

MARKETS AND GOVERNMENT: REALIZING THE PROMISE OF GAINS FROM EXCHANGE AND COOPERATION

William R. Keech

Duke University
Professor of Political Economy
wrk3@duke.edu

Michael C. Munger

Duke University
Professor of Political Science, Economics, and Public Policy
munger@duke.edu

Carl P. Simon

University of Michigan
Professor of Economics, Public Policy, Mathematics, and Complex Systems
cpsimon@umich.edu

—Abstract—

Recent policy debates have focused on the boundary *between* markets and government, as if one could partition them. The placement of this boundary has been debated using the established theory of market *failure* and the developing theory of government *failure*. But the questions raised by this approach are not well-posed, and miss several important points. First, markets and governments *together* can achieve and have achieved enormous success in the last two hundred years in broadening geographical settings. Second, markets need government, and government needs markets to enable societies to capture the gains of cooperation and exchange. Third, we challenge the relevance of idealized “competitive equilibrium” as the reference point against which real outcomes are to be compared. As an alternative, we propose that the appropriate benchmark for comparison is Pareto improvement through solving problems of collective action. In that regard, both firms operating in markets and government agencies operating in a statutory setting should be considered together as organizations. Viewed from this perspective, both firms and government agencies have some shared features and some sharply different features in their capacity for fostering

cooperation. In this paper we outline the advantages and risks of complex organizations, and provide some general guidelines for public policymaking.

Key Words: *market failure, government failure, diminishing returns, increasing returns*

JEL Classification: H00, H10, H11

1. INTRODUCTION: REALIZING THE PROMISE OF GAINS FROM EXCHANGE AND COOPERATION

A focus on *failures* misses an important point. Markets and governments together have achieved enormous success in the last two hundred years. These achievements began in Europe, and spread first to several former English colonies. Since World War II, they have spread to Japan, and elsewhere in Asia. Now middle income countries such as Brazil, Russia, India and China (the BRICs) are joining.

Economic growth has made products and conveniences once unavailable to kings cheaply available to broad masses of people. Development has sharply reduced poverty as well as delivering public health advances such as reduced infant mortality and increased life expectancy. Moreover, these advances are usually accompanied by increases in individual freedom and political self-determination. We submit that the world owes these advances not to pure markets or pure government, but to a tempered, tested alloy stronger than either.

2. THE CLASSICAL THEORY OF MARKETS AND MARKET FAILURE

Competitive equilibrium theory (CET) is the apotheosis of Adam Smith's remarkable insight that selfish choices can be not only moral, but constructive. The two "Fundamental Theorems of Welfare Economics" in CET bring Smith's insight into sharp focus: (1) The distribution of goods in every competitive equilibrium is Pareto optimal; and (2) every Pareto optimal distribution of goods can be realized as a feasible competitive equilibrium. More simply, all market distributions are efficient, and it is possible to select ethically defensible distributions through market processes.

But these results hold only under a restrictive set of conditions. All goods must be private, there can be no externalities, information is free and accurate, and each market participant is a price taker. The violation of each of these assumptions

calls for a particular government intervention to correct it, according to the “theory of market failure” (Bator, 1958; Ledyard, 2008).

Implicitly, but no less importantly, CET assumes in addition that property rights are clearly defined and protected; contracts are enforced; and that rule of law offers equal protection to all. There are instances where such protections are offered through voluntary cooperation (Ostrom, 1990), but some form of government “referee” has proved to be both effective and highly efficient.

3. WHAT IS WRONG WITH THIS PICTURE

We find two things wrong with this CET picture. The first is that CET has one set of foundational assumptions about human behavior, while notions of government “corrections” rest on an entirely different conception. The second is that CET is a myopic and static view of the economic world, missing entirely the sources of economic growth and prosperity that make markets useful in the first place.

3.1. Inconsistent theory of human motivation

Adam Smith is the canonical source of the insight that selfish activity by economic agents can result in improving social well-being.

Every individual ... intends only his own gain, and is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention By pursuing his own interest he frequently promotes that of the society more effectively than when he really intends to promote it (Smith, 1976: 477-478, Book IV, chapter II).

This notion of reconciling self-interest and common good through markets has some limitations. But government action to correct market failures has been commonly assumed to be motivated only by common good from the outset. People who are selfish in the grocery, or the boardroom, become altruistic when they enter the voting booth, or public office.

The Progressive Movement in the United States, spanning the late 19th and early 20th centuries (Campbell, 2005), saw government as a force for good in the context of an economic world it saw as dominated by trusts and monopolies often visualized as old men in black hats. But even A. C. Pigou, the patron saint of government intervention to correct market failures saw that;

It is not sufficient to contrast the imperfect adjustments of unfettered enterprise with the best adjustment that economists in their studies can

imagine. For we cannot expect that any State authority will attain, or even wholeheartedly seek, that ideal. Such authorities are liable alike to ignorance, to sectional pressure, and to personal corruption by private interest. A loud-voiced part of their constituents, if organized for votes, may easily outweigh the whole (Pigou, 1920: 296).

The public choice movement puts analytic assumptions about human behavior for government agents on the same footing as market agents, assuming that all people respond to incentives. Many of the differences in performance in market and government organizations can be traced to the different incentives people confront in these institutions. Public policy goals are a central part of the motivation of public officials, but there is also room for rational ignorance on the part of voters, cynical vote-maximization by elected officials (Downs, 1957) and budget imperialism by bureaucrats (Niskanen, 1971). Treating markets and government agencies as complex organizations with different incentive structures, but common design problems, allows a much more realistic picture of the problem facing reformers.

3.2 Increasing returns and economic growth

The invisible hand, diminishing returns world of competitive equilibrium theory is an awesome mathematical achievement, but the real world is more complex. In spite of its efficiency and Pareto Optimality, this CET world is a world of subsistence, no economic growth and no innovation.

Fortunately there is another metaphor in Smith's *Wealth of Nations*, the pin factory. In this world, there is specialization and a division of labor that makes for increasing returns to scale, and the possibility of economic growth. If we add to this Joseph Schumpeter's ideas of innovation, entrepreneurship and creative destruction, we have the modern world of economic growth and technological advance. Equilibrium, and even adjustment toward equilibrium, are deemphasized as primary concerns of economics. Managing uncertainty and ensuring that prices convey accurate information about relative scarcity become the new central concerns of economic policy.

4. A HIERARCHY OF DISCIPLINE AND ACCOUNTABILITY

There is a hierarchy of self-correcting discipline and accountability that is most stringent in the world of competitive equilibrium, less stringent in the increasing returns world of economics, and least stringent for government.

4.1. Competitive equilibrium and diminishing returns

The brutal, stringent discipline of the CET world is one of its appealing features. Economic efficiency is automatic, and depends only on competition arising from self-interest. There are no profits and no slack for researching new products: all resources are paid the value of their marginal product. Only the lowest cost producers survive. This is an economy of efficiency but not of prosperity, as the number of firms is arbitrarily large, and outputs are homogeneous. And because returns to scale are declining, it is an economy subsisting in the shadow of the Malthusian specter of famine and population collapse.

4.2. Firms in a world of increasing returns

Increasing returns, by contrast, imply that some firms have market power, giving them discretion over output and pricing decisions. Such producers have the slack necessary to produce new investment, product innovation, and economic profits. But such slack also creates opportunities for monopoly pricing, encouraging rent-seeking and agency problems. Firms also face time consistency problems, as inflated asset prices and the pursuit of short-run gains may distort incentives to account for the shadow of the future.

But the positive profit constraint still disciplines private firms, even with increasing returns. If demand is too low, or if costs are too high, firms go out of business. The size and market power of firms in the increasing returns world create substantial opportunities for distorting incentives, diverting money from investing in research or equipment, and rewarding pursuit of special government support. From the state owned enterprises in contemporary China and in the Latin America of the 1970s to the protection of agricultural from market competition in Europe, the United States and Japan, to public bailouts of financial institutions in the recent financial crisis, governments can and do shield firms from this basic discipline of the market.

4.3. Government

Even in a democracy, government is less accountable than firms in the situation outlined in 4.2 above. This is largely because elections are such a blunt instrument of accountability. Even in the simplest electoral situation of dual alternatives, the simple act of voting can combine an evaluation of the performance of the incumbent or incumbent party with a choice of future

alternatives. These two acts might involve different choices when only one is offered.

For example, the voter might disapprove of the incumbent's performance, but prefer the incumbent to the alternative. A single act of voting cannot convey both messages. When we consider the many things that modern government does, it is easy to see that accountability of governments is imperfect.

5. GOVERNMENT AND FIRMS FACE SIMILAR PROBLEMS

5.1. Rent-seeking problems

Rent-seeking is competing for a benefit in a way that either uses up much of the benefit, or changes the rules to create an unfair benefit. A business firm might invest in new plant and equipment, achieving lower prices and higher quality in a way that benefits consumers but harms the rest of the industry. The harm to the rest of the industry takes place within the existing rules of competition, and is generally more than offset by the far larger benefits to consumers. But a business firm might also invest in lobbying the government to create new rules, such as protections from competition that raise prices and destroy incentives for innovation. The benefit to the industry results from a political "investment," and the harm to consumers is far larger than the benefit to firms and workers. Consequently, it is not true that "more competition is always better." Competition within the rules benefits consumers and harms competitors. Rent-seeking competitions changes to rules to benefit an elite, at the expense of the public. Worst of all, rent-seeking competitions may dissipate much of the benefit of more favorable rules, through litigation and lobbying costs. But the entire costs are passed on to consumers and taxpayers.

Of course, rent-seeking competitions also occur in private settings. Super-normal "rents" such as salaries and compensation for top corporate leaders may divert highly talented entrepreneurs away from working on innovations, and devoting their time instead to efforts to climb the salary ladder. If the rewards in a business career do not match up incentives for creative efforts with remuneration, rent-seeking can sap the vitality of private competition as well. We have recently seen egregious examples of leaders of failing companies still being rewarded with enormous compensation packages and "golden parachutes" when they left the firm.

5.2. Principal-agent problems

The literature on agency originated in the problem of incentive design in contracts. Stockholders are principals, and management is their agent, charged with overseeing activities of employees. JPMorgan Chase recently lost nearly \$6 billion in operations characterized by Jamie Dimon, Morgan's CEO, as "flawed, complex, poorly reviewed, poorly executed, and poorly monitored." The official responsible was dismissed, but Dimon himself, as an agent of the stockholders, bore some of the blame.

The agency problem is at least as intractable in government. In the 2010 Gulf of Mexico oil spill to be described below in section 6, the US Department of the Interior's Minerals Management Service did have inspectors whose job it was to assure the safety of the drilling. But they had insufficient manpower and limited incentives to monitor safety effectively.

5.3. Time consistency problems

The time consistency problem is this: the best policy overall is not the best policy right now (Kydland and Prescott, 1977). The maxim, "never negotiate for hostages" captures the essence of the problem. If we can commit never to negotiate, then no one would take hostages. But if hostages are taken, then the pressures to negotiate may prove overwhelming. The problem is that negotiating for the release of the current hostages ensures that there will be more hostages taken in the future.

Bank bailouts in the financial crisis are another example. Because there have been bailouts before, banks can reasonably expect that the government will bail them out again, and therefore take risks they might not take if not for moral hazard. The logic for the present is well captured by the report of the Republican minority of the Financial Crisis Inquiry Report:

For a policymaker, the calculus is simple: if you bail out AIG and you're wrong, you will have wasted taxpayer money and provoked public outrage. If you don't bail out AIG and you're wrong, the global financial system collapses. It should be easy to see why policymakers favored action – there was a chance of being wrong either way, and the costs of being wrong without action were far greater than the costs of being wrong with action (FCIC Report, 433).

6. CONCLUSION: GUIDELINES FOR PUBLIC POLICY

The policy problem is to align personal incentives—those facing *both* economic and political agents—with public well-being. Drawing a line dividing private and public sectors misses the point of our argument, because the ideal system is an alloy, a mixture of market action and government oversight. Simple, consistent rules, fairly applied, improve market systems. We end with two examples.

6.1. A lender of last resort.

Providing a lender of last resort has been a function of central banks since the 19th century. Such lenders provide liquidity when private banks are not functioning. As Allan Meltzer has pointed out, the United States Federal Reserve has never in its nearly 100 year history formally taken on such a role. The government steps in on an ad hoc basis to bail out Continental Illinois in 1984 or not to bail out Lehman Brothers in 2008, leaving much uncertainty about its motivation, goals and policies. Meltzer suggests that the Fed should have a publicly announced lender of last resort policy, though “at a penalty interest rate” (Meltzer, 2003: 730). Such a policy would mitigate the moral hazard and the time-consistency problems that now exist with so many ad hoc rescues. Such a policy would assure a possibility of liquidity when the private banking system was failing, but the stringent terms would discourage banks from taking undue risks that they might take if they thought they were too big to fail.

6.2 Regulation vs. posting a bond.

The 2010 Deepwater Horizon oil spill in the Gulf of Mexico is a case study in ineffective regulation. In the Oil Pollution Act of 1990, the US Congress placed a liability cap of \$75 million per incident. This policy doubtless encouraged oil drilling in spite of the costs and risks, but it was also successful rent-seeking by the oil industry. The liability cap was “too much” regulation, because BP was able to avoid the risks of negligence. With the extra regulation, BP would have been obliged to take risks of failure into account. Worst of all, the bureaucracy regulating the drilling suffered an agency breakdown of the most obvious kind: Their budget was tied to the level of drilling activity, not safety. Further, regulators often moved over to industry. The promise of higher future salaries clearly tempered the zeal for oversight.

How could “less regulation” be better? Instead of shielding the industry from risk, we would propose that the drilling company be required to post a bond equivalent to the expected costs of a serious oil spill, and then leave them alone. The company could receive income off of the bond for the life of the well, but would have to forfeit the entire bond in case of a spill.

6.3 Conclusion

As both of these examples illustrate, the issue should not be whether to expand or contract the spheres of markets or government. Markets need government and government needs markets. A better approach would involve a better set of rules that make for smarter government that aligns incentives of private and public agents with public well-being.

BIBLIOGRAPHY

- Bator, Francis M. (1958), “The Anatomy of Market Failure,” *Quarterly Journal of Economics*, Vol. 70, No. 3, pp. 351-379.
- Campbell, Ballard (2005) "Economic Causes of Progressivism," *Journal of the Gilded Age and Progressive Era*, Vol. 4, No. 1, pp 7–22.
- Cooter, Robert D. and Neil Siegel (2010), “Collective Action Federalism: A General Theory of Article I, Section 8,” *Stanford Law Review*, Vol 63, pp. 115-143
- Downs, Anthony (1957), *An Economic Theory of Democracy*, New York: Harper
- Financial Crisis Inquiry Commission (2011), *The Financial Crisis Inquiry Report*, New York: Public Affairs.
- Kydland, Finn and Edward C. Prescott (1977), ”Rules Rather than Discretion: The Inconsistency of Optimal Plans,” *Journal of Political Economy*, Vol. 83, pp. 473-491.
- Ledyard, John O. (2008), “Market Failure,” (in: Steven N. Durlauf and Lawrence E. Blume-Eds, *The New Palgrave Dictionary of Economics*, Palgrave Macmillan.
- Meltzer, Allan H. (2003), *A History of the Federal Reserve, Volume I: 1913-1951*, Chicago: University of Chicago Press.
- Niskanen, William (1971), *Bureaucracy and Representative Government*, Chicago: Aldine-Atherton
- Ostrom, Elinor (1990), *Governing the Commons: The Evolution of Institutions for Collective Action*, New York: Cambridge University Press.
- Pigou, Arthur C. (1920), *The Economics of Welfare*, London: MacMillan and Company.
- Smith, Adam (1976 (1776)), *An Inquiry into the Nature and Causes of the Wealth of Nations*, Chicago: University of Chicago Press.