Nelson, Richard R.

Working Paper
On the complexities and limits of market organization

LEM Working Paper Series, No. 2003/26

Provided in Cooperation with:
Laboratory of Economics and Management (LEM), Sant'Anna School of Advanced Studies


This Version is available at:
http://hdl.handle.net/10419/89517

Terms of use:
Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.
ON THE COMPLEXITIES AND LIMITS OF MARKET ORGANIZATION

Richard R. Nelson*

* Columbia University, New York, US

2003/26

November 2003
ON THE COMPLEXITIES AND LIMITS OF MARKET ORGANIZATION

Richard R. Nelson
Columbia University

1. Introduction

The close of the twentieth century saw a virtual canonization of market organization as the best, indeed the only really effective, way to structure an economic system. This phenomenon was strongest in the U. S., and to a somewhat lesser extent the U. K., but was very widespread. The conception of market organization being canonized was simple and pure, along the lines of the standard textbook model in economics. For profit firms are the vehicles of production. They decide what to produce and how on the basis of their assessments about what is most profitable. Given what suppliers offer, free choice by customers, deciding on the basis of their own knowledge and preferences where to spend their own money, determines how much of what is bought by whom. Competition among firms assures that production is efficient and tailored to what users want, and prices are kept in line with costs. The role of government is limited to establishing and maintaining a body of law to set the rules for the market game, and assuring the availability of basic infrastructure needed for the economy to operate.

Economists of an empirical bent and political scientists and sociologists who have studied actual modern economies well recognize the oversimplifications involved in this folk theory. If meant as a positive theory of how modern economies actually are structured, it misses the complexity of market organization in many spheres of economic activity, and ignores the wide range of activities involving major investments of resources where markets play a limited role. The theory represses the extensive roles of government in modern economies. More generally, it misses the institutional complexity and variegation of modern economies.
But the folk theory clearly is intended more as a normative statement than as a positive one. And in this role, the theory has been highly successful in recent years.

The Governance of Particular Sectors and Activities

While the broad ideological argument is focused on "the economy as a whole", it is at the sectoral or activity level that the details of economic organization are worked out. And at this level, today discussion about the way a sector or activity should be structured almost always starts with the presumption that market organization, of a relatively simple kind, is the right solution. This is the "default" solution. In recent years, sectors and activities that had been regulated have been subject to strong pressures for deregulation. Where there is a major public sector role, the pressures are towards privatization. Under this view, competition is always something to be fostered, and arguments for public support of any kind viewed with suspicion. Propositions to the effect that perhaps market organization is not appropriate for the activity in question tend to be rejected out of hand, and there is a very strong preference to use the market as much as possible, and to keep non-market elements to a minimum.

A case can be made that this apparent bias in favor of simple market organization at a sectoral level is, on net, a plus. It points policy discussion right from the start towards a mode of organization that, in fact, has served effectively as a central part of the governing structure over a wide range of activities and sectors. It is associated with bias against governing structures that rely heavily on central planning and top down command and control, which often have proved problematic or worse in contexts where they have been employed. However, the case for markets can be pushed too far. If the presumption in favor of market organization is accompanied by blindness to the complexity and variegation of modern economies,
an ideological resistance to mixed forms of governance, and hostility to structures
that make little use of markets, this can be a real problem.

I believe that, at the present time, modern societies are facing a number of
challenging and often contentious choices regarding how to organize and govern a
variety of activities that together employ a large and growing share of their
resources. For some of these a satisfactory solution likely can be found through
market organization that is not too far away from the folk theory. However, in other
cases to make market organization work tolerably well almost surely will require
strong and fine-grained regulation, and perhaps a number of other supplementary
elements. And for some, it likely will prove best to rely centrally on other basic
organizational modes, with markets in an ancillary role.

Each of the chapters of this volume, following this introduction, is
concerned with a sector or area of economic activity where there have been strong
pressures to use market organization more. However, in each there are important
features that make market governance of the simple text book kind problematic.
And in each there are strong voices arguing against what they consider overdue
reliance on market forces. The project which resulted in these studies was organized
to call attention to the fact, that seems overlooked in many contemporary
discussions, that modern economies involve a variety of different kinds of activities.
For some of these market organization can do a fine job of governance. But it also is
important to recognize the complexities and limits of markets as economic
governing structures.

_Economic Governance as a Political Issue_

I use the term "governing structure" to highlight what is at stake in choosing
a mode of organization for an activity or an industry-- who is to get what, who pays,
who is responsible for provision, mechanisms of control-- and to call attention to the
fact that society can and does have a choice about the matter, a choice that is
ultimately political. I note that economists tend to see the governing structure (my terminology) of an industry as involving both a demand side, and a supply side. Political scientists recognize a similar distinction between the processes of policy making, and administration, for the areas of public sector activity they study. And in my discussion which follows I also will use this rough distinction between demand and supply side governance.  

Canonical market organization, with potential users deciding how to spend their own money on the demand side, and for profit suppliers on the supply side, and limited regulation, is one form of governance structure. However, it is far from ubiquitous.

First of all, there are many goods and services where the benefits are spread among the public rather than being private, and here public, generally governmental, processes need to be used to determine how much is wanted, and public funds need to used to pay for what is procured. National security, and public health measures are canonical examples Until recently there was little argument against the proposition that basic scientific knowledge was a public good, and its creation and terms of access should be supported publicly. There also are certain activities where supply is regarded as an innately governmental function. Providing and running the police system and the courts is an obvious example. Structuring elections and developing legislation are others.

Other cases where society uses collective demand determination machinery, or public provision, are more controversial. Thus there is continuing debate about the extent to which medical care should be funded publicly, as contrasted with privately. Countries differ in the extent to which they consider that rail and airline service provides public as well as private benefits, and thus warrant public financial support, direct or indirect. In most countries most of primarily and secondary education is provided though public organizations, an arrangement challenged in the
United States by proposals for vouchers. There is controversy regarding the appropriate role of public spending and public provision of extra family childcare.

In any case, it is a mistake to see the governance issue as strictly about markets versus government. Childcare, an activity that absorbs an enormous amount of resources, is largely provided by family members, with market institutions and government both playing a subsidiary role. Not for profit organizations principally govern organized religion, and little league baseball.

And many activities and sectors that generally are thought of as market governed in fact have a quite mixed governing structure. Thus pharmaceuticals production and sales is regulated, and public moneys go into the basic research that pharmaceutical companies draw from in their development work. Most of the old "public utilities", for example the telephone system, and electric power, still are quite regulated, and some, like passenger rail service, are subsidized to some degree. Government programs provide the infrastructure that enables private for-profit airlines to operate: airports and the air traffic control system. The Internet was brought into existence through a combination of private and public efforts. Today society is struggling with the question of in what ways the Internet requires regulation.

Market organization is a widely used and useful governing structure. However, just as one size shoe does not fit all feet, a single mode of sectoral governance cannot cope with the great variety of human activity. Modern economies are made up of many very different sectors. There is no way that a single form of organization and governance is going to be appropriate for all of them.

The following chapters of this volume deal with sectors or areas of activity where the issue of the role of market organization is highly controversial. This introductory chapter sets the stage.

I begin by reminding the reader that, in historical perspective, the current relatively unchallenged enthusiasm for market organization is rather unusual; in
Section II I briefly review some aspects of the history of continuing debate. Then in Section III I turn to various theories about the virtues of market organization, relative to other forms of governance. It turns out that these are very context dependent, and Sections IV and V considers several lines of argument about what different modes of governance are good for, and develops the case for a mixed economy. In the concluding section I introduce briefly the sectors and activities treated in depth in the following chapters, and reflect on why decisions regarding economic governance are so difficult.

II. The Past as Prologue

The presumption and fact that markets play a pervasive role in the governance and organization of economic activity are relatively recent phenomena. A significant expansion in the role of markets occurred first in Great Britain around the beginning of the 18th century, and later spread to continental Europe, and the United States, still later to Japan, and recently to large portions of the world. Of course certain kinds of markets have existed from virtually the dawn of history, but until recently were central in only a small portion of human activity. It is the pervasiveness of markets, and the broader system legitimating and supporting market organization, that came to be called capitalism, that is relatively new on the historical time scale.

With the spread of markets, of production that was largely for sale on markets, and of an economy where either net receipts from sales or wages garnered on labor markets largely determined the access of an individual or family to goods and services, a sphere of economic activity began to emerge in its own right, as a system that was distinct from the broader society and polity. Thus Adam Smith's The Wealth of Nations (1776) is about a market economy, influenced profoundly to be sure by the culture and government of the nation containing it, but an object in its
own right, and with its own basic rules of operation. That book could not have been written a century earlier.

However, it is important to recognize that many activities continued to be outside the market system. Both government and families remained important institutions. Also, throughout the period of ascendancy of capitalism many sophisticated observers and analysts gave it mixed grades, arguing that there were minuses as well as plusses, and activities where the market should not be dominant.

While the British "classical school" often is thought of as strong proponents of markets, as unencumbered as possible, as extended to as wide a range of human activity as is possible, in fact that is not quite accurate. Adam Smith's enthusiasm for markets was nuanced, and he clearly saw a downside. John Stuart Mill did not like many aspects he saw in the rising capitalism of mid nineteenth century England. The United States today is regarded as the locus of almost unwashed enthusiasm for unfettered markets. However, Alexander Hamilton, in his Report on Manufactures, argued that protection and subsidy were needed if American industry were to survive and prosper. Many of the founders of the American Economic Association, which was established in the late 19th century, believed that the capitalism that was emerging in the United States badly needed regulation.

And for all the enthusiasm today for market capitalism of a relatively extensive and unrestricted sort, it is easy to forget that half a century ago some of the most distinguished scholars were predicting capitalist's demise. In the 1940s Joseph Schumpeter published his classic Capitalism, Socialism, and Democracy and Karl Polanyi, his The Great Transformation. Both saw raw capitalism as a system whose time had passed, the former with regret and the latter with relief. Both saw capitalism as it had developed during the first part of the twentieth century as politically unviable, in a democracy.

The evidence indicates they were correct, at least at that time, although what happened was not quite as they predicted. In Western Europe, and in the United
States, the early post war era saw major "reforms" in the system. It was widely recognized that the reformed capitalism was significantly different from what it had replaced. The roles of government had expanded greatly. Unemployment insurance became widespread and in many countries quite generous, and similarly Social Security. Public support of education became much more extensive, particularly at the university level, and governments became the principal supporters of scientific research. Many countries expanded the scope of national health insurance, or instituted new programs. Several authors considering the reforms speculated as to whether the new economic system was “capitalism” or something new and different. (See for example Dahl and Lindblom, 1953, Crosland, 1956, Bell, 1960, Myrdal, 1960, Schonfield, 1965).

In the United States and United Kingdom, economists increasingly used the term "mixed economy" to describe the system as it was coming to be. The basic themes were well articulated in the 1962 report of the Kennedy Administration Council of Economic Advisors, which contained a number of the country's best known and most respected economists. While market organization was assumed to be the standard way of governing and managing industry, the theory of "market failure," to use a term I will unpack shortly, was very much part of the notion of a mixed economy. Monopoly was recognized as a condition that could negate many of the advantages of market organization, and something to be guarded against by rigorous anti trust, or where inevitable to be controlled through regulation in lieu of competition, or through public sector management. The provision of public goods, like national security and scientific knowledge, under this view required public support, and in some cases public undertaking. Externalities required regulation or a regime of taxes and subsidies. And government needed to proceed actively to assure that the workings of the economic system did not generate unrelieved poverty.

Of course, these changes in economic policy and, more broadly, changes in the view of what capitalism was and what was needed to make it effective, did not
go unchallenged. By the middle or late 1970s, there was loud advocacy for rolling back many of the changes or, at least blocking further moves in these directions. The administrations of Margaret Thatcher and Ronald Reagan clearly marked a watershed. Since that time the conventional wisdom is that a simple lean capitalism is best, and that the earlier chatter about a mixed economy was badly misguided. Thus Daniel Yergin and Joseph Stanislaw have written about how the marketplace has won out over government in the battle for *The Commanding Heights*, and see the outcome as victory for the right cause, expressing few qualms that the issues might be more complex than the ideological arguments of the victors. Francis Fukuyama proclaimed *The End of History and the Last Man*, as a final victory for capitalism (along with liberal democracy) with hardly a mention of the earlier discussions that modern economies, while relying heavily on markets, needed to be "mixed".

Mark Blyth has proposed in his *Great Transformations, Economic Ideas, and Political Change in the Twentieth Century*, that there may be a natural cycle regarding popular opinion on the appropriate level and kind of government regulation and involvement more generally, a cycle that involves both policies and ideologies, with a tendency to overshoot in one direction and then, with a lag, reverse directions. He ascribes the turning of the 1980s to an overshooting in a liberal direction during the earlier postwar era. My argument, of course, is that we have overshoot again.

As I have emphasized, the principal concern of the authors of this volume is with how a society governs different economic activities at the level of a sector. Our argument is not about macroeconomics, or about whether or not broad reliance on market organization is a reasonable thing. Rather, it is that in the current climate there is a strong tendency to rely on market organization, of a relatively pure and simple kind, not only in contexts where this can work reasonably well, but also where simple market organization is at best problematic.
III. The Case for Market Organization: The Perspective from Economics

Since the days of Adam Smith, British and American economists generally have touted the virtues of the “invisible hand” of market organization. For the most part Smith's argument was qualitative, and supported by a set of empirical cases drawn from his own experiences and those of others. Also, it is important to remember that Smith was making his case for market organization partly as argument against a particular alternative: mercantilism.

Noneconomists seem under the impression that modern economists have built a theoretically rigorous and empirically well supported case for market organization, that tightens up the logic of Smith’s argument. However, I will argue here that in fact the most commonly cited theoretical argument in modern economics can support little weight, the empirical case for market organization is rough and ready, and the persuasive part pragmatic and qualitative rather than rigorous and quantitative. In my view at least, the arguments for market organization that are most compelling are quite different from that contained in the standard modern textbook formulation.  

That formulation, of course, is that given a particular set of assumptions, a theoretical model of a market economy yields results that are "Pareto optimal." An important implication of this line of theoretical argument is that one need not look at other forms of economic organization because market organization "can't be beat." Thus this perspective on the virtues of markets does not invite comparative analysis. except for the purpose of exposing the weaknesses of non-market forms. In any case, that argument is a nonstarter for considering what are the real advantages of market organization vis a vis other forms of governance.

It is a nonstarter, first of all, because no one really believes that the model is a close approximation to how a market economy actually works, or that the real economy actually generates outcomes that even in principle "can't be beat". On the
other hand, real market economies are much richer institutionally than the simple model, and thus theoretical arguments (for example those contained in market failure theory) may not be an indictment against the actual market economies that we have. What clearly is needed is careful empirical evaluation of quite complex alternative governing structures. There has been little of this kind of hard research. Unfortunately, therefore, analysis of the plusses and minuses of governing structures that make significant use of markets has to rest on a mixture of the rather rough comparisons that history does allow, plus efforts at sensible, if somewhat ad hoc, theorizing.

Thus while market organization as it actually is does not achieve "Pareto optimality," most economists and many lay persons would argue that market organization and competition often does seem to generate results that are moderately efficient. There are strong incentives for firms to produce goods and services that customers want, or can be persuaded they want, and to produce at as low financial cost as it possible. Also, under many circumstances competitive market organized economic sectors seem to respond relatively quickly to changes in customer demands, supply conditions, and technological opportunities. Thus to the extent that producing what customers value is treated as a plus, and so long as factor prices roughly measure opportunity costs, there is a strong pragmatic case for market organization, broadly defined, on economic efficiency grounds, at least in certain domains of activity. It is not the case presented in textbook theory. But in my view it is far more persuasive.

Why Not Top-Down Planning?

The kind of economic governance needed would certainly seem to depend on the nature of the salient needs. Thus in wartime, and virtually without protest, capitalist economies have abandoned market governance and adopted centrally coordinated mechanisms of resource allocation, procurement, and rationing. The
rationale has been that such economic governance was essential if production was to be allocated to the highest priority needs, and conducted effectively. And by and large there is agreement that remarkable feats of production have been achieved under these arrangements.

The experience with wartime planning has led some analysts to propose that a number of the mechanisms used then would vastly increase economic efficiency during peacetime. However, most knowledgeable analysts have argued against that position, strongly. It is one thing to marshal an economy to concentrate on a central set of consensus high priority demands over a short period of time, as in wartime production, or in the early years of the communist economies where the central objective was to build up a few basic industries. It is something else again to have an economy behave reasonably responsively and efficiently in a context of diverse and changing demands, supply conditions, and technological opportunities, over a long time period. The experience with central planning in the ex communist countries after the era had passed when building up standard infrastructure sufficed as a central goal, bears out this argument.  

However, I would propose that the argument behind the scenes here for market organization is more complex, and in fact different, than the standard textbook argument that profit maximizing behavior of firms in competitive market contexts yields economically efficient results. It hinges on the multiplicity, diversity, and unpredictable changeability of wants, resources, and technologies, in modern economies that experience shows defies the information processing and resource allocating capabilities of centrally planned and controlled systems, and also presumes that the chances of appropriate responses to changed conditions are enhanced when there are a number of competitive actors who can respond without going through a process requiring approval for proposed action by some central authority, or gaining the approval of a large number of people before acting. Hayek, and the modern "Austrian" economists (for example Kirzner, 1979), have stressed
the ability of market economies to experiment, to search for unmet needs and unseized opportunities, and argued that centralized systems are very poor at this. This argument is not what standard textbook theory is about.

I also note that this argument hinges on the desirability of consumer sovereignty, expressed through market choices. It is mute regarding how to mind social or collective demands. More on this shortly.

A Schumpeterian Perspective

Many observers have proposed that it is in dynamic long run performance, rather than in short run efficiency, that market capitalism reveals its greatest strength. As Marx and Schumpeter have stressed, capitalism has been a remarkably powerful engine of economic progress. And here too one can make a rather explicit comparison. Indeed a good case can be made that a central reason for the collapse of the old communist economies was their inability to stay up with and take advantage of the rapid technological progress that was going on in market economics.

But again, the characteristics and capabilities of market organization that contribute to technological progress are very different than those that relate to static efficiency, and the textbook normative model. Indeed Schumpeter made a great deal of those differences. Some commentators on Schumpeter have proposed that he did not believe that, in modern capitalism, competition was important. That is not correct. Rather, his argument was that the kind of competition that mattered was not the sort stressed in the economics textbooks, but competition through innovation. The capitalism of his Capitalism, Socialism, and Democracy was an effective engine of progress because competition spurred innovation. His theory places high value on pluralism and multiple rival sources of invention and innovation. However, under this view of what socially valuable competition is all about, the presence of large firms. With R and D laboratories as well as some market power was welcomed,
despite the fact that such a market structure diverged from the purely competitive one associated with the static theorem about Pareto optimality.

It is interesting that Schumpeter, in his late writings, argued that, as science became more powerful, the unruly and inefficient competition of capitalist systems would no longer be needed for industrial innovation, which increasingly could be planned. History has showed him to be very wrong on this point. Centrally planned systems often have achieved strong success in allocating R and D resources where the objectives were sharply defined and the likely best routes to success quite clear. The Manhattan Project and Project Apollo are good examples. However, for the most part potential innovators are faced with the problem of guessing just how much users will value various innovations they might introduce, and also of judging how easy, or difficult it would be to develop various alternatives. The answers to these questions seldom are clear. Further, well-informed experts are likely to disagree on the answers. Under these conditions, the competitive pluralism of market organized R and D systems is a great advantage.

It can be argued that, at least in recent years, the strong performance of\ market capitalist economies on the industrial innovation front also has a lot to do with features of modern capitalist economies not highlighted in Schumpeter, for example public support of\ university research and training. However, the pluralism, flexibility, and competition of modern capitalism surely are essential aspects of any effective innovation system.

**IV. The Positive Case for a Mixed Economy: Market Failure Theory**

While I, and the other authors of this volume, find the argument in favor of market organization of economic activity broadly compelling, it is too broad. It's breadth covers up the fact that economies include a large variety of sectors and activities, with different properties. As proposed earlier, one size shoe does not fit
all feet. It is important to consider the details of an activity before deciding whether or not it fits neatly into the simple market shoe.

It is clear that most high-level argument about where market organization works effectively, and where market organization works poorly, is conducted using the economists’ market failure language. Market failure theory takes as its benchmark the theory I discussed earlier that, under the set of assumptions about behavior built into neo classical economic theory, and given a particular set of context assumptions; market governance of economic activity yields Pareto optimal outcomes. The orientation of market failure theory is to context conditions that upset that result.

Because this body of theory is so well known, I can telescope here the standard account of the basic market failure categories. Rather, my emphasis will be on the blurry edges of the standard categories. and on some cases that seem to strain the underlying economic theory more generally. In my view, a large share of the current controversies about the role of markets fall into these areas.  

*The Public Goods Bestiary*

Economists use the public good concept to flag a class of goods and services where the benefits are collective and communal rather than individual and private. Under this body of conceptualization, a pure public good has two attributes. One is that, unlike a standard private good like a peanut butter sandwich, which can benefit only one consumer (although of course it can be split and shared), a public good provides atmospheric benefits that all can enjoy. In the language of economists, public goods are non rivalrous in use. Your benefiting from a public good in no way diminishes my ability to benefit. The second attribute is that, if a public good or service is provided at all, there is no way to deny access to any person, or to require direct payment for access. Clean air, and national security are standard examples of
pure public goods. Scientific knowledge often is used as another example. For a neighborhood, the quality of access roads has some public good attributes.

For the procurement of a pure public good, society is virtually compelled to put in place some kind of collective choice mechanism to decide how much to buy, and some kind of a collective revenue source to pay for them. Standard market governance simply will not work. For some “local” public goods, the mechanism can be informal. Thus a neighborhood association may collect voluntary dues for maintenance of access roads. But for public goods that benefit a wide range of people and groups, and which if provided access cannot be blocked, there is no option but to use the machinery of government.

However, pure public goods are rare. And for a variety of goods and services with some public goods properties, using the market for provision is feasible.

First of all, there is a class of goods and services that, while they are marked by non rivalry in use, potential beneficiaries can be made to pay if they are to have access. Thus access to scientific knowledge or data can be restricted by secrecy on the part of its creator. In recent years legal changes have made certain kinds of scientific research results, and certain kinds of data, protectable under patent and copyright law.

Where access can be blocked, there is the option of using market organization for supply, and making individuals and groups pay for what they want to get. The problem with this governance structure is that, if the good or service is non rivalrous in use, or largely so, use may be restricted when there is no social cost of extending use. The losses here can be small, or considerable. Argument about this now is prominent in the face of moves to use the market more for the support of scientific research, and scientific data collection and distribution.

Second, and partially related, many goods and services are partly private and partly public, in the sense that there is identifiable benefit to particular individuals, who can be made to pay for access, and at the same time broad atmospheric benefits
from the availability or provision of the good or service. Education is a prominent example. Vaccination for contagious diseases is another. It can be argued that mass transport, in addition to generating benefits to the users, also benefits society at large by reducing the congestion and other costs associated with greater use of private transport were public transport not available.

Society has a choice here to largely rely on market provision, by making the individuals who directly benefit pay the full costs, thus minimizing needed public support. This is the proclivity of the American government these days regarding rail transportation. We seem to be moving in that direction regarding higher education. However, primary and secondary education continue to be largely publicly financed, even though the benefits to individual students are usually substantial. And vaccination may be required by law.

I now want to turn to a more general point. It is that in many cases the perceived public benefits of a good or service are associated with beliefs about what is appropriate for a society or a polity. Many citizens in a democracy support funding for universal education not because they, or their children, will take advantage of public schools, or because they believe it will reduce the incidence of crime that can affect them, but because they believe that universal free education is a necessary condition for equality of opportunity in a society. Similar arguments have been put forth for public funding of universal pre-school child care. Many people clearly believe it is wrong if people in need do not have access to medical care if they cannot afford it. The values at stake here seem different in kind than the utility that an individual might get from a nice steak.

Whether a good or service has significant public good properties clearly depends on how the benefits it yields are viewed. In the cases above, the benefits that are seen as "public" are not easily analyzed in terms of the standard kinds of benefits that are the focus of standard economics. Rather, their "publicness" resides in values defined in terms of perceptions about what makes a society a decent and
just one. For this reason, for many goods and services the argument is not about whether innate publicness requires public funding to assure a decent level of provision, but rather about whether the good or service should be made available to all, on reasonable or nominal terms, with public moneys footing the bill. That is, a considerable part of the debate is about what goods and services "ought to be public".

There are significant costs involved in employing public choice machinery instead of or supplementary to market demand side machinery. There is, first of all, the question of just how to decide how much is to be provided, in contexts where individuals and groups may value the public provision of the good or service very differently. There is, second, the question of who is to pay. Because of the number of individuals and groups that may try to have a say in these matters, the process is either going to be time consuming and cumbersome, or pruned back and simplified in a way that will certainly outrage certain parties. The outcomes of collective demand generating processes are inevitably going to be considered by some to be unfair and inefficient. But if a good or service has strong innate public good properties, or is deemed by some as something that ought to be public, this argument is inevitable.

*The Externalities Problem: Bringing in Broader Interests to the Governing Structure*

The externalities concept of economists is meant to refer to by products of economic activity that have negative or positive consequences that are not reflected in the benefits and costs perceived by those who engage in the externalities generating activity. Environmental contamination is an obvious example of a negative "externality" and a clear case where there is a value at stake in the operations of an activity, with no one to represent and fight for it, at least in the simple model of market governance put forth in economic textbooks.
In a famous article written some time ago, Ronald Coase argued that, if property rights are clear and strong, and the number of interested parties relatively small, in fact markets can deal with these kinds of problems. Those who value clean air or water simple can "buy" behavior that respects those values from the potential polluter. The problem arises when those who care about the values, which could be neglected, are dispersed. In this case some kind of collective action machinery is needed to bring them in. A good way to think about regulation or a tax on pollution is to see these measures as the result of governance machinery that has brought in a broader range of interests and values bearing on decision-making in an activity or sector than would be there under simple market organization.

The general problem for society is to delineate the range of interests which should be represented, their relative influence, and the mechanisms through which they can operate to make their values felt. The latter can range from public interest advertising, or boycotts, which can proceed without direct access to governmental machinery, to lawsuits which involve general governmental apparatus, to particular pieces of special regulation and associated control machinery.

As suggested earlier, one of the major advantages of market governance of an activity or sector is that this tends to avoid the costs and inefficiencies of central planning. One of the reasons for its flexibility and responsiveness to certain kinds of needs is that simple market governance tends to count a rather narrow range of interests. Yet it is hard to identify an activity, or a sector, where there are not some values at stake that go beyond the direct interests of the customers, and the suppliers. Severe externalities from an activity clearly call for amending simple market organization to give those interests an effective voice. On the other hand, the greater the number of interests and values that have to come to some collective conclusion before action is taken, or which have a veto power over change, the more cumbersome the governance system. The question, of course, is where to draw the line.
The Costs of Competition and The Problem of Private Monopoly

The benefits of competition are part of virtually all arguments extolling the advantages of market organization. Of course one can have competition without having for profit firms. Indeed there are a number of proposals for reforming primary and secondary education by giving parents and students a wider range of school choice, and providing stronger incentives to schools to attract and hold students, which don’t necessarily involve introducing for-profit schools into the supply side of the picture. Some of those that oppose this kind of reform, or doubt its advantages, argue that parents and students do not in general have the knowledge or motivation to make good choices in such a setting, and that stimulating competition among schools would invite catering to ill informed tastes. There are similar arguments, pro and con competition, regarding choice of medical plans and doctors. I will consider this set of issues in more detail shortly.

However here I want to flag the problem that in a number of activities or sectors there are significant economies of scale of provision relative to the size of the market, or strong advantages of having an internally coordinated system, or both. Activities with these characteristics are called by economists “natural monopolies”. If a sector or an activity is a natural monopoly, competition is not a desirable or a viable element of a governing structure. This traditionally had been the assumption regarding the range of sectors that have been called “public utilities” including prominently the telephone system, electric power, and railroads. Up until recently public utilities tended to be operated as government corporations in much of Europe, and as franchised private but regulated corporations in the United States.

Over the past quarter century, there have been strong pressures to denationalize, or deregulate, the old public utilities. Often this argument has been associated with the proposition that in fact these activities no longer were natural monopolies, if they ever were. However, in many cases it has turned out that the
generation of competition has proved very difficult or very costly. And as a result customers now tend to face a relatively unregulated private monopoly, as contrasted with a regulated or public one.

American economists are inclined to rationalize the use of antitrust to prevent undue market power from arising, and regulation to deal with cases where there is natural monopoly, on the grounds that monopolists tend to charge too high a price. It is clear, however, that much of the force behind the policies to break up or rein in monopolies, or regulate them closely, has to do with people's concerns that arise when private bodies gain considerable power over their lives, a matter that may involve but also may transcend being forced to pay monopoly prices.

Economists are inclined to rationalize the fact that governments not only fund but directly control activities related to national security and the criminal justice system to the fact that these activities yield "public goods". But it probably is at least as relevant that there is near consensus that it would be highly dangerous to place the power over these activities in private hands. While clearly there is widespread concern about undue governmental powers, in the arena of public utilities there is concern about unregulated private power as well.

I propose that concern about the lack of accountability to the public of private power over activities and services that many people believe are of vital importance to them lies at the heart of the current debate about how to govern activities like telephone service, electricity generation and distribution, urban water supply, the railroad system, urban mass transport. I think that to ignore this aspect of the debate about how to govern these sectors is to miss the point. However, as with the issue of regulation to deal with externalities, the key question of regulation of industries where monopoly or a highly concentrated structure is inevitable, is where to draw the line.
The Issue of Uneven Expertise and Agency

Economists have become more interested recently in how asymmetric information between buyer and seller, or more generally lack of the expertise to judge quality on the part of customers, complicates the workings of markets. I propose that a number of the current controversies about the efficacy of market organization, about regulation of market supply, and about alternatives to market supply, reflect this issue.

The problem clearly is fundamental in medical care. The medical community long has professed that, while patents sell their services on the market, they most emphatically do not try to maximize their profits, but rather prescribe in the patient’s interests. Analysts have observed that that may be true to some extent, but still the capabilities of patients to choose among physicians or physician groups remains problematic. Thus the questions of what information needs to be provided to those choosing among doctors or plans, and what controls there should be on advertising, are important matters in considering the role that competition should play in the provision of medical care. And there is the question as to whether, even under suitable regulatory constraints, competition among heath plans and physicians for patients is a useful component of the governing structure, or even whether competition may be on net pernicious.

The same issues of course come up in arguments over the wisdom of adopting a voucher plan, and school competition, in education. There is considerable resistance on the part of many citizens, not simply public school teachers, to the notion that for-profit schools should receive public support and can act as useful competitors to public schools. Similar issues are involved in the debate about the rules and regulations that should be required of extra family child care, and whether or not to encourage for-profit firms in that line of activity.

My point here is not that those who oppose simple market organization in areas where there is considerable consumer ignorance have a fully persuasive
argument for heavy regulation, or non market provision. These alternatives to market organization have their own liabilities. Rather, it is that where one cannot count on informed customers to make good choices, the argument in favor of lean market organization is problematic.

_The Peculiar Bias of Market Failure Theory_

I want to conclude this survey of market failure theory by pointing out a bias built into that theory. By the way it is formulated, market failure theory carries a heavy normative load to the effect that markets are preferred to other forms of governance, unless they are basically flawed in some sense. Thus the only reason why government should provide for national security and protect citizens from crime is that markets can't do these jobs very well. Parents need to take care of children because of market failure. As one reflects on it, the argument that we need government because markets sometimes "fail" seems rather strange, or at least incomplete. Can't one make a positive case for government, or families for that matter, as a form that is appropriate, even needed, in its own right?

_IV. The Functions of the State, and the Community_

_Values of the Collective_

Of course there is an ancient body of theorizing that puts forth a positive case for government. In much of its early incarnation, and some of its more recent, the state is viewed as the structure through which values are defined at the level of the community, and decisions regarding the community as a whole are made. Reflect on Plato's discussion in _The Republic_, or Hegel's discussion where the good state is defined in terms of the quality of its justice and the character of its citizens. This formulation of the role of the state of course does not resolve the issue of differences among individuals who comprise the state. Indeed disputes about values
are likely to be even more heated than deputes involving choices that affect
economic interests differently. And the issue of how to decide may be even more
contentious. Plato saw the answer in government by philosophers. For better or
worse, modern societies are stuck with democratic process.

A liberal position on how to deal with value differences within the
population would be to keep the state out of it, and to try to avoid forcing the values
of one group to be imposed on another. But in many cases there is no way to do that.
Abortion either is legal or it is not.

This theory clearly captures a lot of the flavor of contemporary debates
about matters like rights to life and rights to choose, the commitment of a society to
ideals of equal opportunity and fairness, and whether there should be universal
health insurance regardless of ability to pay. Arguments about these matters involve
beliefs about appropriate collective values, or values of the collective, that transcend
those of particular individuals. Under this theory, in these areas at least the state,
which defines the collective, is the natural vehicle of governance in contexts where
a collective position on something has to be taken one way or another. In these areas
the state may choose to use markets to further some collective values, but the
purpose being served is a public purpose. and the responsibility for furthering it
ultimately is a state responsibility.

Providing the Contest for a Fruitful Civil Life, and Economy

Another, but not mutually exclusive, body of theorizing about the state
focuses not so much on collective values but rather sees the state as the necessary
vehicle to set the context for fruitful private lives and actions. From at least the time
of Hobbes, and Locke, theories about the need for a strong state have involved,
centrally, the proposition that an effective state is needed for individuals to lead
secure, decent and productive lives. Originally this body of theorizing had little to
do with economics, much less the role of the state in market economies. Thus
Hobbes' case for a strong state to establish and enforce a clear body of law is posed in terms of the need to avoid the "war of every man against every man". While this case involved security of property, this was not its central orientation. With Locke, the orientation is more towards security of property, but his great writings were before capitalism emerged as a recognizable economic system.

The argument for a strong state here is an argument for a single ultimate source of legal authority and police power. In the language of market failure theory, it is a natural monopoly argument as well as a public good argument. But the orientation to these issues in the political philosophy literature is that these are natural basic functions of the state, and don't simply fall to the state by default because of some kind of market failure.

A closely related proposition is that the state has principal responsibility for assuring the provision of needed basic infrastructure, physical as well as legal. While the emphasis in Adam Smith's *The Wealth of Nations* was on the need for a reliable government and legal system if an economy were to work decently, as economies grew more complicated provision of basic services soon became viewed as a responsibility of the state.

Of course the question of what is infrastructure that needs to be provided for markets to work well, and what markets themselves can be expected to provide, often is not an easy one. But this issue is not generally argued out strictly under the concepts of market failure theory. Thus consider activities like providing a system of contract law, building and maintaining a road system, or a railroad system, or supporting the development of basic scientific knowledge. These activities can be viewed as public goods, in the sense of market failure theory, with the market failure stemming from the fact that their benefits are to a considerable extent collective rather than individual, and hence that for profit firms would have great difficulty collecting for their provision on a conventional market. Or they can be considered as "needed infrastructure", that governments are, by their functions,
responsible for getting provided. While the former theory sees the reason for
government provision or overview and control in the inability of markets to do an
adequate job, the latter sees provision of such goods and services as a central
responsibility of government, even if they could be provided through market
mechanisms. And where market mechanisms in fact are used as part of the
machinery for provision, the latter perspective sees government as still responsible
for overseeing the operation, at least to some degree.

The State and the Community

Several of the theories of the state referred to above rest heavily on the
concept of a natural community of individuals, families, and more extended social
structures, tied to each other by community bonds. Under this conception, the state
is the vehicle through which the community makes collective decisions and take
coordinated collective action, when that is appropriate. But from another point of
view, it is clear that much of the decision making and action taking of the
community does not involve state mediated collective action. Indeed, assuring that
the state not interfere too much in the life of the civil community has been a central
issue in Anglo American political theory.

I believe it is fruitful, and illuminating, to view the economy as an aspect of
community life, rather than as a set of institutions that stand separate. From this
perspective, the economy is the term used to denote and focus attention on the
activities of the community that use scarce resources to achieve human purposes. It
is clear that much of economic activity in this broad sense does not involve markets,
in the standard sense of that term.

Adam Smith is mostly known today, particularly among economists, for his
The Wealth of Nations. There he stressed the value of the "invisible hand" of market
mechanisms. The orientation of his Theory of Moral Sentiments was quite different
in a number of ways. There he stressed the extended empathy that humans in a
community have for each other, along with feelings of rivalry, and sometimes of hostility. Extended empathy can be a powerful ingredient in a governing structure, and in some cases an ingredient that can be deemed vital for effective governance. But extended empathy is not what markets are about. Thus, to pick up on an earlier theme, the family is the standard governance structure for child care, and for many other economic activities, not because of simple "market failure", but because the family can be counted on (mostly) to hold the extended empathy towards its and related children that seems essential to good care. Similarly, there are a wide variety of other activities involving members of the community where neither formal government nor markets play a central role in the governing structures, but rather neighborhood groups, voluntary associations, clubs, etc.

Karl Polanyi was in a long line of social analysts who saw the extension of markets as an enemy of society, a destroyer of communal modes of governance. This is not a "market failure" argument. It is an argument that markets should be fenced off from certain kinds of activities.

The reality, but even more the myth, of the community structure that was undermined by market capitalism included first, that the community took care of its own. And second, that each community member, depending on his or her status, had certain rights as well as certain obligations. With the rise of the modern state, formal government gradually took on responsibility for taking care of its citizens, and for assuring their basic rights. Over time, arguments about the appropriate domain of such rights have moved from political rights to economic rights.

Thus under traditional democratic theory, all citizens of a state ought to have the right to vote, to equal treatment under the law, and a variety of freedoms of action regarding personal matters. Access to these basic rights of citizenship were seen as something that should not be rationed through markets, and for which government had a fundamental responsibility. During the 19th century, government also came to be charged with protecting those who were regarded as too weak to
protect themselves from market arrangements that would hurt them: thus child labor laws were passed, and laws limiting hours of work for certain classes of labor. A right of all citizens to a free public education, to a minimal level at least, gradually came to be recognized. The core arguments of modern welfare state theories add to these venerable political and protective rights, a set of rights to access to certain kinds of goods and services. This decoupling of access to a considerable range of goods and services from normal market process is the hallmark of the modern welfare state.9

Note that the proposition here regarding the role of government has a family resemblance to that associated with the position that government is responsible for needed infrastructure. The difference is that the orientation is not so much to what is needed to make the economy work, as to what is needed to make a society viable. Also, note that in both theories there is a strong notion of collective values. While the base values in this theory are associated with individual well being, the notion that society is simply a collection of individuals and families who have their own independent wants and purposes, misunderstands this perception of what human societies are. Solidarity is a word often used by advocates of this position. From another (sometimes closely related) tradition, we all are our brother’s keepers.

VI. Economic Governance as a Continuing Challenge

The heart of this volume consists of chapters concerned with a number of sectors and activities where society currently is struggling with the question of how best to organize and govern. Four chapters are concerned with traditional public utilities: electric power, telecommunications, passenger rail service, and bank clearance operations. For many years each of the sectors was thought of as a natural monopoly, and not as amenable to standard market governance. Beliefs and conditions changed, and over the past quarter century more market elements and
more competition have been introduced to the governing structure of each of them. The consequences have been controversial, and in each of them there is continuing argument about how much reliance to rest on simple market governance.

Four of our chapters are concerned with human services: medical care, public health, primary and secondary education, and extra family child care. In each of these sectors there have been strong pressures to rely more on market governance, and less on regulation and public provision, along with strong counter arguments.

Three chapters consider activities central to the advance of science and technology: basic research, the acquisition and distribution of satellite data, and the development of the Internet. The lines between the areas where public funding and private funding, and between what was deemed appropriately in the public domain and what was appropriately private property always have been somewhat controversial in the domain of science and technology. These chapters discuss the recent pressures to move these lines so that market governance covers more, and the reactions.

Despite broad ideological endorsements for the use of markets, there always have been areas where there is near consensus that market forces should be fenced out. But in a society committed to market organization and the values that go with capitalism, it is hard to keep market elements from encroaching. The concluding chapter of this volume is concerned with elections and legislation, and the attempts to prevent these from being for sale.

Each of these clusters will be proceeded by a short introduction, which lays out the issues that are particular to the area. This introductory chapter will conclude with a few general remarks about why these kinds of issues are so difficult to deal with.

Arguments about appropriate governing structures are difficult for many reasons. In the first place, there often are significant conflicts of interest and
differences in views regarding the salient values at stake. Since a central aspect of a
governing structure involves the mechanism that determines what interests and
values count, it is easy to see why this may be a contentious issue. And the question
of who is responsible for supply, and under what set of rules, often involves
contenders with strong interests in how that question is resolved. Reflect on the
conflicts involved in proposals in the U. S. for a "patients bill of rights" in dealing
with managed care organizations, or in proposals for a voucher scheme for publicly
funded education. Deregulation of the electric power system and the telephone
system was supported strongly by certain firms and interests, an a tightening of
regulation will be strongly resistd by those interests.

The problem is difficult not just because of competing interests, and values,
but also because of real uncertainties, the better term might be ignorance, regarding
the consequences of adopting one governance scheme or another. Given the analytic
limitations of the social sciences, or the complexity of the subject matter, or both, it
simply is impossible to foresee reliably the consequences of a patient’s bill of rights,
or a voucher scheme for public education. The developing argument about whether
and if so how to regulate spam and pornography on the Internet is made additionally
complicated by the fact that it is impossible to forecast how different regulatory
regimes will in fact work.

Further, for better or for worse, decisions that lead to the establishment of
and changes in a governance structure almost always are made in a highly
decentralized manner, and much of the action is by private parties doing things they
think are in their best interest. The current modal structure and the range of variants
of managed care in the IJ.S. is the result, largely, of decisions made by, on the: one
hand, organizations seeing potential profit in managed care, or striving to reorganize
their managed care operation so as to make it profitable, and on the other hand,
individuals and organizations with a responsibility to fund health care making their
decisions regarding with whom to do business.
Of course in this case and others the evolution of public programs and policies are an important part of the story. Indeed the ratification of a governance structure or changes in it ultimately is a political decision, even if that decision does not involve new law. However, the way issues arise and are dealt with in a democracy, policies are made and remade piece by piece. Thus today the U.S. Congress is treating the issue about patient rights and the issue about coverage of pharmaceuticals costs as if they were separate issues. The issues of school reform, and reform of regulation of public utilities, are complicated by the fact that there are many government agencies that will have a say, some at the national level, some at the state level, and in education some at the local level.

Some analysts would blame the problems societies have had at developing coherent and effective governing structures for areas like medical care, or the Internet, to this fragmentation. However, from another point of view this decentralization and the serial nature of the policy making process largely has protected us from grand coherent plans, the reach of which extends well beyond what can be well predicted. While ex ante analysis can serve to rule out certain proposals as obviously inadequate in certain areas, the development of governance structures for various activities has to rely to a considerable extent on evaluation of experience with attempts to reform.

It would be nice if experience with prevailing systems and their variants provided sharp clear feedback of what is working and what is not so as to guide the next round of adjustments. However, even putting aside that the interests and values of different parties might lead them to evaluate the same thing differently, and even where there is agreement that the current regime is unsatisfactory in certain ways, it may be extremely difficult to identify just what aspect of the current regime is causing the problem, or how to fix it. While ex post evaluation of a reform may be somewhat easier than ex ante prediction of the effects of that reform, it still is very difficult.
In such a context, a general broad belief in the efficacy of market organization undoubtedly is on net a plus, given the broad experience societies have had with market organization and the alternatives. However, it is a mistake to think that simple markets are the solution to all of our economic governance problems. To make market organization work decently well in certain contexts requires quite complex ancillary governing structure. And market organization is simply poorly suited for governing certain kinds of activities. It is important to develop a thoughtful understanding of the complexities and limits of market organization.


2 For a statement in this spirit see Fukuyama, 1992, and Yergen and Stanislaw, 1998.


4 For a good discussion see Lipsey et al, 1998, chap. 3

5 The discussion which follows develops some of the themes I first introduced in my 1981 article, "Assessing Private Enterprise: An Exegesis of Tangled Doctrine".

6 Lindblom’s discussion of these issues in his Politics and Markets, 1977, is particularly good.

7 Of the many expositions of the many facets of market failure theory, I find Stiglitz, 1986, especially fine. See also Lipsey et al 1998, chap 18
This is very much the position taken by Lindblom, 2001.

Esping-Anderson, 1990, provides a broad and incisive picture of the modern welfare state. See also Goodin et al, 1999.

The dangers of detailed planning where understanding is limited has been stressed by Hayek and Lindblom.

See Rivlin's discussion, 1971.