Make Economics Policy-Relevant: Depose the Omniscient Benevolent Dictator

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-Abstract-

Economic policy analysis typically takes place by developing models that derive an optimal outcome, and the "optimal" policy is a description of possible policy tools that can generate the optimal outcome. This is the often-referenced planners problem. The assumption in this line of reasoning, sometimes implied and sometimes explicitly stated, is that government policy is designed and implemented by an omniscient benevolent dictator. In fact, government is neither omniscient, benevolent, nor a dictator. After discussing the omniscient benevolent dictator model of government, alternatives are suggested for making economic analysis more policy-relevant.

1. Introduction

Economic policy analysis typically is undertaken by developing a model that describes an optimal outcome, whether that means an efficient allocation of resources, an optimal distribution of income, an optimal growth path, or an optimal macroeconomic outcome of stability with full employment and low inflation. Because economic models can become complex when they account for many things, all models employ simplifying assumptions to focus on one particular issue. Models that analyze policies to promote economic growth, for example, will not be the same as models describing the optimal distribution of income, which will not be the same as models describing the optimal policy for internalizing an externality, as Holcombe (1989) notes. Nevertheless, the methodology is the same: develop a model that incorporates the particular issue, and show in that model the optimal result along with a depiction of what keeps the

economy from producing the optimum. The recommended policy is one that moves the economy from a non-optimal position to the optimal one, by removing impediments for attaining an optimal outcome, by changing the incentive structure so that market participants trade to a Pareto optimum, or where markets pose more difficult problems to implement regulations, government mandates, or government production to optimally allocate resources.

When the invisible hand of the market fails, economic policy recommendations typically do not go beyond advising that the visible hand of government move the economy to the optimal outcome, without any detailed discussion of whether government action is capable of achieving this outcome, or whether even if it is capable the actors within the public sector have the incentive to implement the optimal outcome. Government is modeled as if it is an omniscient benevolent dictator. To make economics policy-relevant, This omniscient benevolent dictator must be deposed. Government is neither omniscient, benevolent, nor a dictator.

2. The Planner's problem

The omniscient benevolent dictator is often represented in economic analysis as the planner's problem. The analysis derives the conditions that are required for an optimal allocation of resources, and the planner's problem is to create those conditions. The policy problem is couched entirely in comparative static terms, identifying the optimal outcome and the status quo, with policy recommendations intended to move from the latter to the former. The comparative statics methodology for evaluating economic policy measures goes back at least to Pigou (1920: ch. 1), who lays out a methodology for evaluating policy measures by comparing economic welfare with versus without that policy measure being implemented. Ramsey (1928) explicitly lays out a planner's problem for finding the rate of saving that maximizes consumption over successive generations. Lange and Taylor (1938), in response to Mises's (1922) claim that central planning cannot rationally allocate resources, lay out a method whereby they assert that central planners can allocate resources at least as efficiently as the market. Lerner (1944)

delivers a policy analysis based on the planner's problem, which lays out conditions for the optimal allocation of resources and then says government should implement these conditions.

The omniscient benevolent dictator who solves the planner's problem has been a part of economic analysis for at least three-quarters of a century, as the previous paragraph documents, but gained increased stature with the Arrow and Debreu (1954) proof of the uniqueness and stability of competitive equilibrium. Using competitive general equilibrium as a benchmark, it is then possible to develop a formal framework to depict cases in which the market fails to reach that optimum. In a frequently-cited article, Negishi (1960: 92) shows that "... the existence of an equilibrium is equivalent to the existence of a maximum point of this special welfare function." Bator (1957) shows the conditions for welfare maximization, and Bator (1958) demonstrates conditions under which markets will fail to reach this maximum. It is a short step indeed to show the conditions for an optimum, and demonstrate some reason why the market fails to get there.

The well-known Samuelson (1954, 1955) public goods articles offer a good example. Samuelson titles his first article "The Pure Theory of Public Expenditure," indicating that his analysis of a possible market failure in the production of public goods is, in fact, not a theory, but the theory, of public expenditure even though the article contains no analysis of how government would succeed in producing public goods where the market would fail.² The only way Samuelson's public good theory can be a theory of government expenditure is if the government is an omniscient benevolent dictator. This is the planner's problem: how to get from the imperfect allocation of resources in the real world, depicted in a mathematical model, to the outcome that has been demonstrated mathematically to be optimal.

Milton Friedman (1947: 405), commenting on Lerner (1944), says "Most of the book is devoted to the formal analysis of the conditions for an optimum. The institutional problems are largely neglected and, where introduced, treated by assertion rather than analysis. ... not only the title and the introduction but even a first reading somehow generate the expectation and the illusion that the book contains a concrete program for economic reform. ... Much of what at first sounds like a concrete proposal, particularly about the general structure of society, turns out to

be simply an admonition to the state that it behave correctly and intelligently." Friedman's critique of Lerner holds more generally for the work that has followed, in that it tends to show the mathematical conditions that are required for an optimal allocation of resources, but does not explain how a real-world government can get there. Because government is not an omniscient benevolent dictator, in many cases government failures will be at least as significant as market failures.

To make economic analysis policy-relevant, the omniscient benevolent dictator must be deposed. Government is not omniscient, it is not benevolent, and it is not a dictator.

3. Not Omniscient

In many cases the mathematical formulation of a market failure shows that the information required to correct that market failure is not available to policymakers. Taking a classic example from welfare economics, Pigou (1920) demonstrates that a corrective tax on an externality can internalize the externality. As Baumol (1972) shows, for the tax to be optimal, it must be precisely equal to the external cost, and vary with it, so that if the external cost rises the tax must rise by an equal amount, and if the external cost falls the tax must fall by an equal amount. However, the amount of the external cost cannot be observed, so unless government is omniscient it cannot calculate the optimal tax and therefore it cannot eliminate the market failure. It may be able to improve on the allocation of resources in cases where externalities exist, through corrective taxation or through regulation, but even this would only be a conjecture, because an essential piece of information – the amount of the external cost – is unobservable.

The same problem arises with the government production of public goods. Even as Samuelson (1954: 389) calls his public goods theory a public expenditure theory, he states that "... given sufficient knowledge the optimal decisions can always be found by scanning over all the attainable states of the world and selecting the one which according to the postulated ethical welfare function is the best. The solution 'exists'; the problem is how to 'find' it." This is the planner's problem, and although Samuelson offers no solution, he still is willing to equate a

theoretical inefficiency in the market with a theory of public expenditure. However, the optimal solution Samuelson proposes requires information that is not available, so a government that is not omniscient cannot correct this market failure. One can conjecture that government will get closer to an optimum than market allocation, but even this is a conjecture, and Minasian (1964) and Holcombe (2008) offer the opposite conjecture. While one can debate the merits of government production of public goods, one thing that is beyond debate is that to optimally allocate resources to correct this market failure would require that government have information that is unobservable, and therefore unavailable to government decision makers. Government is not omniscient, so it cannot solve this planner's problem.

As another example, the Ramsey (1927) rule for optimal commodity taxation says that to minimize the excess burden of commodity taxes, the taxes should be levied in inverse proportion to the elasticities of demand for the goods. Not only are the elasticities of demand unobservable, thus making the Ramsey rule impossible to implement by anything other than an omniscient government, Holcombe (2002) argues that under reasonable assumptions about the political process that would be used to try to estimate those elasticities, any attempt to implement the Ramsey rule would result in an outcome more inefficient than if all commodities were just taxed at an equal rate.

Lucas (1976) suggests the difficulty of collecting information on likely effects of government policies, because any statistical data collected prior to the implementation of a policy may not hold after the policy is implemented, because people will adjust their behavior in response to the policy. Lucas's example was the use of a government macroeconomic policy to produce low inflation and full employment, but the argument applies more generally. Econometric results, even though they use actual data, only provide information on the past, and relationships that have held in the past may not persist into the future for many reasons, including the reason Lucas cites that people will change their behavior in response to policy changes.

The new institutional economics has done a substantial amount of research on informational problems, as Williamson (1990) notes, but the bulk of this analysis has been done on

informational problems in private markets, not informational problems that may arise in government decision-making. For economic analysis to be policy-relevant, it must recognize the information that is available to policy makers, and policy recommendations cannot be based on information that is beyond their reach.

4. Not Benevolent

Even with sufficient information, public policy might not be made in the public interest because the people who are making the policy may not have an incentive to act in the public interest. Thus, policy analysis must take account of the incentives that face those who make the policies. The "market failures" that public policy tries to correct are often due to the incentives people in the private sector follow, with their self-interest leading them to make decisions that are not in the public interest. People generate externalities, free ride on public goods, or monopolize markets because they make decisions to further their private interests, not the public interest. Buchanan (1975) argues that public sector behavior should be evaluated using the same types of models, and assuming the same type of behavior for those in the public sector as economic analysis assumes for private actors. The analysis should take into account the incentives that face public sector decision makers, recognizing that sometimes the incentives they face lead them to act in ways that further their own interests rather than the general public interest.

One commonly recognized example is the re-election motive that faces elected officials. They have an incentive to produce policies that will generate support in the next election, which may conflict with the public interest. One manifestation of the re-election motive is the political business cycle described by Nordhaus (1975). Re-election probabilities are higher when the economy is growing and unemployment is low, giving politicians an incentive to use macroeconomic policy to stimulate the economy prior to elections. Another manifestation is the provision of special interest benefits at public expense to constituencies that can be encouraged to cast their votes for the incumbents, as described by Bueno de Mesquita et al (2003) and Niskanen (2003). The incentives facing elected officials push them toward short-sighted policies

that produce immediate benefits, but perhaps with long-term costs, because elected officials must be re-elected to remain in power. Thus, they tend to weight effects that occur before the next election much heavier than those that occur after.

Incentive problems are not limited to elected officials. Niskanen's (1971) bureaucracy model looks at the incentives facing government bureaucrats and argues that in the same way that profit maximization is a useful simplification of the incentives facing those who run private sector firms, budget maximization describes the incentives facing government bureaucrats. Niskanen develops a model showing that bureaucratic incentives coupled with the institutional framework within which government's budgetary decisions are made lead government bureaucracies to produce a larger than optimal output, with a larger than optimal budget.

Governments face the same type of agency problems that Jensen and Meckling (1976) describe for the private sector, and there is no reason to think that government agents are any less responsive to the incentives they face than are private sector agents. For economic analysis to be policy relevant, it must take into account the incentives facing those who are designing public policies. Governments are not benevolent. Their actions are determined by individuals who often face incentives that work against the public interest.

5. Not a Dictator

Government decisions are not made by a dictator – even in dictatorships! Rather, there is a collective decision-making process that goes into determining what action a government will take. The collective decision-making process has been analyzed most extensively with regard to democratic government, where the sub-discipline of public choice has shown that many factors prevent collective decisions from generating an optimal result. The median voter model, explained well by Downs (1957), is a standard description of the outcome that will be produced by representative democracy, Holcombe (1985) shows that even at its best, democratic decision-making cannot expect to locate the optimal allocation of resources. However, democracy is not always at its best. Olson (1965) notes the influence of interest group politics, showing that

intense minorities can organize to steer public policy to further their interests at the expense of the general public interest. The interaction of voters, interest groups, legislators, and bureaucrats, all with their own personal interests, means that democratic decision making is not undertaken by a dictator, but is made through a collective decision making process with institutions that weigh private interests in ways that do not necessarily produce an outcome that furthers the public interest. As Buchanan (1987: 243) argues, "Economists should cease proffering policy advice as if they were employed by a benevolent despot, and they should look to the structure within which political decisions are made."

Democratic decision-making also has aggregation problems, as Arrow (1951) has shown. The Arrow problem suggests that democratic decision making cannot be used to aggregate preferences in a way that produces a consistent ordering of social preferences. There is not a unique stable outcome under majority rule decision making, and McKelvey (1976) shows that majority rule decision making is inherently unstable. Tullock (1982) suggests that democratic outcomes are more a function of political institutions than the underlying preferences of citizens, which creates a stable outcome but tends to work against efficiency. Weingast, Shepsle, and Johnsen (1981) show why political institutions in democracy leads toward inefficient outcomes.

Not everyone argues that democratic decision making leads to inefficient outcomes. Becker (1983) depicts the legislature as a political marketplace that weighs the interests of supporters and opponents of legislation, and Wittman (1989, 1995) makes persuasive arguments about the efficiency of political decision making. Even these arguments, however, do not present government as a dictator, but rather view public policy as the outcome of a collective decision making process that involves legislators, voters, interest groups, and government bureaucrats.

Even in dictatorships, government decisions are not made by one individual. As Niskanen (2003) and Bueno de Mesquita et al. (2003) argue, dictators can remain in power only as long as they have a supporting group with enough power to keep them from being overthrown. Therefore, policy decisions must supply sufficient payoffs to the dictator's supporters for the dictator to retain that support base, in much the same way that democratic leaders must maintain

the support of their majorities to remain in power. Dictatorships will have a narrower support base, including the military and law enforcement institutions to stifle any challengers, but even here dictators must undertake public policies to retain support. They cannot simply make any decisions they choose, let alone make decisions that further the general welfare without considering the provision of benefits to those who keep the dictator in power.

Holcombe (1998) argues that to understand why particular tax policies are put into place, one should look at who benefits from those policies, and how much political power they have. Tax policies are created through the political process, and are the results of various interests working through political institutions to implement policies they favor. This same idea applies to all public policy. To understand why specific policies are enacted, rather than asking why they might be in the public interest, ask who benefits, and how they are able to use their political influence to get those policies put in place. Government policies are made through a collective decision-making process, not by a dictator.

Welfare Maximization in the Real World

Welfare maximization, following Graaf (1957) and Bator (1957), means arriving at a Pareto optimal allocation of resources. The unique stable Pareto optimum provides the benchmark, and welfare maximization means identifying any conditions that stand in the way of an economy's arriving at that optimum. Bator (1958) follows up by discussing factors that can keep an economy from reaching that welfare maximum. As neoclassical welfare economics is laid out, the implementation of policies that can reach that optimal allocation of resources is the role of the omniscient benevolent dictator. The methodology of welfare economics is to show the conditions that prevent the economy from arriving at a global optimum in a mathematical framework, and then demonstrate the mathematical conditions for a Pareto optimum. An economy not at an optimum suffers from market failure, and the implication is that some set of policies is available to reach the optimum. Neoclassical welfare economics implies that

government policy will eliminate the market failure, but this can only happen in the general case if the government is an omniscient benevolent dictator.

As Buchanan (1975) notes, the conclusion that a market failure exists compares the real-world conditions of the market with an ideal optimum that may not be attainable in practice. To make a policy-relevant assessment, one would have to compare the performance of the market with the performance of a real-world government, incorporating the same types of information and incentive problems in the assessments of both market performance and government performance. Government interventions are unlikely to lead to the theoretical optimum for the same reasons that welfare economics claims that markets fail: information problems and incentives for less-than-optimal outcomes. The literature has noted this to a degree, for example with Nordhaus's (1975) political business cycle and Niskanen's (1971) bureaucracy model. The problem from the standpoint of policy-relevant economic analysis is that these models stand as isolated examples, and for the most part realistic modeling of government decision-making has not found its way into the bulk of the economics literature.

Welfare economics falls short in another area. It is based on an unrealistic model of welfare maximization. Welfare economics works within the comparative static general equilibrium framework and concludes that welfare is maximized when resources are allocated Pareto optimally. This static depiction of welfare maximization is not closely related to the factors that actually produce economic welfare. If one considers how well off people are today compared to 20, or 50, or 100 years ago, most of the improvement in welfare has been the result of economic progress that allows people to cross oceans in jet aircraft rather than steamships, that allows people to send messages to each other by email rather than by mailing messages written on paper, that allows people to cook with microwave ovens, and that allows them to watch television on giant flat screens in addition to listening to the radio. Improvements in welfare come from economic progress, and only trivially if at all from movements toward Pareto optimality, as Holcombe (2009) notes. Indeed, despite the huge increases in economic welfare over the decades and centuries, very likely the aggregate economy is further from Pareto optimality than

it was a century ago, because technological advances have created more ways in which people's behavior can generate externalities.

This means that not only should the methodology underlying policy analysis be reevaluated, but also the goals of economic policy. Economic policy should focus more on the development of policies to generate economic progress rather than on policies to eliminate market failures. Surely both are worth examining, but if policies to eliminate market failures also take away entrepreneurial incentives, those policies could reduce welfare, even if they are successful at eliminating what economists call "market failures." Improvements in economic welfare come from economic development, as Schumpeter (1934) described it. This approach to economic welfare envisions an economy as a group of individuals who are engaged in an ongoing process of exchange, rather than as an equilibrium outcome that occurs when no further mutually beneficial exchanges can take place. This process-based depiction of economic activity has a solid standing in economics, as described by Williamson (1990) and Kohn (2004), but when analyzing economic welfare and developing public policy recommendations, academic economists still work mainly within the framework that depicts welfare maximization as an outcome rather than as an ongoing process, and that depicts government policies that can maximize welfare as if they will be implemented by an omniscient benevolent dictator.

7. Conclusion

The component parts of this paper's argument are well-known and are a part of the mainstream literature. The paper's arguments on why government is not omniscient, not benevolent, and not a dictator were all supported by references to well-known sources that go back decades. This being the case, one wonders how the omniscient benevolent dictator has been able to remain at the center of economic policy analysis despite so many well-known arguments against him. All dictators have their critics, and they remain in power only as long as their supporters have sufficient power to keep their dictator from being deposed.

The omniscient benevolent dictator finds support from several sources. One is the mathematical elegance of the general equilibrium framework. Economists, like artists, are often in love with their models.³ There is something aesthetically pleasing about demonstrating an optimal policy with mathematical precision – regardless of how closely the math is connected to reality. A second source of support, which goes back centuries, is the push to make economics more "scientific," which often means more mathematically rigorous, like physics. McCloskey (1983) has argued that mathematics and econometrics are often used in economic analysis for persuasive purposes. If one can prove an optimal outcome with mathematical precision, the outcome is difficult to argue against, because it has been logically proven. The technical rigor of such demonstrations often does, in fact, persuade editors and referees, as McCloskey suggests. That positive reinforcement encourages further "research" using those methods, and the people who publish that work become the profession's experts – the editors and referees who determine what will be published as the discipline progresses. As Yeager (1997) notes, success in academic research is measured by peer approval rather than by whether the ideas actually work in the real world, and in this way the marketplace for ideas differs from a real marketplace.

Yet another source of support for the omniscient benevolent dictator comes from economists who aspire to be a part of the policy-making process themselves. Armed with their models they are often willing to claim that if they were in a position to make policy, they would do it as the omniscient benevolent dictator does in their models. Looking at actual political incentives, the political process is, regrettably, biased in their favor. Who is more likely to be chosen for a policy-making position in government, the economist who says "I have analyzed this issue, and here is the optimal solution I would impose if I had the power," or the one who says "Because of information and incentive problems, any policy to deal with this issue is likely to make the situation worse rather than better"?

For a number of reasons the omniscient benevolent dictator has substantial support in economic analysis, even though there is a large body of economic analysis that demonstrates the omniscient benevolent dictator is a fiction. This is problematic for economic policy analysis,

but points to a more serious shortcoming in economic analysis. When analyzing markets, economic analysis draws its conclusions based on models of individual behavior which are then aggregated to draw conclusions about the implications of that behavior in particular markets, and in the economy as a whole. A complete economic analysis demands that the public sector be depicted in the same way, as individual decision makers whose decisions are aggregated to produce policy outcomes that affect particular markets and the entire economy. The omniscient benevolent dictator points to a serious and fundamental flaw in the way that economic analysis is undertaken. To make economic analysis policy relevant, and even to make it logically consistent, the omniscient benevolent dictator must be deposed.

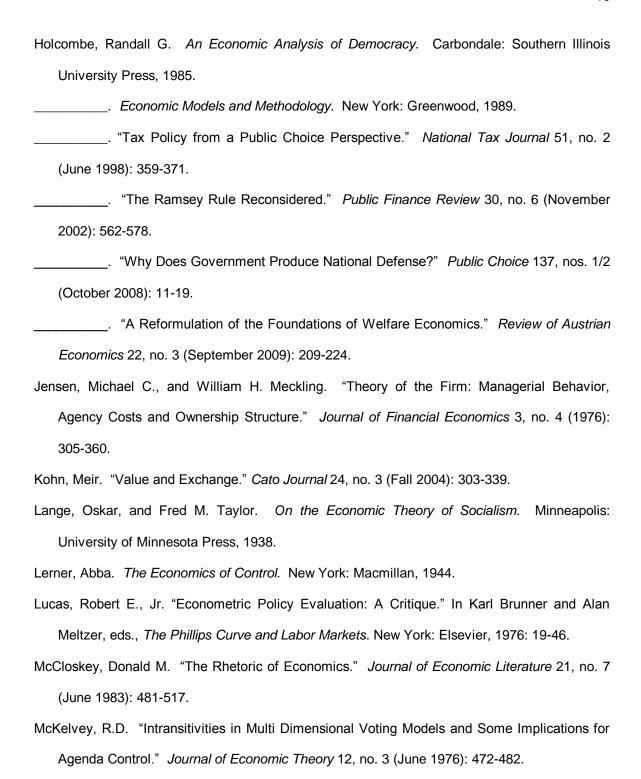
Notes

- *The author gratefully acknowledges helpful comments from Paul Beaumont and James Gwartney.
- ¹ Hayek (1945) gives an insightful analysis that points out areas in which the Lange and Taylor analysis falls short. Desrochers (2001) builds on Hayek's insights in his discussion of the transmission of tacit knowledge.
- ² Minasian (1964) makes the argument that the market is better-suited to the production of public goods than government, but Samuelson's comment that directly follows Minasian's article shows Samuelson does not agree. Samuelson (1955) does back away from the claim in Samuelson (1954) that his article is *the* theory of public expenditure, referring to it in the follow-up article as a theory rather than the theory.

³ I cannot take credit for this observation, but I do not recall where I first heard it.

References

- Arrow, Kenneth J. Social Choice and Individual Values. New Haven: Yale University Press, 1951.
- Arrow, Kenneth J., and Gerard Debreu. "Existence of an Equilibrium for a Competitive Economy." *Econometrica* 22, no. 3 (July 1954): 256-291.
- Bator, Francis M. "The Simple Analytics of Welfare Maximization." *American Economic Review* 47, no. 1 (March 1957): 22-59.
- Baumol, William J. "On Taxation and the Control of Externalities." *American Economic Review* 62, no. 3 (June 1972): 307-322.
- Becker, Gary S. "A Theory of Competition Among Pressure Groups for Political Influence." Quarterly Journal of Economics 98 (August 1983): 371-400.
- Buchanan, James M. "Public Finance and Public Choice." *National Tax Journal* 28 (December 1975): 383-394.
- ______. "The Constitution of Economic Policy." *American Economic Review* 77, no. 3 (June 1987): 243-249.
- Bueno de Mesquita, Bruce, Alastair Smith, Randolph M. Siverson, and James D. Morrow. *The Logic of Political Survival.* Cambridge, MA: MIT Press, 2003.
- Descrochers, Pierre. "Geographical Proximity and the Transmission of Tacit Knowledge." Review of Austrian Economics 14, no. 1 (2001): 25-46.
- Downs, Anthony. An Economic Theory of Democracy. New York: Harper & Row, 1957.
- Friedman, Milton. "Lerner on the Economics of Control." *Journal of Political Economy* 60, no. 5 (October 1947): 405-416.
- Graaf, J. de V. Theoretical Welfare Economics. Cambridge: Cambridge University Press, 1957.
- Hayek, Friedrich A. "The Use of Knowledge in Society." *American Economic Review* 35, no. 4 (September 1945): 519-530.



- Minasian, Jora R. "Television Pricing and the Theory of Public Goods." *Journal of Law & Economics* 7 (October 1964): 71-80.
- Mises, Ludwig von. *Socialism.* New Haven, CT: Yale University Press, 1951 [orig. in German 1922].

- Negishi, Takashi. "Welfare Economics and Existence of an Equilibrium for a Competitive Economy." *Metroeconomica* 12, nos. 2-3 (June 1960): 92-97.
- Niskanen, William A. *Bureaucracy and Representative Government*. Chicago: Aldine-Atherton, 1971.
- ______. Autocratic, Democratic, and Optimal Government: Fiscal Choices and Economic Outcomes. Cheltenham, UK: Edward Elgar, 2003.
- Nordhaus, William D. "The Political Business Cycle." *Review of Economic Studies* 42, no. 2 (April 1975): 169-190.
- Olson, Mancur, Jr. The Logic of Collective Action. New York: Shocken Books, 1965.
- Pigou, A.C. The Economics of Welfare. London: Macmillan 1920.
- Ramsey, Frank P. "A Contribution of the Theory of Taxation." *Economic Journal* 37, no. 145 (March 1927): 47-61.
- _____. "A Mathematical Model of Saving." *Economic Journal* 38, no. 152 (December 1928): 543-559.
- Samuelson, Paul A. "The Pure Theory of Public Expenditure." *Review of Economics and Statistics* 36 (November 1954): 387-389.
- ______. "A Diagrammatic Exposition of a Theory of Public Expenditure." Review of Economics and Statistics 37 (November 1955): 350-356.
- Schumpeter, Joseph A. *The Theory of Economic Development*. Cambridge, MA: Harvard University Press, 1934
- Tullock, Gordon. "Why So Much Stability?" Public Choice 37, no. 2 (1982): 189-202.
- Weingast, Barry R., Kenneth A. Shepsle, and Christopher Johnsen. "The Political Economy of Benefits and Costs: A Neoclassical Approach to Distributive Politics." *Journal of Political Economy* 89, no. 4 (August 1981): 642-664.
- Williamson, Oliver E. "A Comparison of Alternative Approaches to Economic Methodology." *Journal of Institutional and Theoretical Economics* 146, no. 1 (March 1990): 61-71.
- Wittman, Donald A. "Why Democracies Produce Efficient Results." *Journal of Political Economy* 97, no. 6 (December 1989): 1395-1424.

_____. The Myth of Government Failure: Why Political Institutions are Efficient. Chicago: University of Chicago Press, 1995.

Yeager, Leland B. "Austrian Economics, Neoclassicism, and the Market Test." *Journal of Economic Perspectives* 11, no. 4 (Fall 1997): 153-165.