POLICY REPORT

DEREGULATING MONEY

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Infrastructure: Public or Private?

by Tom G. Palmer

Much public debate has recently been generated by claims that America's economic "infrastructure"—that is, mainly government-provided capital goods like roads, bridges, sewers, and water facilities—is crumbling. The passage in the last lame-duck Congress of new transportation taxes and increased government expenditures on transportation services was partially a result of this debate. Given the amount of public attention devoted to this issue, the time has certainly come to critically scrutinize the assumptions behind the arguments for state provision of public goods in general, and the economic infrastructure in particular.

This analysis will focus primarily on the "public goods" arguments for state action. There are at least two other prominent arguments commonly wielded by proponents of state intervention, but I will mention them only in passing. The first is ethical in nature, and while often found in conjunction with the public goods argument, in fact contradicts it.[1] The state, some argue, should deliberately thwart the desires of consumers and alter the pattern of property ownership that arises in a voluntary market, usually justifying such action on the grounds of "equality." This argument has been cogently dissected by Harvard philosopher Robert Nozick, among others.[2] Another common argument advanced for government public-works projects is that they "create jobs" or act in a countercyclical manner, extricating the economy from depression. This argument has been thoroughly critiqued by economists from Frederic Bastiat to F.A. Hayek, and has been effectively rebutted by historical experience. Public-works expenditures are, if anything, procyclical in nature.[3]

Tom G. Palmer is a policy analyst with the Council for a Competitive Economy.

Market Failure

Since at least the time of David Hume, many economists have argued that coercion is necessary to provide some economic goods desired by consumers, since those goods cannot be provided on the market because of attributes of "publicness." Various approaches to the definition of public goods have been developed, but most share two related characteristics: jointness of supply (or consumption) and nonexcludability of nonpaying consumers.

> "In the absence of markets, mechanisms for judging claims about repair or construction 'needs' are insufficient at best."

Jointness of supply (also referred to as nonrivalrous consumption) means that one person's consumption of a good does not diminish another person's consumption of the same good. For example, if a signal is broadcast on the electromagnetic spectrum, its use by one receiver does not diminish the access of others to the same signal. Nonexcludability means that if one person consumes the good, it cannot feasibly be withheld from some other person(s). For example, if a lighthouse sends out a light beam, its services cannot be selectively withheld from nonpaying passers-by. Thus, each person has an incentive to "free-ride" off of the contributions toward the purchase of the good made by others. Under such conditions, consumers can be expected to under-reveal their "true" preferences for the good.

Proponents of state action then argue that, since the voluntary market process is incapable of producing such goods (at least in optimal quantities), state action becomes necessary. In the words of William Baumol, "[I]f we assume the role of government to be that of assisting the members of the community to attain their own aims with maximum efficiency, then . . . it becomes the task of government to override the decisions of the market. This is not because the government believes, on some peculiar gound, that the people are not competent to judge, but rather because the market fails to provide machinery for these decisions to be given effect."[4] Taxation and other forms of coercion then become necessary to ensure that all beneficiaries of the state's services pay for benefits received.

But this view of state action presents numerous problems. Any good can be alternately considered a private or a public good, depending upon the quantity supplied, the definition of the relevant marginal unit ("one corn chip" or "food"), and the simultaneous valuation of the same good by two or more persons (an attractive appearance, for example, can be considered a public good, because other parties benefit without paying for the costs of nice clothing, haircuts, etc.).[5] Further, any good can be produced at least one of two ways: One allows for exclusion of non-

(Cont. on p. 3)

EDITORIAL

The Politicization of Research

As it was reeling from repeated attacks, the Environmental Protection Agency was hit with a charge that it had removed more than 50 scientists from its technical advisory boards for political reasons.

A few weeks later it was reported that the Interior Department had removed half the scientists on an advisory committee for its offshore oil drilling program after learning that they were unacceptable to the Republican National Committee. Officials of both the Interior Department and the RNC said the procedure was "routine."

Scientists aren't the only experts whose political credentials have come into question. Education Secretary Terrel H. Bell has tried to abolish the National Council on Educational Research, which governs the National Institute of Education, in order to prevent the conservative Reagan appointees to the council from changing the institute's programs.

The Reagan administration isn't the first to let political considerations get in the way of scholarly independence, of course. Officials in the Nixon administration considered revoking federal research funds from the Massachusetts Institute of Technology in retaliation for MIT President Jerome Wiesner's opposition to the ABM program. President Lyndon Johnson personally scratched some research grants to critics of the Vietnam War. And the Carter administration ordered copies of a Department of Energy study on energy availability destroyed and the head of the U.S. Geological Survey fired because the study conflicted with the administration's energy program.

Sophisticated analysts are no longer surprised that regulatory agencies and subsidy programs are strongly influenced by political considerations. Somehow, though, federal funding of research has been assumed to be free of such politicization. Scientists have gladly accepted federal grants, but only recently have they become concerned about the politicization and bureaucratization of research.

Now, however, writes Don Doig in a study for the Cato Institute, "A groundswell of discontent has arisen in the U.S. scientific community, fueled by uncertainty of federal funding, censorship, red tape, and assorted other ills."

One major problem is the increased bureaucracy associated with federal funding. Doig reports estimates that in 1978 a total of about 47,500 grant proposals for scientific research were submitted to various federal agencies. The total time investment by those writing the proposals and by scientists reviewing them for the agencies is some 3,300 man-years, time taken away from research. Since most university researchers spend about half their time in teaching-related duties, this figure represents the entire equivalent research time of 6,600 academic scientists.

Massive federal funding has clearly increased the amount of research being done by American scientists (unless that increase is completely offset by the added red tape), but it is not clear that quality has increased commensurately. A new book, *Betrayers of the Truth: Fraud and Deceit in the Halls of Science,* by William Broad and Nicholas Wade, suggests that there are too many scientists writing too many papers. The authors say that most published papers are worthless, are never cited by other scientists, and serve only to gain tenure for the writers.

When government becomes the primary source of research funding, it gains a significant degree of control over the scientific community, and much effort is devoted to gaining a piece of the pie or seeking control over the funding agencies. As in other areas of political and economic life, we face the problem identified by F.A. Hayek in *The Road to Serfdom* almost 40 years ago: As the state becomes increasingly the primary source of wealth and prestige in a society, individuals and groups will turn their efforts to acquiring control over the state instead of more productive endeavors.

The way the process can work in research and academia was illustrated in a *Village Voice* article last summer on the struggle between neoconservatives and traditionalist conservatives to gain control of the National Endowment for the Humanities. The *Voice* explained why such control is important:

> The NEH has a ripple effect on university hiring and tenure, and on the kinds of research undertaken by scholars seeking support. Its chairman shapes the bounds of that support. In a broad sense, he sets standards that affect the tenor of textbooks and the content of curricula. . . . Though no chairman of the NEH can single-handedly direct the course of American education, he can nurture nascent trends and take advantage of informal opportunities to signal department heads and deans. He can "persuade" with the cudgel of federal funding out of sight but hardly out of mind.

Participants in the federal funding process, from researchers to agency administrators to presidents, know how powerful a force the federal government can be. It should come as no surprise to us, then, if a new administration battles with entrenched groups for the right to wield that power. The solution is not a new EPA administrator, a new president, or new rules. The solution is to reduce the power the federal government holds by reducing or eliminating its ability to dole out funds. ■

Infrastructure (Cont. from p. 1)

purchasers and the other allows equal access to all.[6] In practice, there are no goods for which exclusion of nonpurchasers is impossible. As Tyler Cowen writes, "The costliness of exclusion is not an intrinsic function of the good, but rather it depends on how the good is supplied and at what levels it is produced or consumed."[7]

The cost of producing any service or good includes not only labor, capital, marketing, and other cost components, but also fencing (or exclusion) costs as well. Movie theaters, for example, invest in exclusion devices like ticket windows, ushers, and walls, all designed to exclude noncontributors from enjoyment of its service. The costs of exclusion are involved in the production of virtually every good imaginable. There is no compelling justification for singling out some goods and insisting that the state underwrite their exclusion costs simply because of a political decision to make the good available on a nonexclusive basis, which decision is itself the relevant factor in converting what could be a private good into a public good.

Further, the argument for state provision is framed in purely static, rather than dynamic, terms: *given* a good, for which the marginal cost of making it available to one more person is zero (or less than the cost of exclusion), it is inefficient to expend resources to exclude nonpurchasers. But this begs the question. Since we do not live in a world where goods are a *given,* but have to be produced, the problem is how best to produce these goods. An argument for state *provision* that assumes the goods are already produced is no argument at all.

If a good can be considered either a private good or a public good, the distinction begins to break down. Few if any of the goods now provided by the state fall strictly within the standard definitions of public goods (most do not even approach jointness of supply), and it is often forgotten that the state also invests in exclusion devices to bar from enjoyment of goods those who refuse to pay the taxes that support them: The mechanism includes the Internal Revenue Service and the federal prison system, and it is by no means clear that this draconian system is superior to its noncoercive free-market alternatives.

Government Failure

The most serious flaw in the public-goods theory of state action lies in the standards of comparison and the divergence between the incentives necessary for efficient provision of goods and the incentives actually guiding political action. The voluntary market is held up to an impossibly exacting standard and found wanting (in theory, if not in practice); it is then asserted that the state "must" take action to provide an optimal supply of goods. With Alfred Marshall, we should ask proponents of this approach, "Do you mean Government all wise, all just, all powerful; or government as it now is?" As economist William C. Mitchell notes, "The production and distribution of government services is guided not by profit possibilities, based on consumer preferences and production costs, but by the electoral aspirations of politicians and the budget-maximizing activities of bureaucrats."[8] If voluntary market mechanisms can be criticized for being insensitive to the preferences of consumers, the state must surely fare even worse in the comparison. The incentives faced by political decision-makers are likely to generate consequences far more perverse than those faced by consumers and producers in free markets. These consequences have been well documented in the burgeoning literature of public choice (for example, uneconomical overproduction of some goods, elimination of possibilities for incremental choices, and upward redistribution of income).

Advocates of state action to provide public goods have failed to justify their claims; an examination of the incentives faced by political decision-makers shows little resemblance to the incentives necessary to provide an optimal supply of public goods.

But if the case is shaky on theoretical grounds, it becomes even more so after examining case studies. For decades,

(Cont. on p. 4)

In This Issue

Infrastructure: Public Or Private? 1
Editorial:
The Politicization of Research 2
Policy Forum:
Deregulating Money and Banking 6
Policy Report Reviews:
The Political Economy of Deregulation 10
Studies in Business Cycle Theory 10
Costs of the Civil Justice System: Court Expenditures for Processing Tort Cases 11
"To be governed . . ." 12

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Tyler Cowen, Daniel Klein, Tom G. Palmer . . . . Contributors

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Infrastructure (Cont. from p. 3)

economists opined that "even Adam Smith" supported state-run lighthouses, a clear case of market failure if ever there was one. The subject was rapidly dropped from textbooks after University of Chicago economist Ronald Coase published his investigations into the history of lighthouses in Great Britain. He showed that lighthouses were efficiently provided on the market (tolls were collected at ports and were considered a cost of safe-transit from one port to another), but were produced in inadequate supply after the state took over their production.[9] As economist Kenneth Goldin remarks, "Lighthouses are a favorite example of public goods, because most economists cannot imagine a method of exclusion. (All this proves is that economists are less imaginative than lighthouse keepers.)"[10] Other examples of disparities between the predictions of public-goods theorists and the behavior of entrepreneurs in the market abound.[11]

Goods with potential characteristics of publicness are regularly provided on the market voluntarily through clubhouse contracts, through mechanisms that internalize externalities (for instance, creation of a joint product), inclusion of public goods in the overhead costs of a firm, linkages of the sale and consumption of public with private goods, and other means.

Of course, it may be no accident that the claims made on behalf of state provision of public goods are not borne out in practice; as a consequence, perhaps the theory of government underlying such claims should be revised. Harvard economist Joseph P. Kalt suggests that we should view government "as a means whereby some free riders are able to force others to pay for their rides, rather than as a means whereby we all agree to coerce ourselves in order to overcome a free-rider effect that frustrates desires for public goods."[12] An insight into the real incentives motivating the recent infrastructure debate was provided by a striking advertisement that appeared in the *Washington Post* for a new newsletter: *"Infra$tructure* . . . is a new Washington 'buzzword' for: A. America's crumbling physical plant? $3 trillion is needed to repair highways, bridges, sewers, etc. B. Billions of federal reconstruction dollars? The 5¢ per gallon gasoline tax is only the beginning. C. *Your bible for infrastructure spending—where the money is going and how to get your share*—in a concise biweekly newsletter? ANSWER: All of the above. Subscribe today" (ellipses and emphasis in original). *Infra$tructure*, the ad informs us, is published by "Business Publishers, Inc., serving industry and government since 1963."

Roads and Infrastructure Repair

The public good that dominated public debate for several months recently, and which is likely to occupy a central place in the near future, is road and mass transit provision. Though the issue was imbedded in a more general "Chicken Little"-like panic over the nation's "crumbling infrastructure," light may be shed on the entire infrastructure debate by examining the case of transportation.

> **"Government has failed the public-goods test, and it is time to let the market succeed."**

To begin with, the infrastructure is not in the alarming state the public was led to believe.[13] The changing age distribution of the interstate highway system has been the primary fact cited in support of claims that the system is crumbling; but older does not always mean worse. There is a no evidence to support the "universal collapse" thesis that garnered so many headlines in the recent debate. Road conditions vary widely from one locale to another, and the comprehensive Department of Transportation study on road conditions concluded that "the great majority of pavement in both urban and rural areas was in satisfactory or good condition."[14] The most recent federal report showed some decline, but pavement deterioration differed widely from state to state and was hardly of sufficient magnitude to be called a crisis.[15]

It is also unclear what is being purchased when roads are repaired. A recent Federal Highway Administration study makes clear the need for a significant reevaluation of current thinking about the importance of road conditions.[16] The study concluded that both accident rates and fuel consumption, two of the most important factors considered in road work cost-benefit analysis, are not influenced by pavement condition (for the range of conditions commonly encountered in the U.S.). Only nonfuel operating costs were seen to be so influenced. The assumptions underlying most cost-benefit analyses and informing public discussion for the past two decades may have been wrong.

Further, in the absence of markets, mechanisms for judging claims about repair or construction "needs" are insufficient at best. The needs presented to the public most commonly emanate from engineers or bureaucrats; the former often take little or no account of cost constraints (if a facility is not perfect, it is not good enough), while the latter's situation encourages budget-maximizing activity, including inflation of claims on the treasury. The hybridization of the two in government agencies is particularly likely to lead to extraordinary "needs" and uneconomic budget demands.

But perhaps most important, the problem is fundamentally one of management, and it is here that state action has shown itself to be most uneconomical and inefficient. A disproportionate amount of total funds allocated for public works has gone into new construction, due to federal matching-fund policies. The capital structure of public goods has been seriously distorted in favor of new construction and away from maintenance and repair, as state and local government jurisdictions allocate scarce funds in order to receive federal matching funds for new construction. This is true

not only of roads and bridges, but also of sewage systems, water treatment and control, and other facilities as well.

This should not be surprising, given the political incentives in favor of new construction (with the possibilities of cost overruns, consultant's fees, facilities named after political figures, and the like) rather than maintenance of existing facilities. As has been commented, "Nobody ever held a ribbon-cutting ceremony over a filled pothole." The "Iron Triangle" system that dominates congressional action manifests itself in public-works programs as well as in defense, energy, agriculture, and other state-subsidized industries.[17]

In the case of transportation, use-inefficiencies and wealth transfers have been generated by the massive subsidization of interstate highways. While taxes are levied on fuel, tires, and other vehicle operating cost components, some users have managed to benefit at the expense of others. Most road damage is the result of heavy-vehicle operation, yet heavy vehicles bear little of the cost for road repair and maintenance. An Oregon Department of Transportation Cost Responsibility Study in 1980 showed that the per-mile cost responsibility of an 80,000-pound truck is roughly 16 times greater than that of an automobile.[18] Yet the 80,000-pound truck consumes only three-to-four times the fuel consumed by the average automobile over a comparable amount of travel (and hence only three-to-four times the fuel taxes).

Rational road pricing would most likely require differential fees based on vehicle weight, weight distribution (number of axles), and distance traveled.[19] But the imposition of damage-based weight-distance taxes, while encouraging more efficient road use, would not address the structural incentives for inefficient resource allocation that are unavoidable in state-managed enterprises. Demand would be affected, but not supply. The political incentives for wealth transfers would far outweigh any incentives for efficient management that weight-distance taxes might introduce.

"Even" Adam Smith was aware of the political incentives attending tax-financed roads: "A magnificent high road cannot be made through a desart country where there is little or no commerce, or merely because it happens to lead to the country villa of the intendant of the province, or to that of some great lord to whom the intendant finds it convenient to make his court. A great bridge cannot be thrown over a river at a place where nobody passes, or merely to embellish the view from the windows of a neighboring palace: things which sometimes happen, in countries where works of this kind are carried on by any revenue other than that which they themselves are capable of affording."[20]

Far more feasible than partial and one-sided fixes like weight-distance taxes is the introduction of a true market system, entailing freely transferable property rights. Under such a system, costs and risks would be borne privately rather than publicly, efficiency would be generated by a rational pricing system, and transportation decisions would no longer be held hostage to the aspirations of the "road gang" of politicians, bureaucrats, and construction-industry lobbyists. Roads, like other elements of the economic infrastructure, are neither nonrivalrous in consumption nor incapable of supporting exclusion devices for nonpurchasers.

> **"The argument for state provision of public goods is framed in purely static, rather than dynamic, terms."**

The inefficiencies and distortions generated by state usurpation of the market can be eliminated by movements toward true markets. Proposals to introduce efficient production and maintenance of higher order public goods (infrastructure) via privatization are eminently practical. John Semmens, senior economist for the Arizona Department of Transportation, has a detailed plan for privatizing that state's highway system.[21] The plan would entail putting the state highway system on a non-tax-supported basis and then requiring divestiture to the market sector of all segments whose revenues from tolls failed to cover their costs of operation. Non-bureaucratic management, argues Semmens, is likely to turn "losers" into "winners" through entrepreneurial alertness to possibilities for cost-cutting innovation, marketing, and other opportunities for new combinations of factors of production.

Semmen's strategy for introduction of efficiency through real markets could be implemented on a more piecemeal basis as well. Much of the funding in the so-called repair bill passed by Congress is in fact intended for new construction of gaps in the interstate highway system. Construction of these gaps, amounting to 3.7% of the total 42,944-mile system, will cost the taxpayers some $40 billion under current cost estimates.[22] The construction should be opened to private enterprise, with the right to charge tolls and reap profits as the incentive. Some projects may not be undertaken (a likely example is New York's multibillion dollar Westway), but that will reflect an entrepreneurial estimate of costs and benefits, rather than pork-barrel decisions based on political incentives.

Voluntary market ownership and management of the infrastructure need not be limited to roads. Mass transit is a prime candidate for rapid privatization.[23] Other services—including water and sewage treatment, solid-waste collection and disposal, and fire protection — would also benefit from privatization.[24]

Present financing difficulties faced by federal, state, and local governments are already leading to moves away from general revenue tax financing to user fees and tolls.[25] The introduction of market pricing structures should be completed by allowing freely transferable property rights as well. Government has failed the public-goods test, and it is time to let the market succeed. ■

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[1]Lester Thurow, however, argues that certain kinds of income redistribution qualify as public goods. See "The Income Distribution as a Pure Public Good," *Quarterly Jour-*

(Cont. on p. 11)

Deregulating Money and Banking

Every month the Cato Institute sponsors a Policy Forum at its Washington headquarters, where distinguished analysts present their findings to an audience drawn from government, the public policy community, and the media. A recent Forum featured Lawrence H. White, associate professor of economics at New York University and author of Free Banking in Britain *(Cambridge University Press, forthcoming). Commenting on White's talk was William Niskanen, a member of the President's Council of Economic Advisers.*

Lawrence White: My approach to the questions of monetary policy, unlike most other economists I see addressing the issue, isn't to argue that the problem is that the Fed is misbehaving and the solution is that the Fed should start behaving in a proper way. I prefer to look at the more basic issues and argue that instead of just giving the Fed better advice, we ought to look at the question of whether the public should be subject to the vagaries of Fed policy at all. The most fundamental question of monetary policy is: Does government have any legitimate role to play, either in producing money itself or in regulating private firms who do produce money?

When I say money I'm blurring an important distinction. There are basically two kinds of money in our economy: basic cash, which in our economy is produced by the Treasury and the Federal Reserve System; and bank liabilities, such as deposits which are transferable by check. Typically these are privately produced, and their value derives from their being redeemable for the basic cash. The distinction between these two kinds of money is usefully expressed by calling the one "outside" money, that is, issued outside the banking industry; and the second, "inside" money. So the question of market provision or government provision breaks down into two subquestions: should we deregulate the provision of "inside" money, and should we denationalize the provision of "outside" money. It's possible to answer "yes" to one question and "no" to the other, although I'm going to answer "yes" to both.

Why have even free-market monetarists been reluctant to endorse free markets in banking or deregulation of banking to the full extent? What are the arguments against it? It seems that in large part the skepticism—or sometimes hostility—toward deregulation is based on economists accepting at face value certain historical myths which have grown up concerning the way that free banking—as it was called—operated in the 19th century. For instance, there's a passage in Friedman's *Program for Monetary Stability* in which he argues that if banks issue currency there will inevitably be a lot of fraud and the banks will inevitably be driven to over-issue the currency. In fact, if you look more carefully at the historical record, and especially at the record of free banking in Scotland, as I have in my forthcoming book, you don't find any of these things that economists fear.

A Cato Institute Policy Forum

If you look more closely at the American experience with what was called free banking, you find that all the problems with it were created by certain regulations that hemmed in the system. In particular, what was called free banking was simply the system that eliminated the need to get a special charter from a state government. But to open a bank, one had to buy state bonds. It was primarily a scheme for selling state debt to the banks. And what this requirement did was to force banks to hold a large share of their assets as state government debt rather than being able to spread their portfolios normally.

A recent article in the Federal Reserve Bank of Minnesota Quarterly Review looks at this problem of bank failures in the United States in the 19th century under the free banking system. What the authors (Arthur Rolnick and Warren Weber) find is that most of the failures—almost all—occurred during periods of declining state bond prices. The banks were being forced to hold their assets not in a normal diversified way, but in a certain kind of asset, namely state debt. And when that asset fell in value the banks became insolvent and therefore had to suspend payments. So again the problem here—the reason there were so many bank failures—was not because there was competition, but because there was this peculiar regulation on the banks.

Looking at the Scottish experience, which is the only long-lived example in history of a really free banking system, we find first that there were no wildcat banks. There were no banks that were issuing bank notes and then disappearing when people came to redeem them. Second, there were no systemwide overissues that meant that the entire system had to suspend payments. Third, there were no major problems with fraud or with counterfeiting. Sometimes it will be argued that you can't have a lot of different brands of currency because that will make counterfeiting of currency easy. In fact, it makes it harder, although the argument's a little complicated, so I won't get into it.

Fourth, there weren't any runs on the banks or any financial panics of the sort you found in the United States and in England. The reason you found them in the U.S. and in England were, again, restrictions on bank capitalization that made the banks very failure-prone because they weren't able to raise enough capital to diversify their assets. There were business fluctuations, of course, but you didn't find banks failing in droves during downturns in the business cycle.

Fifth, you didn't find any pyramiding of reserves such as you found in England and the U.S. where some banks would place their reserves with other banks and other banks would place them with one or a very small number of banks, and therefore the whole system became very sensitive.

And finally, it's been argued by some people—particularly Allan Meltzer—that a free banking system creates risk and thus will impede the growth of the economy. If you look at the Scottish economy you don't find any evidence of that sort at all. It grew very rapidly during the Industrial Revolution, more rapidly even than England. So there isn't any evidence that competition in banking would impede growth. In fact there's reason to believe the opposite, since you have more efficient intermediation—that is, more efficient matching of people who want to borrow money with people who want to lend money.

Let me turn now to the more controversial question, of "outside" money or the basic cash in the system. Is it necessary for government to produce that? This question has been brought to prominence recently by the work of Friedrich Hayek, who published a booklet in 1976 entitled *The Denationalization of Money*.

The person who's in favor of denationalizing "outside" money is somewhat at a disadvantage in stating his case. That is, somebody who favors government production of "outside" money, for example a monetarist, can tell you precisely what he wants government to do and how the money industry would work. The government will target the monetary base or M-1, and it will supply reserves in a certain way. And he can map out a very specific rule for how the money supply will function. Well, I'm at a disadvantage because in advocating competition I can't spell out in detail all the changes that would mean. And that's because an essential part of competition is the freedom of entrepreneurs to innovate and for institutions to evolve in ways that we can't foresee. As Hayek has remarked, competition is a discovery procedure. Its results are different from what anybody could predict or deliberately bring about, and in fact that's the advantage of competition.

It seems to me that a free banking system based on convertibility into gold or silver is the system that would have evolved if governments hadn't gotten involved in the monetary system in the first place. The reason we have government-issued fiat currencies today is only because governments first monopolized the coinage, and second monopolized the issue of bank notes that were convertible into coins through the creation of central banks. The idea that central banks arise naturally is a myth in my view. The third step was to suspend convertibility. First you get the economy using central bank money as the only sort of paper money in the system, and then once people are used to it you eliminate convertibility into gold or silver, and this paper which is now irredeemable continues to circulate. Historically that's what you find.

Lawrence H. White

There's no evidence that the production of bank notes that are convertible into gold is a natural monopoly.

The question's a little more complicated when you deal with fiat currency, irredeemable currency. There is a tendency in an economy for everybody to use the same basic money, the same monetary standard, and that's because the benefit money provides to people, the reason it emerges in the first place, is that people want to use the most marketable good in the economy. They want to hold inventories of something they can usually make payments with because people will routinely accept it. Well, that process tends to snowball; that is, one or a very small number of things, become *the* most acceptable. So if fiat money is what's being used in the economy, it's plausible that one fiat money will be able to outcompete multiple fiat monies. Even if this is true, that doesn't rationalize barriers to entry; that is, if that were true, then government wouldn't need to prevent anybody else from trying to produce fiat money. Nor would it even follow that fiat money should be nationalized. It might be better to have a private producer who is disciplined by potential competition or from competition at the borders from other nations.

Basically, to use this natural monopoly argument that government should produce fiat money is to beg the question of why we should have fiat money in the first place. Why fiat money rather than commodity money? Where is the evidence? When economists make recommendations as to what's efficient they're supposed to be taking consumer preferences as given and talk about a policy as an efficient way of meeting given consumer preferences. My question is, where is the evidence that consumers prefer fiat money to commodity money. As far as I know, there aren't any historical cases in which fiat money voluntarily supplanted commodity money.

That's sort of a cheap argument because if you take seriously the idea that everybody tends to converge on a single money, then it becomes impossible to switch from one monetary standard to another. Everybody is waiting for somebody else to go first. Meanwhile, he prefers to use a lousy money that everybody is using rather than a good money that nobody's using. So if you're going to choose between fiat money and a gold standard, you have to do it at a constitutional level, as the public-choice people call it.

What are the arguments that would appeal to people in a constitutional setting? A common argument is that commodity money is too expensive. Why should we use gold when paper can serve quite as well? Milton Friedman once made an estimate that it might cost

(Cont. on p. 8)

Policy Forum (Cont. from p. 7)

2½% of an economy's GNP to provide a commodity money. If you look carefully at how he got that estimate, he got it by assuming that 100% of the aggregate we now call M-2 is backed by gold. This obviously is going to give a very high estimate if you assume that every dollar has to be backed by a dollar's worth of gold. But if you look at the reserve ratios that the Scottish banks used under free banking and recalculate what the resource cost is in terms of annual GNP, it comes out to 1.4 one-hundredths of 1%, or 14 one-thousandths of 1% of annual GNP. This is a fairly trivial number in terms of the lost GNP from monetary instability.

It's certainly plausible that consumers would find this cost worth bearing. I don't think economists are in a position to divine consumers' preferences. Consumers should recognize that if you create a fiat money you're giving government the temptation to pay its bills by printing up more fiat money.

My conclusion is that there really isn't any justification for government's production of "outside" money, and in fact government production of "outside" money is responsible for inflation and recessions. Well, what's to be done? The very least is to get rid of the legal barriers that prevent private moneys from competing with the government's current monopoly.

But would this be enough? Would this really insulate us from the damage the Fed can do? Unfortunately, I don't think so because of this problem of the persistence of the entrenched money. I don't think a parallel monetary standard could get much of a foothold.

So there are two ways, as I see it, of neutralizing the Fed's ability to do monetary damage. A moderate policy is to freeze the monetary base. A more thorough policy is to retire the stock of federally issued money, that is, federal reserve notes and treasury coins, by redeeming them for gold or silver. Given this tendency of an economy to converge on a single "outside" money, I think converting to a precious metal-based monetary system seems our best hope for a competitive supply of money.

William Niskanen: The position of the Council of Economic Advisers and the administration these days on monetary policy is absolutely clear. It ranges all the way from the Fed can do no harm to the Fed can do no good.

What position has to bear the burden of proof? Most of us in this room share a political philosophy that suggests that the burden of proof rests on those people who propose restrictions on consensual relations of any kind. The effective burden of proof in the political system is on those people who are proposing change of any kind. And *within* the government

William Niskanen

the effective burden of proof is on those people who have proposed reducing the discretion of the government. So I think to be realistic and to bring scholarly work to the attention of people who will ultimately have to make these decisions, we libertarians should recognize that we bear the effective burden of proof rather than those people who promulgate restrictions on consensual relations.

I think it's important in this regard to review the history of managed money in the United States. As a non-specialist my perspective on this is the following: The history of managed money in the United States is awful, but it is not clearly worse than the major historical alternatives.

We experimented with a variety of monetary arrangements in the first 150 years of our constitutional history, and during that period of time there were three attributes of that experience that we should recognize. There was a relatively high variance of both the price level and of aggregate output, relatively large swings in prices and in output. The period was roughly equally divided between recoveries and recessions. In other words, the recessions lasted roughly as long as recoveries. But over a quite long period of time there was no net inflation—in the sense that as well as we can measure it, the price level in, say, 1790 was not that different from in 1940.

During the last 40 years, we've had more close attention by the government to manage money for whatever purposes, but it has been manifested by the following characteristic—at least to the extent that we can compare data over such periods. There has been a relatively lower variance of prices as well as quantity. Periods of recession are characteristically about ¼ the length of the recoveries, and there has been a quite strong inflation bias during this period of time.

So within the last 40 years, we have experienced a trade-off of a lower variance of price and quantity for a quite clear inflation bias. To put that in perspective, however, it should be recognized that inflation is one of several forms of tax instruments available to the federal government—none of which are particularly desirable and all of which are distortive. It is not clear, at least on a priori grounds, that inflation is a clearly more distortive tax than other forms of taxes that are available to us.

I am not familiar with the detailed experience of the Scottish free banking episode. I do want to express some puzzlement, however, why that episode ended during what was otherwise the most classically liberal period of economic policy-making in English history. We should all recognize that monetary history suggests that people are prepared to pay a very high cost to use a common currency—that is, that it takes an extraordinary rate of inflation as well as extraordinary marginal tax rates to lead to much of a flight from the money economy into barter and the underground economy.

We should also recognize that there are some kinds of alternatives available now. Since 1977 gold clauses have been allowed in contracts, but to my knowledge there has been almost no use of such contracts. Apparently, according to a footnote in Larry's paper, the Secret Service has not yet prosecuted somebody who has issued some gold certificates. Whether that will happen in the future is not too clear.

Let me suggest that I think the only realistic approach toward pursuing the ideas that Larry has suggested is to continue what has been a quite rapid deregulation of "inside" money that has occurred in the last several years.

To date, I think it is quite clear that financial deregulation has not so much triggered changes in the money markets, but that the money markets have so far outrun the existing structure of financial regulation that the regulation has been largely trying to catch up with reality. It's like Jerry Brown's favorite trick of waiting to see which way the crowd is going, running out in front and calling himself the leader.

I think that there is a case for progressively reducing some of the penalties that Larry mentions on the private provision of "outside" money. If that kind of approach is not enough, however, I see no basis for expecting that we can make the kind of constitutional case that Larry suggests may be necessary. In the absence of a revolution, we are not likely to make a wholesale substitution of private money for public money. In that regard, I'm a little bit perplexed about the argument that Larry uses in his paper. He proposes several progressive steps, which I think most of us can endorse, and I think there is some real potential for taking those steps. He asks, would these be enough to allow private producers of "outside" money to compete with the Federal Reserve. And he says unfortunately it most likely would not be. And, in part, the case based on what we both recognize is a very high premium that people are willing to pay for a common monetary unit.

But then his solution to achieve private banking is to restrict competition from the government. I find this a rather strange argument, because a good bit of his earlier argument is that the private banking disappeared because of government restricting the opportunities for private banking, and now he's saying somehow that the potential for bringing about a private banking system is dependent on, in effect, taking political action—not to reduce the political restrictions on private banking, but to go beyond that and to impose a political restriction on the dominant form in which the Federal Reserve Board provides a public money.

But if we are to make a case for this to the larger community, I think we're going to have to make a step-by-step case. And if it turns out that a step-by-step approach is not going to lead to this end that may be desirable, then it's not going to happen. I cannot imagine political processes taking the kinds of measures which Larry apparently seems convinced are necessary to make private banking the dominant monetary system.

White: I certainly appreciate that the burden of proof is on those of us who advocate change, especially sweeping change, and that's especially true here in Washington. I'm encouraged by the amount of research that's going on currently, trying to meet that burden of proof.

Why did the episode of Scottish free banking end? It turns out that it didn't have anything to do with the desire for a common currency unit, because the laws that ended it did not in any way promote a common currency unit. Scotland and England were both on a gold standard and the exchange rate between them was fixed.

What happened was that the English government wanted to impose uniformity on the banking system throughout Britain.

The way they overcame the objections of the Scots was that they simply grandfathered in all the existing banks; that is, it wasn't a wholesale elimination of the autonomy of the Scottish banking system. It simply froze entry into it and froze the market shares of the existing banks that were issuing bank notes. And so the banks that were existing thought that this was a great thing. They no longer had to compete with each other, and they no longer had to worry about new competitors entering the markets. Today there are three left.

The last question is: Why do I want to restrict competition by the government with private firms? This question isn't peculiar to money. We could ask this question with regard to the post office. Do we want just to allow private firms to compete with the post office, or is there some rationale for allowing the U.S. Postal Service to exist in the form it's in? Well, I have no objection to the post office competing on equal terms with other mail carriers, but I've never heard of a government firm that competed on equal terms with private firms. It seems to me that if it's on equal terms, it's become a private firm. ■

How Regulation Creates Special Interests

Policy Report Reviews

The Political Economy of Deregulation, *by Roger G. Noll and Bruce M. Owen. American Enterprise Institute, Washington, D.C., 1983. 164 pp. $15.95/$7.95.*

The Political Economy of Deregulation consists of an illuminating introductory essay on the role of interest groups in the deregulatory process and five case studies by noted scholars and participants in the process. The volume provides a useful "score card" for identifying the "sides" in six ongoing conflicts over deregulation (television syndication, federal speed limits, real estate rebate practices, introduction of new drugs, automobile emission standards, and natural-gas pricing). Noll and Owen also elaborate on two general themes: "Regulation itself can create or reinforce interest groups and . . . it is possible to make predictions about which groups affected by regulation are likely or unlikely to coalesce into effective interest groups." Their study includes a detailed review of the arguments likely to be advanced in opposition to deregulation by groups that benefit from continued regulation.

The book's main interest lies in its systematic identification of those groups who benefit and those who lose in the regulatory process and their activities on behalf of their interests. Its unique contribution, however, lies in the discussion of how regulation can create opponents of deregulation out of opponents of regulation. By imposing various barriers to entry or lump-sum costs on market participants, groups that opposed the regulations in the past, but which have already undergone the costs, may be induced to oppose their elimination because of the barrier to entry such costs represent for new firms. In addition, the elimination or weakening of existing "losers" following the imposition of regulation and the consequent strengthening (or creation) of "winners" can act to cement the regulatory apparatus more firmly in place: "A regulation can be more strongly advocated once it is in effect than when it was being considered. Initially, the source of participation will be the *anticipated* effects on the groups that are organized to participate in the debate. When regulation is in effect, the losers will have been weakened and some will have disappeared. Meanwhile, interests created by unanticipated side effects will advocate continuation of the regulation, although they did not participate initially."

Well-documented case studies are provided by Andrew S. Carron ("The Political Economy of Financial Regulation"), Joseph P. Kalt ("The Creation, Growth, and Entrenchment of Special Interests in Oil Price Policy"), Marcus Alexis ("The Political Economy of Federal Regulation of Surface Transportation"), and Alfred E. Kahn ("Deregulation and Vested Interests: The Case of Airlines"). Each provides useful information on the political struggle over wealth that lies at the base of governmental regulation, as well as numerous insights into the dynamics of that struggle.

In light of this focus on political struggle, it is somewhat puzzling to read, in Noll and Owen's introductory chapters, of "the responsibility of the regulator," "the task of the regulator," and so on. Regulators are treated as being somehow external to the political struggle, rather than as an integral part of it. This detracts from the force of Noll and Owen's evaluative framework, but it does not detract from the value of the information they provide. *The Political Economy of Deregulation* is an important new book; an understanding of the data it presents is essential to understanding the ongoing debates over deregulation.

Studies in Business Cycle Theory, *by Robert E. Lucas, Jr. MIT Press, Cambridge, Mass., 1981. 300 pp. $19.50/$9.95.*

The best essays of Robert Lucas on business-cycle theory have been collected in this recent volume. These essays, previously available only in academic journals, are now accessible to both policymakers and the general public.

Lucas's influence on economic theory and economic policy has been profound. One colleague referred to him as "the dominant figure in American macroeconomics," while *Fortune* magazine labeled Lucas "the intellectual leader of the rational expectations school." The phrase "rational expectations" summarizes Lucas's theory that people will rationally forecast future government policy and take steps to counteract its influence. Thus, policymakers will find it difficult, if not impossible, to "fool" economic actors with monetary and fiscal policy. For instance, Lucas has been a strong critic of the Keynesian notion that inflation will decrease unemployment by fooling workers into thinking their real wage offers are being increased. Instead, Lucas argues that workers also know that prices are going up and that the inflation will fail to increase either employment or real output.

The rational expectations school has formulated a systematic critique of government policy based on the above argument. At worst, random government policies can be destabilizing (if they are not anticipated), while at best, systematic government policies will be ineffective (if they are anticipated). Therefore, all the government should hope to do is provide a stable framework for market behavior and economic growth. Most of Lucas's essays are devoted to making the theoretical case for this proposition.

There are two particularly outstanding essays in *Studies in Business Cycle Theory*. The first, "Econometric Policy Evaluation: A Critique," provides a hard-hitting assessment of the econometric models used for macroeconomic stabilization. Lucas argues that these models are misleading since they do not account for the fact that people adjust their behavior in light of both announced and expected economic policy. He argues that the case for inflation assumes that people actually are systematically fooled the way that econometric models postulate they are. Thus, it is no surprise that the use of these models has led to economic and political disaster. The second essay of note, "Understanding Business Cycles," argues that many kinds of inflation tend to destabilize individual behavior and lead to business cycles.

Despite Lucas's well-taken point that the main role of government is to provide a stable framework for economic growth, some of his policy conclusions are somewhat disappointing. For instance, Lucas advocates a 4% money-supply growth rule. However, both political incentives to inflate and the well-known inability of the Federal Reserve System to control or even estimate the money monetary stability that Lucas desires. Nonetheless, *Studies in Business Cycle Theory* is recommended as a good introduction to the rational-expectations critique of macroeconomic stabilization policies.

Costs of the Civil Justice System: Court Expenditures for Processing Tort Cases, *by James S. Kakalik and Abby Eisenshtat Robyn. Institute for Civil Justice, The Rand Corporation, Santa Monica, 1982. 91 pp. $4.00*

The ballooning costs of the governmental court system have been the subject of much recent popular debate, but little work has been done to estimate just what those costs are. The Rand Corporation's Institute for Civil Justice has embarked on an ambitious series of studies to determine what government at various levels spends on the administration of the court system and what costs are undergone by private parties in its use. The first results of this effort are contained in *Costs of the Civil Justice System*. The authors focus exclusively on governmental expenditures on the processing of tort cases, that is, civil wrong or injury (other than breach of contract), including personal injury, death, or property damage.

Kakalik and Robyn examine publicly available records from U.S. District Courts and the states of California, Florida, and Washington, where detailed caseload data on work-time for various court-related activities are maintained.

The authors find that for state courts, average judge-time per case ranged from 74 to 139 minutes (depending on the category of tort case), while for U.S. District Court judges it ranged from 120 to 446 minutes. The largest component of total judge-time is spent presiding over jury trials. The average annual expenditure (including support staff) per state judge ranged from $261,000 to $383,000, while it was $752,000 per federal judge. Based on these and other considerations, the authors estimate the court expenditures for processing the approximately 661,000 tort cases filed in state courts of general jurisdiction in fiscal year 1980 at $264 million (excluding small claims and municipal courts). The 32,315 U.S. District Court tort filings cost an estimated $56 million.

In the section on expenditure per tort case filed, the authors remark that "since trials by either judge or jury cost thousand of dollars, the government expenditure to process a case of small potential liability that goes to trial can easily exceed the amount of the potential financial liability." Attempts to estimate and incorporate private costs incurred will make the disparity even greater. While the growth in private arbitration services in recent years has been limited to contract-dispute related civil cases, the enormous and uneconomic costs of governments tort processing reported by Kakalik and Robyn may indicate that nongovernmental binding arbitration offers many advantages in this field as well. ■

Infrastructure (Cont. from p. 5)

nal of Economics (May 1971).

[2]Robert Nozick, *Anarchy, State and Utopia* (New York: Basic Books, 1974). Also see Richard B. McKenzie, "Taxation and Income Redistribution: An Unsympathetic Critique of Practice and Theory," *Cato Journal* 1 (Fall 1981): 339-71.

[3]Bruce Bartlett, executive director of the Joint Economic Committee, has demonstrated the procylical nature of such programs. "Public Works Programs Don't Create Jobs," *Wall Street Journal,* November 30, 1982.

[4]William J. Baumol, *Welfare Economics and the Theory of the State* (Cambridge, Mass.: Harvard University Press, 1969), p. 55. For alternative views, see Giovanni Montemartini, "The Fundamental Principles of a Pure Theory of Public Finance," in *Classics in the Theory of Public Finance,* ed. Richard A. Musgrave and Alan T. Peacock (New York: St. Martin's Press, 1967), and Joseph P. Kalt, "Public Goods and the Theory of Government," *Cato Journal* 1 (Fall 1981): 565-84.

[5]See Tyler Cowen, "On the Definition of Public Goods and Their Institutional Context," forthcoming (Fairfax, Va.: Center for the Study of Market Processes, George Mason University, 1983).

[6]See Kenneth Goldin, "Equal Access vs. Selective Access: A Critique of Public Goods Theory," *Public Choice* (Spring 1977).

[7]Tyler Cowen, "The Problem of Public Goods: A Preliminary Investigation," research paper (Menlo Park, Calif.: Institute for Humane Studies, 1981), p. 19.

[8]William C. Mitchell, *The Anatomy of Public Failure: A Public Choice Perspective* (Los Angeles: International Institute for Economic Research, 1978), p. 5.

[9]Ronald Coase, "The Lighthouse in Economics," *Journal of Law and Economics* (October 1974).

[10]Goldin, "Equal Access vs. Selective Access," p. 62.

[11]For a sampling, see Steven N.S. Cheung, "The Fable of the Bees: An Economic Investigation," *Journal of Law and Economics* (April 1973); Terry Anderson and P.J. Hill, "An American Experiment in Anarcho-Capitalism: The Not So Wild, Wild West," *Journal of Libertarian Studies* (vol. 3, number 1); and William C. Wooldridge, *Uncle Sam, the Monopoly Man* (New Rochelle, N.Y.: Arlington House, 1970).

[12]Kalt, "Public Goods," p. 573.

[13]See Allan T. Demaree, "Infrastructure Chic: How to Judge the Jobs Bill," *Fortune,* December 13, 1982; and Tom G. Palmer, "The Infrastructure Scam," *Inquiry,* February 1983.

[14]*The Status of the Nation's Highways: Conditions and Performance* (Washington, D.C.: Department of Transportation, 1977).

[15]*The Status of the Nation's Highways: Conditions and Performance* (Washington, D.C.: Department of Transportation, 1981).

[16]*Vehicle Operating Costs, Fuel Consumption, and Pavement Types and Condition Factors* (Washington, D.C.: Federal Highway Administration, March 1981).

[17]See Gordon Adams, *The Iron Triangle: The Politics of Defense Contracting* (New York: Council on Economic Priorities, 1981).

[18]L. Lee Lane, "The Case for Weight Distance Taxes," paper presented to the American Association of State Highway and Transportation Officials, November 22, 1982.

[19]See Fred L. Smith, "Alternatives to Motor Fuel Taxation —Weight Mileage Taxes," paper presented at the North American Gasoline Tax Conference, September 15, 1982.

[20]Adam Smith, *The Wealth of Nations,* ed. Edwin Cannan (New York: The Modern Library, 1937), p. 683.

[21]John Semmens, *Investment Recovery Analysis: A Businessman's Approach to Highway Planning* (Phoenix, Ariz. Department of Transportation), and *Highways as Earning Assets,* unofficial report.

[22]*Economics of Completing the Interstate Highway System* (Woody Creek, Colo.: Skrotzki Associates, 1982).

[23]See James B. Ramsey, *Selling the Subways in New York: Wild-Eyed Radicalism or the Only Feasible Solution?* (New York: C.V. Starr Center for Applied Economics, New York University, 1981).

[24]See Robert Poole, *Cutting Back City Hall* (New York: Universe Books, 1979).

[25]Rochelle L. Stanfield, "The Users May Have to Foot the Bill to Patch Crumbling Public Facilities," *National Journal,* November 27, 1982.

"To be governed . . ."

At least he's not worried about Social Security

After two terms as Georgia's governor, George D. Busbee did what many outgoing officeholders do: he filed for his pension and hired on as lawyer with a high-priced firm.

Only in Busbee's case, the pension was based on an unusual claim. Busbee, 55, who by state law had been ineligible to run for a third consecutive term as governor, claimed that he was "involuntarily separated" from his job.

State Attorney General Michael Bowers agreed, and the state employe retirement board made Busbee the most highly paid pensioner in state history by awarding him $57,648 a year for life under a provision that allows qualified state veterans to draw full and immediate benefits if they are "involuntarily separated" from their jobs.

—*Washington Post,* April 1, 1983

Keep an eye on the special interests

Groups backing 6,500 registered lobbyists shelled out at least $8,756,609 trying to influence Congress in the final months of 1982, House and Senate records show. And the biggest declared spender of them all was Common Cause, the self-styled citizens lobby. . . .

Common Cause, the Washington-based organization, said it spent $442,537 on lobbying activities in either the third or final quarter of 1982. . . .

Following Common Cause were Handgun Control Inc., which supports firearms control, $356,443; the American Petroleum Institute, $222,413; the Sierra Club, $212,052; the American Postal Workers Union, $176,927; and the American Medical Association, $163,717.

—*Washington Times,* March 31, 1983

Protecting the public interest?

A developer who planned a four-story office building in the heart of Old Town Alexandria that its critics say is out of keeping with its antique surroundings bowed last night to pressure from the City Council and agreed to submit new plans. . . .

"We will bring the design back," he said. "We are not going to satisfy everyone."

"All you have to do is satisfy seven of us," said [Mayor Charles] Beatley, referring to the seven-member council.

—*Washington Post,* March 23, 1983

A principled administration

And a presidential aide said he felt "very strongly the president is on firm political ground in blasting the banks for whipping up public opinion on this [withholding] issue, instead of lowering interest rates."

He called it "a matter of principle" for the president.

—*Washington Post,* March 30, 1983

A good analogy

"The last time I was alone with [President Reagan], I was in the outer office setting up for a meeting with business leaders and he walked in," [Wayne] Valis [former special assistant to the president] said. "I told him who they were and their concerns about tax increases. He laughed and said: 'Very good, fine, maybe we should feed them some liquor. You know, the Indians always gave their victims some liquor before they scalped them.'"

—*Washington Post,* March 14, 1983

Big business opposes regulation?

The antideregulation backlash has now been joined by Republicans and business people as well as consumer and environmental activists. . . . Exxon and Bacardi, companies that spent large sums meeting EPA water standards, expressed annoyance when those standards were eased — "rewarding companies that failed to comply," one businessman said.

—Mark Green in *The New Republic,* March 21, 1983

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