper is an entirely negative one, and therefore of no real interest except for the typical scientific one of closing off yet one more dead alley. Not that there would be anything remiss in this, as economics, as with the other (social) sciences, often proceeds in just this way. It is also valuable to know that something is not the case.

At first glance there appears to be a grain of truth in this view. After all, we have determined only that the empirical evidence cannot be used in support of the Brennan and Buchanan (1980) "Leviathan" hypothesis, at least with regard to the international statistics we bring to bear on this case.

Nothing could be further from the truth, however, than that this is an entirely negative finding — at least in the sense of public policy analysis. For if true, it has serious implications for a perspective with a long term following not only for scholars, but among politicians of a certain stripe and also the general public.

We refer, here, to the usual assumption, among conservatives, that the best way to solve practically any social issue — from education, to welfare, to poverty, to crime, to divorce, to transportation, to housing — is to shift from relying on the federal government to the states. Commentators such as William F. Buckely, William J. Bennett, Chester E. Finn, John O'Sullivan and Jack kemp, have practically made careers out of urging devolution as a panacea to national problems along decentralist lines. Even the Catholic Church lends support to this view with its doctrine of "subsidiarity." (Bolick, 1980, is a good antidote to these views).

The present study, then, can be used to at least question devolving responsibility from federal to state and even to municipal levels. Of course, we cannot afford to generalize widely from this one empirical examination. Obviously, much more study needs to be given to this important issue. But if these findings are correct, they have major implications — and negative ones — for the conservative reliance on decentralization.

Exhibit 1: The Components of the Index of Economic Freedom

I. Money and Inflation (Protection of money as a store of value and medium of exchange)

A. Annual Growth Rate of the Money Supply adjusted for Growth of GNP (last five years)

B. Standard deviation of Annual Inflation Rate (last five years)

C. Freedom of Residents to Own Foreign Money Domestically, Maintain Bank Accounts Abroad, and Export the National Currency.

II. Government Operations and Regulations (Freedom to decide what is produced and consumed)

A. Government General Consumption Expenditures as a Percent of GNP

B. Nonfinancial Central Government Enterprises
1. Total Number
2. Government Enterprise in Designated Industries

C. Price Controls (1990 Index Only)

III. Taking and Discriminatory Taxation (Freedom to keep what you earn)

A. Transfers and Subsidies as a Percent of GNP

B. Top Marginal Tax Rate (and Income Threshold at which it applies)

C. Conscripts per 1,000 Population

IV. Restraints on International Trade-including taxes, regulations and exchange rate controls (Freedom of exchange with foreigners)

A. Taxes on International Trade as a percent of Exports plus Imports

B. Difference Between the Official Exchange Rate and the Black Market Rate

C. Actual Size of Trade Sector compared to the Expected Size

V. Capital Markets and Real Interest Rates (Freedom to save and invest)

A. Differential Between the World Real Deposit Interest Rate and the Country's Real Deposit Interest Rate (the greater the deviation from the world real interest rate the lower the rating of the country)

Exhibit 2: The Economic Freedom Rating in the Five Major Component Areas and the Overall Summary Rating, 1990.

Country	Money and Inflation	Governmnet Operations & Regulations	Takings & Discrim-inatory Taxation	Inter-national national	Capital Markets and Real Interest Rates	Overall Summary Rating	Grade
INDUSTRIAL							
United States	10.0	6.7	6.8	6.7	8.4	7.7	A
Canada	9.7	5.3	5.7	9.0	6.8	7.3	A
Australia	7.7	5.3	5.4	6.3	5.6	6.1	B
Japan	9.0	7.7	7.5	6.3	3.6	6.8	B
New Zealand	5.0	6.2	5.0	5.0	7.2	5.7	C
Austria	10.0	3.3	2.9	8.0	6.8	6.2	B
Belgium	10.0	5.5	1.8	9.7	10.0	7.4	A
Denmark	9.0	3.8	1.8	7.0	8.4	6.0	B
Finland	9.3	3.8	1.1	6.3	6.8	5.5	C
France	10.0	5.2	2.1	8.0	9.2	6.9	B
Germany	9.0	4.7	2.9	8.7	7.2	6.5	B
Iceland	5.3	3.5	-	4.3	1.0	3.5	F
Ireland	6.0	5.3	3.9	8.0	4.8	5.6	C
Italy	9.7	2.8	3.2	7.7	6.8	6.0	B
Netherlands	10.0	6.8	1.1	9.0	10.0	7.4	A
Norway	7.3	2.2	1.4	8.3	6.8	5.2	C
Spain	7.0	3.7	2.5	6.3	10.0	5.9	C
Sweden	8.7	3.0	0.4	6.7	8.8	5.5	C
Switzerland	9.7	8.0	7.8	6.7	9.6	8.4	A
United Kingdom	7.0	5.2	5.7	8.0	8.0	6.8	B

CENTRAL/SOUTH AMERICA

Argentina	3.3	4.0	5.4	4.7	3.6	4.2	D
Belize	6.0	6.0	7.5	3.0	9.2	6.3	B
Bolivia	3.3	4.8	7.1	6.0	5.6	5.4	C
Brazil	1.0	2.3	6.1	3.7	2.4	3.1	F
Chile	5.3	8.2	3.3	8.7	7.2	6.5	B
Colombia	3.0	6.0	6.7	3.7	6.0	5.1	C
Costa Rica	6.7	4.3	7.9	6.3	8.4	6.7	B
Dominican Rep	0.7	6.2	6.4	3.0	6.7	4.6	D
Ecuador	4.0	5.2	5.7	7.3	3.2	5.1	C
El Salvador	2.7	8.3	4.6	3.0	5.2	4.8	D
Guatemala	4.7	8.2	6.4	5.0	6.8	6.2	B
Haiti	5.0	7.5	10.0	4.7	-	6.8	B
Honduras	5.3	-	5.6	5.0	4.8	5.2	C
Jamaica	1.0	3.5	7.8	6.0	6.4	4.9	D
Mexico	3.3	3.3	6.1	7.3	6.0	5.2	C
Nicaragua	1.0	1.0	3.3	5.0	-	2.6	F
Panama	7.3	3.5	5.7	6.3	3.3	5.2	C
Paraguay	5.3	8.0	7.1	5.3	8.0	6.7	B
Peru	1.0	5.2	4.6	2.7	1.2	2.9	F
Trinidad & Tobago	5.0	3.3	6.4	4.0	2.0	4.1	D
Uruguay	3.7	5.5	7.5	5.0	4.0	5.1	C
Venezuela	4.3	6.0	6.4	7.3	2.8	5.4	C

EUROPE/MIDDLE EAST

Cyprus	6.7	4.3	1.4	5.0	9.2	5.3	C
Czechoslovakia	5.3	0.3	1.8	4.0	-	2.9	F
Egypt	5.7	3.5	2.9	5.3	4.8	4.4	D
Greece	4.0	1.7	2.2	6.7	7.2	4.4	D
Hungary	2.0	4.7	1.4	5.3	1.3	2.9	F
Iran	4.7	3.5	2.9	2.3	-	3.4	F
Israel	1.3	0.7	2.1	6.0	4.0	2.8	F
Jordan	2.7	2.7	7.1	6.7	1.3	4.1	D
Malta	6.7	2.5	3.9	5.3	7.6	5.2	C
Poland	3.0	4.3	1.1	5.7	0.5	2.9	F
Portugal	3.0	3.7	3.6	8.0	5.2	4.7	D
Syria	3.3	3.3	-	3.5	-	-	
Turkey	2.7	6.0	3.9	7.3	3.2	4.6	D

ASIA

Bangladesh	5.7	7.8	-	1.0	4.4	4.7	D
Fiji	3.3	6.3	7.5	4.3	6.0	5.5	C
Hong Kong	6.3	10.0	9.3	10.0	6.7	8.5	A
India	5.7	3.3	5.6	3.3	5.3	4.6	D
Indonesia	5.7	5.7	6.8	9.3	4.0	6.3	B
Korea	5.7	6.0	4.3	7.7	6.0	5.9	C
Malaysia	9.0	4.7	7.9	9.0	9.2	8.0	A
Nepal	3.7	6.3	-	1.3	-	-	
Pakistan	6.7	3.5	6.1	4.3	4.0	4.9	D
Philippines	2.7	6.7	8.6	6.0	7.2	6.2	B

Singapore	9.7	8:3	8.5	10.0	8.4	9.0	A
Sri Lanka	2.7	5.3	7.2	4.3	7.5	5.4	C
Taiwan	6.7	4.5	4.3	7.7	9.3	6.5	B
Thailand	7.0	5.3	6.1	8.3	9.2	7.2	A
AFRICA							
Algeria	4.3	1.0	-	5.0	-	-	
Benin	4.3	7.0	-	3.0	-	-	
Botswana	1.7	3.8	5.4	6.3	4.4	4.3	D
Burundi	6.7	4.5	-	3.0	3.5	-	
Cameroon	5.3	4.2	5.0	4.0	8.7	5.4	C
C. Africa Rep	6.0	-	-	2.7	-	-	
Chad	4.0	-	7.8	6.7	6.5	6.3	B
Congo	2.7	1.2	6.7	7.0	-	4.4	D
Cote d' Ivoire	6.0	2.3	5.0	5.3	6.8	5.1	C
Gabon	3.0	3.3	6.4	5.3	6.8	5.0	D
Ghana	4.0	5.0	5.6	3.3	1.6	3.9	F
Kenya	3.0	2.0	6.8	5.7	6.4	4.8	D
Madagascar	2.0	-	7.8	4.5	-	-	
Malawi	1.3	4.7	6.8	3.7	1.3	3.6	F
Mali	9.0	7.3	-	5.3	6.0	6.9	B
Mauritius	3.3	6.5	7.5	5.0	9.2	6.3	B
Morocco	5.0	2.2	1.1	5.3	6.4	4.0	D
Niger	5.3	-	-	3.5	9.5	-	
Nigeria	1.3	5.0	5.6	6.3	2.8	4.2	D
Rwanda	6.0	-	-	1.5	5.5	-	
Senegal	5.3	4.5	5.0	4.5	5.3	4.9	D

Sierra Leone	0.0	7.0	10.0	2.0	0.0	4.8	D
Somalia	0.0	0.0	-	0.5	0.0	0.1	F
South Africa	4.3	4.0	5.7	6.7	4.0	4.9	D
Tanzania	2.0	2.8	6.1	5.5	1.3	3.5	F
Togo	5.3	3.0	-	4.3	7.0	4.9	D
Tunisia	6.3	2.5	3.3	5.3	6.4	4.8	D
Uganda	0.0	4.2	6.1	1.0	-	2.8	F
Zaire	0.3	7.0	6.8	4.7	-	2.2	F
Zambia	0.3	1.2	4.4	5.0	0.0	2.2	F
Zimbabwe	3.3	1.7	2.2	4.7	1.3	2.6	F

Exhibit 3: Summary of the Data.

Variable	Source	Mean	Std. Dev	#
Overall Summary Rating of Economic Freedom	GBL	5.36	1.47	77
Fiscal Fragmentation: Number of Districts Per Square Mile	IMF	27.30	60.23	77
Fiscal Centralism: Central Government Revenue as a Share of Total Government Revenue	IMF	0.834	0.140	41
Grants: Inter-governmental Grants as a Share of Central Government Expenditures	IMF	0.085	0.081	41
Urbanization Rate(%)	WB	59.48	21.97	77
GNPPC: Gross National Product Per Capita (US$)	WB	6908.7	8485.7	77

Sources: GBL = Gwartney, Block and Lawson (1993);
IMF = International Monetary Fund (1993);
WB = World Bank (1993).

Exhibit 4: Regression Results (t-statistics in parenthesis).

Dependent Variable:	Overall Summary Rating of Economic Freedom	
Independent Variables	1	2
Constant	1.625410	1.27415
	(16.628)	(3.427)
Fiscal Fragmentation	0.000155	-0.000130
	(0.285)	(0.215)
Fiscal Centralism	--	0.570138
		(1.534)
Grants	--	-0.180680
		(0.325)
Urban	-0.001833	-0.003491
	(1.030)	(1.408)
GNPPC	0.000017	0.000020
	(3.565)	(3.125)
R^2	0.179704	0.226517
Adjusted R^2	0.145993	0.116019
F (3, 73)	5.3308	--
F (5, 35)	--	2.0500
Number of Obs.	77	41

Notes

1. *This theory is similar to Tiebout's (1959). McKenzie and Lee (1991) provide an excellent account of the increasing mobility of international capital and the impact of this mobility on governments' abilities to raise taxes.*
2. *See Dye (1990) for a complete review of American federalism as a way to create competition among governments.*
3. *We are assuming that there is governmental competition within the nation but none exists between nations. Obviously such competition exists, but in general should be less important than internal intergovernmental competition.*

4. *Zax (1988) coined the terms, "fiscal centralism" and "fiscal fragmentation."*

5. *Indeed Brennan and Buchanan (1980, p. 1985) are clear on this point, "total government intrusion into the economy should be smaller, ceteris paribus, the greater the extent to which taxes and expenditures are decentralized." The term "total government intrusion" implies a much broader scope than simply total government spending.*

6. *The Index of Economic Freedom is the product of a series of colloquia on "Rating Economic Freedom" sponsored by the Liberty fund and the Fraser Institute. This index was constructed for the "Rating Economic Freedom VI" Colloquium held at Sonoma, CA in November, 1993. A preliminary version of the index was published as a result of the "Rating Economic Freedom IV" Colloquium; see Gwartney, Block and Lawson (1992).*

7. *Regression specifications were run using each of the component ratings as the dependent variable as well. The basic results in these regressions were the same, and thus are not presented here.*

8. *It has been noted that international collusion among governments, through the UN, IMF, WTO, etc., threatens economic freedom as well.*

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