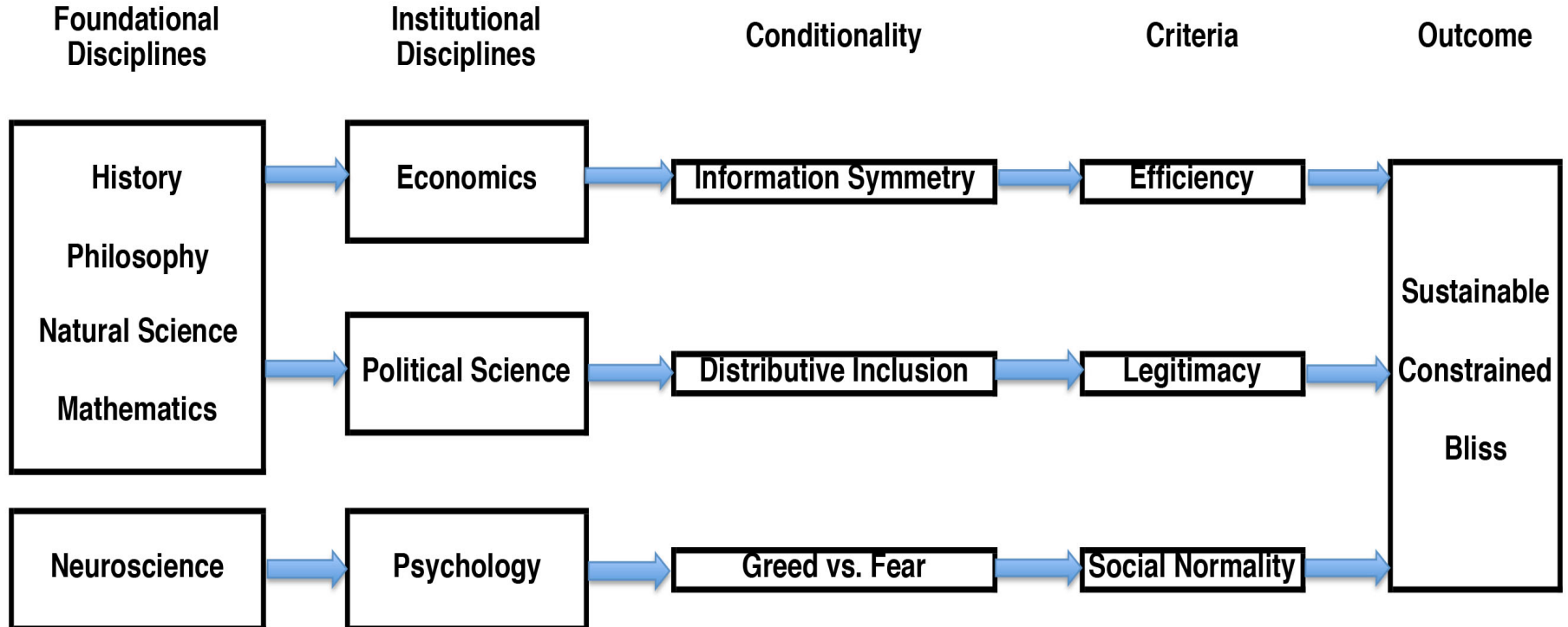


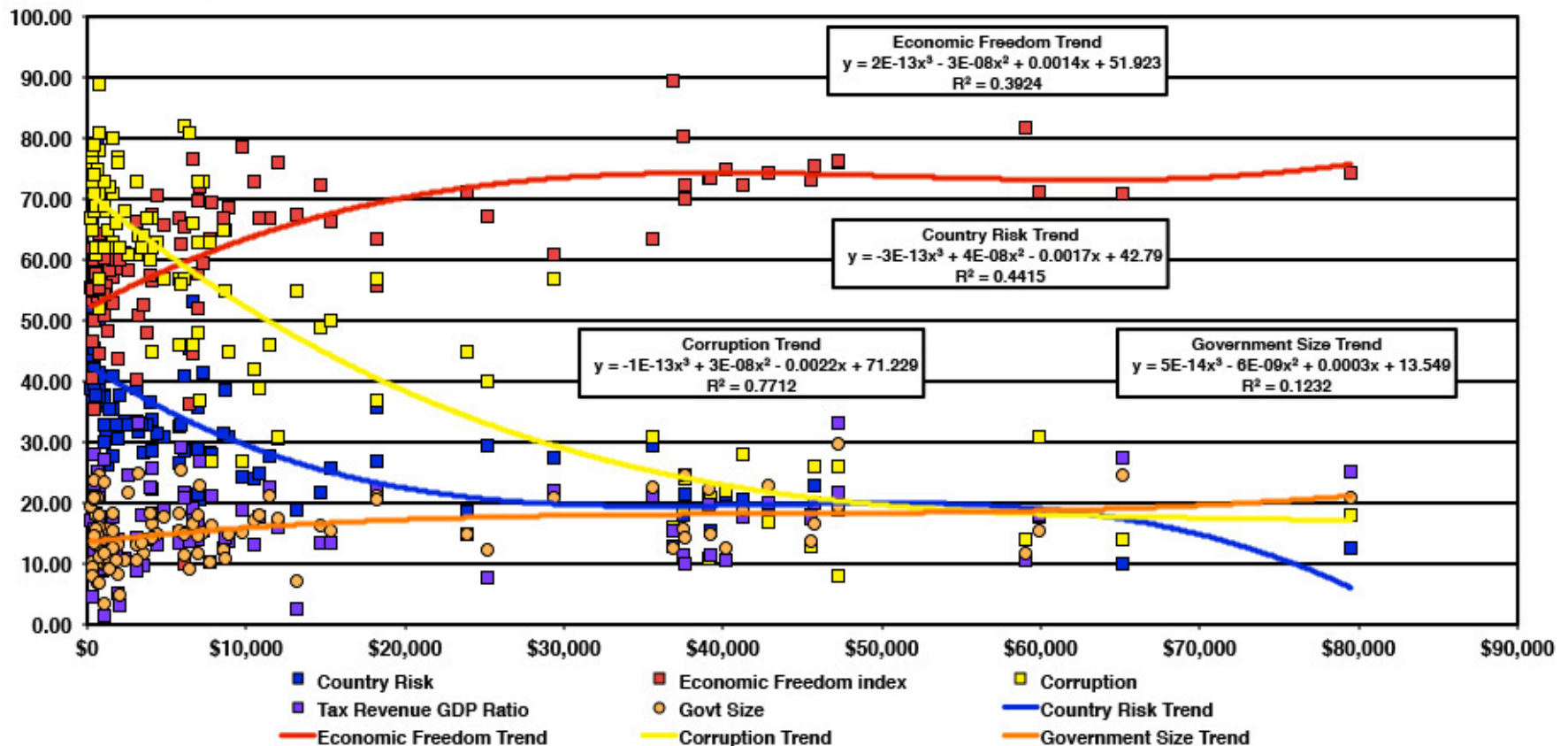
The Search for Sustainable Constrained Bliss

Epistemology of Optimal State-Market Relations



Risk and Political Legitimacy

\$2005 Real Per Capita GDP, Risk, Economic Freedom, Corruption, and Government Size - 2013



Source: The World Bank, *World Development Indicators*; The Heritage Foundation, *Index of Economic Freedom*; Transparency international, *The Corruption Perceptions Index*

Principles of Optimal Macroeconomic Fiscal Policy

At a macroeconomic level, government spending should be guided by the sustainability principle that any deficit spending be used in a counter-cyclical role and focused on spending for capital goods capacity creation rather than on recurrent functions. At present, all 50 states have balanced budget constitutional mandates that require voter approval for any net borrowing to invest in capital goods (public infrastructure). No such capital budgeting principle applies to the federal government, which leads to an endless confusion and argument about recurrent versus capital expenditures and rhetorical claims about “wasteful spending”.

Under the adoption of capital budgeting principles, government should run surpluses in boom periods to reduce inflationary pressures while in depression conditions, spending on capital investment is appropriate. As Keynes noted years ago, over the long run, the government’s balance should over time enable it to amortize all debt created without crowding out private sector consumption and investment. Macroeconomic fiscal policy thus should be used to produce sustainable growth with reduced volatility.

Capital budgeting principles aside, self-interested elected officials often discount long term decisions, thus creating a bias against sustainable public infrastructure. Economic incentives to change are lacking.

Principles of Optimal Microeconomic Fiscal Policy

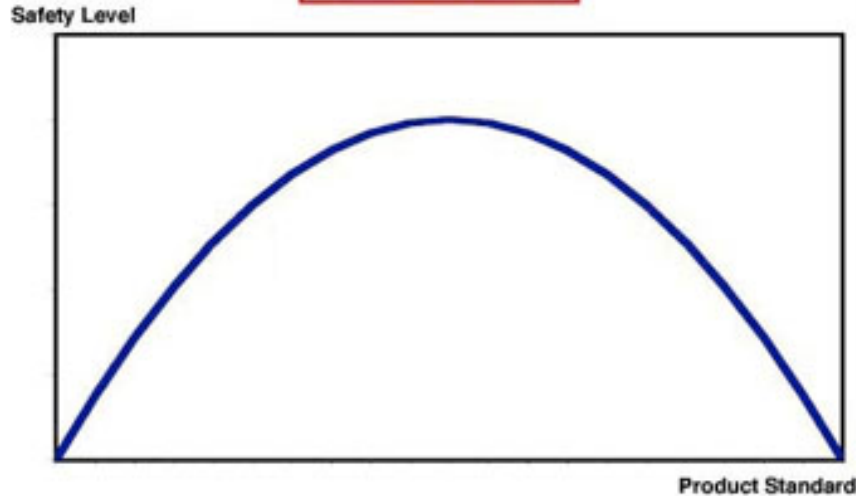
In the presence of market failure, government can adopt two corrective responses: In the presence of negative externalities, it can adopt a mix of taxes and regulation to reduce a market-based over-production of a good; In the presence of positive externalities, it can adopt a mix of tax expenditures (subsidies) and government spending to increase a market-based under-production of a good. This approach relies on the work of many economists, notably Arthur C. Pigou (1877-1959), who first put forth a formal exposition in his treatise, *The Economics of Welfare* (1920).

Pigou's work has guided the development of cost-benefit analysis in the assessment of projects. It is a tool used both in industry as well as in the public sector. Where the net social rate of return exceeds the opportunity of capital, government spending and/or subsidies are warranted up to the level of external benefits, while in the case of negative externalities, optimal taxation can be used to address such questions as environmental pollution and congestion.

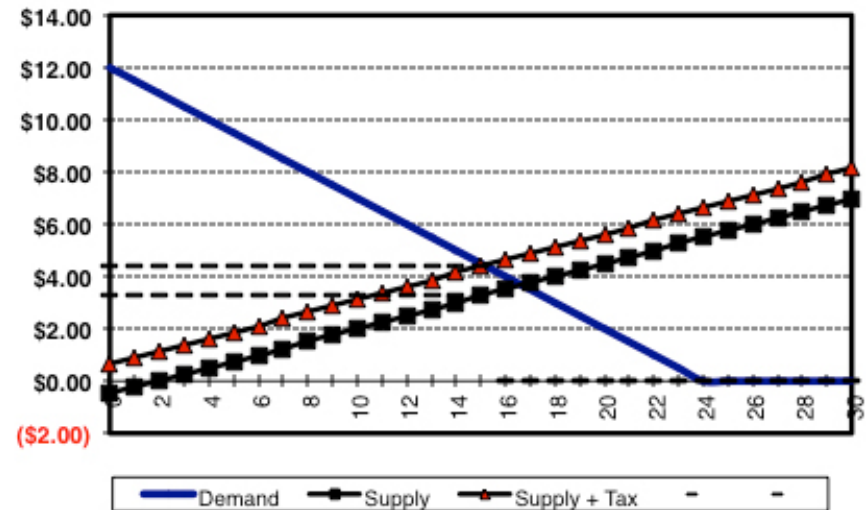
As in the case of optimal macroeconomic fiscal policy, elected officials tend to discount life cycle consequences of any proposed legislation. Seeking to maximize the outcome of legislation on prospects for their re-election, they may cast aside the analytical framework that could achieve economic efficiency, especially when the public remains unaware.

Sustainable Economic Efficiency can be achieved through a mix of regulation and taxation to compensate for asymmetric information conditions

Optimal Regulation



Taxation and Market Equilibrium



Ramsey Taxation for Microeconomic Fiscal Efficiency

In the 1920's the British government faced a major problem of how to reduce wartime debt through the use of public taxation. Frank P. Ramsey (1903-1930) provided an answer based on the principle of achieving minimal distortions in economic decisions, that is, fiscal efficiency in taxation.

Ramsey taxation is based on the notion that one should apply a higher rate of taxation on goods where consumers are less price sensitive while one should do the opposite for those goods with greater price sensitivity.

This is known as the inverse elasticity rule. It was embraced by the British government as it sought to address its wartime debt obligations through the use of various types of income, sales, and excise taxes.

Agencies such as the Congressional Budget Office (CBO) often are asked to assess proposed legislation in terms of Today, legislative propositions often are subject to several performance tests: 1. how much revenue is gained or lost; 2. what is the impact of legislation on employment and on correcting for market failures; 3. what is the distributive consequences of a mix of measures to correct for net negative and positive externalities.

It is still relevant today. However, it is not something that always guides decisions by elected officials with high rates of discount until the next election.

Equity in Fiscal Policy

Equity in Fiscal Policy turns on two governing principles: a. procedural fairness; b. outcomes fairness. We look here at outcomes fairness.

As already noted, fiscal intervention can change the level of economic activity, the growth of economic activity, and the composition of goods and services produced. It also can affect the distribution of income, and which is why debates about tax reform typically invoke whether it meets a “fairness” test.

	Income Function	Pre-Tax Total Utility	Tax Rate	Taxes Collected	Net Income Before Tax Redistribution	Pre-Distribution Total Utility	Net Income After Tax Redistribution	Post-Tax Distribution Total Utility
A.	UA = (\$200.00) 1.20	577.08	10.00%	\$20.00	\$180.00	508.54	\$226.67	670.60
B.	UB = (\$400.00) 1.00	400.00	10.00%	\$40.00	\$360.00	360.00	\$406.67	406.67
C.	UC = (\$800.00) 0.80	210.12	10.00%	\$80.00	\$720.00	193.14	\$766.67	203.09

Totals:	Income: \$1,400.00	Utility: 1187.20
---------	-----------------------	---------------------

Taxes:	Income:	Utility:	Income:	Utility:
\$140.00	\$1,260.00	1061.68	\$1,400.00	1280.36

Estimating the Marginal Utility of Income

SUMMARY OUTPUT - Dependent Variable is AGI Charitable Giving

Regression Statistics	
Multiple R	0.6432
R Square	0.4137
Adjusted R Square	0.4017
Standard Error	0.0919
Observations	51

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	0.2917	0.2917	34.5703	3.5849E-07
Residual	49	0.4135	0.0084		
Total	50	0.7052			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	4.4393	0.9440	4.7027	0.0000	2.5422	6.3363	2.5422	6.3363
Log AGI	-1.1974	0.2037	-5.8796	0.0000	-1.6067	-0.7882	-1.6067	-0.7882

Transforming the above estimates into a standardized income utility equation, we obtain:

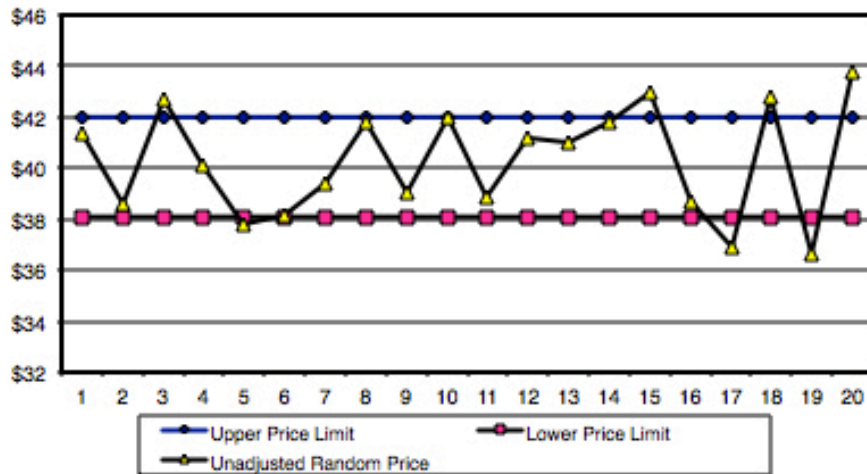
Estimating Equation:	
AGI CG =	84.7136 Y ^{0.3020}

The exponent of Y, which is positive but less than one, indicates that money is a necessity, (just in case we didn't know). The above results seem to affirm the quote that "greed is good", i.e., that individuals reflect an unwillingness to part with a larger share of their income as the level of income increases. John Stuart Mill (1806-1873), who suggested that there may be a diminishing marginal utility of income, did not have the kind of data with which to conduct such an empirical test. What this leaves is the problematic question of linking a definition of poverty to the level of social responsibility for its reduction and/or elimination. It also leaves open the question whether generosity varies significantly over time.

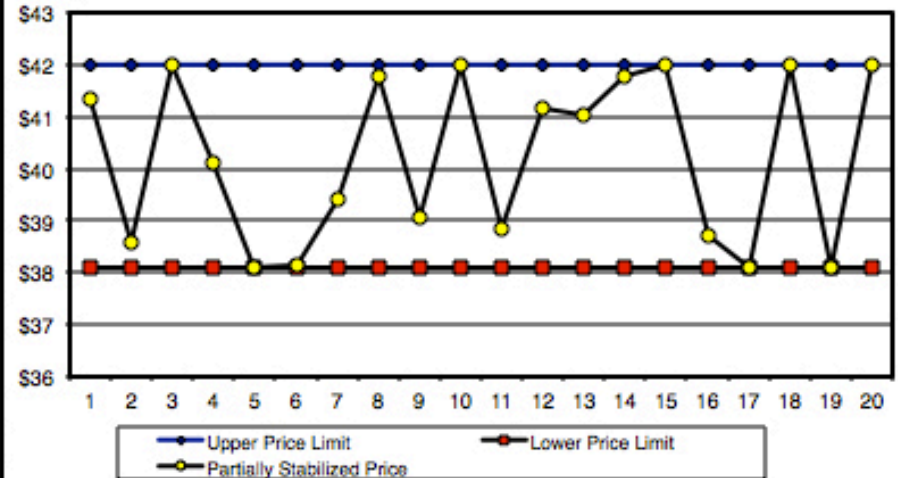
If the marginal utility of income is less than one, then any measure to reallocate income will reduce individual welfare, thus violating the Pareto principle of economic efficiency. Elected officials tend to remain oblivious to any such empirical approach to public policy.

Are there market tools to manage risk?

Partial Stabilization Price Band with Unadjusted Random Price



Price Path Under Partial Price Stabilization



Buffer stocks such as the strategic petroleum reserve and precious metals reserves can be costly and not achieve long term sustainability, especially if future volatility differs from today.

Moreover, as in the case of OPEC, buffer stock decisions can be driven as much by political considerations as by the goal of price stabilization.

Market contractual instruments do exist to manage risk.

<i>Risk-free rate</i>	6.0%	<i>Market variance</i>	3.0%		
<i>Market rate</i>	15.0%	<i>Maximum weight</i>	100.0%		
	<i>Beta</i>	<i>ResVar</i>	<i>Weight</i>	<i>*Beta</i>	<i>*Var.</i>
Stock A	0.80	0.04	20.0%	0.160	0.002
Stock B	1.00	0.20	20.0%	0.200	0.008
Stock C	1.80	0.12	20.0%	0.360	0.005
Stock D	2.20	0.40	20.0%	0.440	0.016
T-bills	0.00	0.00	20.0%	0.000	0.000
Total			100.0%	1.160	0.030
			Return		Variance
	Portfolio Totals:		16.4%		7.1%
<i>Risk-free rate</i>	6.0%	<i>Market variance</i>	3.0%		
<i>Market rate</i>	15.0%	<i>Maximum weight</i>	100.0%		
	<i>Beta</i>	<i>ResVar</i>	<i>Weight</i>	<i>*Beta</i>	<i>*Var.</i>
Stock A	0.80	0.04	41.1%	0.329	0.007
Stock B	1.00	0.20	10.3%	0.103	0.002
Stock C	1.80	0.12	30.8%	0.554	0.011
Stock D	2.20	0.40	11.3%	0.248	0.005
T-bills	0.00	0.00	6.6%	0.000	0.000
Total			100.0%	1.234	0.025
			Return		Variance
	Portfolio Totals:		17.1%		7.1%

Investment portfolios can be constructed to diversify holdings to raise the rate of expected return for a given level of volatility.

While portfolio diversification may succeed to some extent, the choice of assets is driven by historical observation rather than future conditions.

Another choice is the use of option price contracts

Stock Price	\$100.00	$d_1 =$	1.25	$d_2 =$	1.15
Strike Price	\$100.00	$\text{abs}(d_1) =$	1.25	$\text{abs}(d_2) =$	1.15
Term, in years	1.00		0.7755		0.7896
Risk-Free Rate	12.00%		0.1826		0.2059
Dividend Yield	0.00%		0.8942		0.8748
Volatility	10.00%	$Z_1 =$	0.8942	$Z_2 =$	0.8748
Call Option Solution Price with No Dividends:					\$11.84
Dividend Effect:					\$0.00
Call Option Solution Price with Dividends:					\$11.84
Put Option Solution Price with No Dividends:					\$1.12
Put Option Solution Price with Dividends:					

Option price contracts, or derivatives, rely on proxy information to arrive at insurance protection that a future sale or purchase of an asset will not result in losses. Derivatives markets are not perfect foresight instruments but they incorporate much available information to achieve greater efficiency.

Government Failure Reconsidered

Reliance on government to manage risk can produce government failure, in part because underlying levels and perceptions of risk are not always sufficiently transparent. As a result, government may be as much a destabilizing as a stabilizing force in the pursuit of sustainable economic growth.

In addition to a failure to achieve stabilization, government may fail also to reach a sustainable rate of economic growth, in addition to a mal-distribution of income outcomes that are at odds with popular perceptions of fairness.

What about monetary policy? Monetary policy is a central banking set of instruments designed solely to achieve price stabilization in the economy. Unless its mandate is shaped to specific forms of credit, as in the case of industrial policy, its scope of intervention is limited to macroeconomic stabilization.

During the Great Recession of 2007-2009, warding off another Great Depression fell largely to the Federal Reserve as Congress failed repeatedly to craft coherent fiscal policy legislation and budgets that could have addressed several underlying structural weaknesses in the economy such as “too big to fail”, even though Dodd-Frank was designed to accomplish this objective.

Political Legitimacy Revisited

When should an electoral or legislative decision be considered politically legitimate? In a democratic society, one fundamental principle is a voting majority. But what constitutes a voting majority? Does it require a simple majority, or a larger majority rule to affirm the legitimacy of a decision. Nothing illustrates this more clearly than the “nuclear option” that the U.S. Senate adopted to confirm Neil Gorsuch as a justice on the Supreme Court. But the Gorsuch appointment also reflects the ways in which not just the Senate but also the House have chosen to make decisions.

The U.S. Constitution is a political social contract, not an economic one. No penalties exist for a failure to adopt a budget or to confirm or reject a government nominee to any office. Recalling Kenneth Arrow’s 1951 essay on *Social Choice and Individual Values*, the procedures used to decide electoral outcomes often produce non-democratic outcomes, even if the Constitution provides for a regular succession through a calendar of elections.

To illustrate this, we can look at Presidential elections in the U.S. since 1824 to note how many Presidents were elected under non-majoritarian rules, and leaving open whether a simple or super-majority would decide an electoral outcome.

In the search for that sustainable constrained optimal bliss, then, what tests could be applied?

Can an econometric model for the U.S. provide an answer?

<i>GDP PC</i>	<i>Coefficients</i>	<i>t Stat</i>	<i>F</i>	<i>Regression Statistics</i>	
Intercept	46,441.03	11.56	103.54	Multiple R	0.9689
Total Central Government Expenditure as a Percentage of GDP	-265.26	-2.52		R Square	0.9388
Central Government Debt to GDP Ratio	140.96	5.66		Adjusted R Square	0.9297
Tax revenue (% of GDP)	-1,022.15	-4.85		Standard Error	1,049.66
Public Sector Balance to GDP Ratio	206.20	1.85		Observations	32

A Modest Proposal to Improve Federal Governance

- 1. Whenever a federal government shutdown takes place by any voting procedure that prevents continued operations, without exception everyone on an active federal payroll shall receive no pay for the duration, nor shall Congress be authorized to reconstitute any lost pay once government operations are resumed.**
- 2. All members of the federal government shall be subject to the same withholding and entitlement provisions as those that apply to other citizens: a. Social Security shall apply to all federal elected officials for the time worked in Washington with no separately funded federal pension; b. All members of Congress are required to purchase insurance as mandated in the Affordable Health Care Act instead of separately funded government health care.**
- 3. If Congress fails to adopt a budget by July 1st of each calendar year, a new election shall be called within one month of the lapse the timing of which election shall be no later than two months from the date of lapse. In such elections, no standing member of Congress may run for office. Following the election, a new budget deadline of October 1st shall apply. The process repeats until the next budget deadline is met.**
- 4. Following any national election, the largest losing party shall determine the apportionment of election districts for the next election.**
- 5. Former members of Congress shall be banned from employment in any lobbying firm for a period of ten years following the date of departure from public office.**
- 6. There shall be no limits on election funding contributions to any political action committee. Failure to list a source of each individual personal contribution, whether through a corporation or by individuals shall be a felony with a minimum of ten years imprisonment and fines on chief executives of the organization to which such political contributions have been made.**
- 7. All federal budgets must have a separation of recurrent and capital expenditures in which recurrent expenditures must be balanced with federal tax revenues while capital expenditures reflect any net borrowing. Each piece of legislation used in the preparation of a budget must contain a projection of the impact on future levels of GDP and on the government's net position prior to submission to the White House for action.**
- 8. A maximum of five amendments is to be allowed on any piece of Congressional legislation. The author of each amendment is required to list for public inspection all sources of political contributions to that elected official at the time before an amendment is voted on, and this information must be available to the general public at least five days before any vote on an amendment takes place.**
- 9. The federal budget shall consist of no more than 200 pages, and each version shall be available online to all citizens at least ten days before a vote is to take place. All Representatives and Senators must inform their constituents either electronically or in writing prior to the ten-day countdown of any version of the budget.**
- 10. As long as the Constitution calls for a two-term presidential limit, the following shall apply to Congress: a. a four-term limit for members of the House of Representatives; b. a two-term limit for members of the Senate.**

Or, alternatively...

U.S. Elections Cancelled



To the citizens of the United States of America from Her Sovereign Majesty Queen Elizabeth II

In light of your failure in recent years to nominate competent candidates for President of the USA and thus to govern yourselves, we hereby give notice of the revocation of your independence, effective immediately. (You should look up 'revocation' in the Oxford English Dictionary.)

Her Sovereign Majesty Queen Elizabeth II will resume monarchical duties over all states, commonwealths, and territories.

Your new Prime Minister, David Cameron, will appoint a Governor for America without the need for further elections.

Congress and the Senate will be disbanded. A questionnaire may be circulated next year to determine whether any of you noticed.

To aid in the transition to a British Crown dependency, the following rules are introduced with immediate effect: