Distinguished Lecture on Economics in Government

The Private Uses of Public Interests: Incentives and Institutions

Joseph Stiglitz

s a long-time student of the public sector, I welcomed the opportunity to come to Washington as a member of the Council of Economic Advisers and later to become the Chairman of the Council, partly because it gave me an opportunity to study at first hand this immensely important part of our economy and society and to test my ideas against the reality of government in action.

To be sure, I came also as an activist, if not with a fully articulated agenda, at least with a view about what it was that government should, and should not be doing. My reference point was the fundamental theorems of welfare economics which, as some describe them, proved that the market left to itself would produce efficient allocations. Many saw in these theorems the vindication of Adam Smith's faith in the invisible hand leading the self-interested decisions of each person to maximize the well-being of the nation as a whole. Today, many of us look at the fundamental theorem not as a description of the world, but as an explication of the conditions under which a market equilibrium will be Pareto efficient. These conditions are quite strong. The importance of some of the more explicit assumptions—like the lack of externalities and the completeness of markets—has long been known. In the last two decades, we have explored much more seriously the consequences of the informational assumptions implicit in the belief that markets are efficient. In particular, it has been shown that in the presence of imperfect information or incomplete markets, the economy will not be Pareto efficient; in other words, there

■ Joseph Stiglitz is Senior Vice President and Chief Economist, World Bank, Washington, D.C. Stiglitz was a member of the Council of Economic Advisers from 1993–95, and chairman of the CEA from 1995 through February 1997. He is on leave from Stanford University.

will always be some intervention by which the government can make everyone better off (Greenwald and Stiglitz, 1986).¹

Nineteen ninety-three was a great year to arrive in Washington. The first two years of the Clinton administration were extremely active. The ideas and policies that had been pent up in the Democratic party during the previous 12 years of Republican presidents were all discussed in concurrent meetings. Although certain issues dominated the attention of the economics team—the budget, trade relations with Japan, and health care, for example—there was also space for a lot of independent initiatives, some small, some large. Later, I shall describe the fate of several of these.

Some of my friends who had spent a spell in Washington suggested that I would return a bit wiser for the experience, a bit more jaundiced about the role of government. That seems a shared experience: a better understanding of government failures to counterbalance the market failures that have occupied so much of my thinking as a professional economist.

Today, I want to share with you some of my thoughts about the possibilities and limitations of government. These thoughts are focused around a simple question: Why is it so difficult to implement even Pareto improvements? I knew the immense complexity of political decisions involving trade-offs among different groups. But surely, if we as economists had anything to contribute, it would be to identify Pareto improvements, changes (perhaps complex mixes of policies) which held out the prospect of making some people better off without making anyone worse off. I quickly saw that although a few potential changes were strictly Pareto improvements, there were many other changes that would hurt only a small, narrowly defined group (for example, increasing the efficiency of the legal system might hurt lawyers). But if everyone except a narrowly defined special interest group could be shown to benefit, surely the change should be made. In practice, however, "almost everyone" was rarely sufficient in government policy-making and often such near-Pareto improvements did not occur. My major theme will be to provide a set of explanations for why this might be so.

Of course, to critics of the role of government, these disappointments should not have come as a surprise: they were the predictable consequences of the government failures that are no less marked than the market failures to which I alluded earlier. I was, of course, aware of these government failures, and indeed had written about them. One of the reasons I looked forward to coming to Washington was to study them more closely, and Washington gave me a wealth of experience on which I shall draw for years to come. But the analytics of government failure have always seemed to me to be on less firm ground than the analytics of market failure. For instance, critics of the role of government have put forward two, somewhat inconsistent arguments. One is that government is

¹ More precisely, the economy is not even *constrained* Pareto efficient. There exist government interventions which can lead to a Pareto improvement, even while respecting the imperfections of information and the incompleteness of markets and taking the costs of gathering information and establishing markets into account.

not needed: Coasian bargaining leads to efficient solutions, even for situations, like externalities, where interventionists claim that government has a role. The other is that government is rife with inefficiencies, such as those associated with rent-seeking. The argument seems to be that while Coasian bargaining works in the private sector, it fails to work in the public sector, for reasons that are not usually explained. If Coasian bargaining worked well, surely Pareto improvements would quickly be agreed to, both within the public and private sectors. However, the conditions under which Coase's conjecture is correct are sufficiently restrictive as to provide little guidance either for when markets might fail or government actions might improve matters.²

I shall put forward four hypotheses in this lecture, each of which provides part of the explanation for the failure in at least one instance of a proposed Pareto improvement. These hypotheses, like much of the literature on government failures, focus on the role of incentives: how misaligned incentives can induce government officials to take actions that are not, in any sense, in the public interest.

I should remark at the outset that the limitations run deeper, into the sociology and anthropology of the political scene. When I was in the lawyer- and politician-dominated White House environment, I often felt that I had arrived in another world. It was not just that another language was spoken. I understood and expected that; every culture (including that of economists) creates its own language to set itself apart. It was that often another system of logic, another set of rules of reasoning, applied. I had expected lower standards of evidence for assertions than would be accepted in a professional article, but I had not expected that evidence offered would be, in so many instances, so irrelevant, and that so many vacuous sentences, sentences whose meaning and import simply baffled me, would be uttered. A so-called foreign policy expert would claim with fervor that we must maintain our "credibility." Surely, no one would dispute that. The issue was, what was the theory and evidence concerning the relations between particular actions and "credibility," however that was defined. What credibility meant and how it was established seemed issues beyond rational inquiry. Empirical evidence-at least beyond an anecdote or two-and theoretical analysis should have been able to shed light on the merit of alternative policies. While that is where the conversation should have begun, it almost never got that far. What occurred was often worse than Gresham's Law: it was not only that bad arguments seemed to drive out good, but good economists, responding to implicit incentives, adopted bad arguments to win their battles. In a process of cognitive dissonance reduction, possibly combined with some intellectual atrophy, sometimes good economists even seemed to come to believe their specious arguments.

Nevertheless, there were also some Pareto or near-Pareto improvements that were successfully done: some with surprising difficulty, some with—given the

² See Farrell (1987), Dixit and Olson (1997), Stiglitz (1994).

difficulties of getting anything done—surprising ease. Before embarking on our discussion on the reasons for some of our failures, let me describe two of our successes.

Some Successful Pareto Improvements

The two examples of Pareto improvements are not grand policies, like an attempt to redo the nation's health care system. But they are the sort of incremental policies that can add up and make a difference.

One was pension reform. Pensions represent one of the most important forms of savings in the United States, and a critical source of economic security for the aged. But pension coverage, after rising rapidly in the years after World War II, was stagnating, and even declining. And for good reason: the costs of administering these pension programs was soaring, especially for small businesses. In part, this was due to the high administrative costs required to comply with the incredibly complex tax code that had evolved to prevent well-paid executives from taking advantage of the tax advantages of pensions, and to ensure equitable treatment of workers.

As part of Vice President Albert Gore's initiative to reinvent government, I proposed pension simplification. We put together a model pension program (referred to as a "safe harbor"), which would eliminate all the red tape if a firm subscribed to it. The idea resonated, especially with small business, and was enacted as part of a more comprehensive package of pension reforms (including pension portability). Subsequently, at least some businesses which previously felt that they could not afford to do so began to offer pensions to their employees.³ The ease with which this major change was accomplished made me wonder: Why hadn't it happened earlier?⁴

A second successful initiative was inflation-indexed bonds, which provide a way for households and the government to reduce their risks. At the same time, they

⁴ The answer, I think, has to do with the second reason for the failure to adopt Pareto-improvements noted below: the bargaining game in which so much of political decision is embedded. Unions wanted stronger "equity" requirements; for example, not only that employers offer "fair" pension treatment, but that there be "equitable" take-up rates. This was perhaps because they did not trust management—a plan that looked fair might be implemented in such a way as to discourage worker participation. Perhaps they thought that these more stringent rules would encourage a more pro-active stance by employers to enroll their employees. In practice, though, what was happening was that the stringent rules were discouraging employers from providing any pension plan—making workers worse off. The ultimate recognition of this pattern, combined with the weakening of unions themselves, may have created the climate for meaningful pension reform.

³ While the reform was an important step in the right direction, I am not optimistic about a reversal of the downward trend in coverage among low-wage workers. The lack of pension demand among from these workers—who derive smaller tax advantages from pensions—may be the more important driving force. There may be good reasons for the decline in demand, including improved Social Security coverage and lower marginal tax rates. If so, the reforms may not lead to an extensive expansion of pension coverage. Still, the reform is a Pareto improvement.

create a market that did not previously exist,⁵ and the government reaps some of the benefits of this new market in the form of lower interest charges on its debt. (Because "real" risk is reduced, the risk premium should be smaller.)

Despite these obvious attractions—and the fact that very few people would be hurt by the innovation—getting the Clinton administration to accept indexed bonds was a long and difficult process. There were three reasons for this. First, it was enormously difficult explaining the nature of the real risk faced by the government. Critics worried that if inflation increased, interest payments would increase. Try as we might, I think some never understood that the government's tax receipts also went up with inflation and thus indexed bonds actually reduced the government's *real* risk.

Second, some misguided inflation hawks thought that indexing would reduce the resolve of government to fight inflation.⁶ As is so often the case with such inflation hawks, they did not bother to look at the relevant empirical literature (Fischer, 1996, provides a survey), or at the counterargument that with indexed bonds, inflation has an immediate and direct budgetary impact, thus encouraging governments to act against it.

The third reason was that Treasury turned to bond traders—their natural clientele—for advice. The experience in England *from the perspective of bond traders* was that these bonds were a failure; that is, people bought them for their retirement and did not trade them. Without trades, where were their commissions? Of course, from the perspective of someone trying to create an instrument to enhance retirement security, this was ideal: we did not want a gambling instrument. The bond traders raised anxiety levels: Would Treasury throw a party to which no one would come? We at the Council had our independent ways of ascertaining interest in the market—we talked to some large mutual funds and other financial institutions, market makers who understood the economics behind indexed bonds, and they were enthusiastic. As it turned out, our assessment of the market was far more accurate than that of the bond traders—the issue in January 1997 was an enormous success, in spite of the fact that, given the uncertainty at that time about the problems of measuring inflation, it could not have been a worse time to issue them.⁷

Four Reasons Why Potential Pareto Improvements Fail

Having spent a few moments on successes, I will now turn to four hypotheses that explain a number of the failures to implement Pareto or near-Pareto improvements. The list of failures is a long one—ranging from the more obvious ones in

⁷ In this journal, Wilcox (1998) provides an evaluation of the success of the indexed bond issuance.

⁵ Our analysis had shown that there did not exist any security, or combination of assets, which systematically provides anything close to full insurance against the risks of inflation.

⁶ The argument is based on the premise that unless inflation hurts—and hurts not just bondholders but also workers and retirees—there will not be sufficient public resolve to fight inflation. But indexing can reduce the pain of inflation, at least among retirees.

trade and agriculture policy⁸ to those in social, health, and environmental policy. The failure of Housing and Urban Development (HUD) reform and the inability to implement economic incentives in home health care are a few specific examples which come to mind. In reality, many of the policies I describe are near-Pareto improvements, which bring diffuse benefits to a large group but at a well-defined cost for a narrowly defined group. In some of these cases, feasible compensation was proposed to make it a strict Pareto improvement; in other cases, it was not. More complex are changes such as the elimination of the step-up in basis for capital gains combined with changes in estate and capital gains tax rates that would reduce distortions, raise revenue, and improve investors' welfare as a group although particular investors might indeed be hurt.

The traditional answer to these questions is Mancur Olson's Logic of Collective Action (1971) which argued that it is hard to overcome the free rider problem in organizing a large group to defend itself against a concentrated interest.⁹ This answer, however, is incomplete because it does not explain why policies that harm no one or involve compensation fail to be adopted. My four hypotheses, in attempting to understand the unique nature of government's powers and limitations, address this issue.

1. The Inability of Government to Make Commitments

Policy-making is a dynamic process, with today's decisions shaping options and coalitions in the future. In the naïve view, a Pareto improvement is a one-shot, static policy change. In reality, it is part of a sequence of policies, and although a reform may be favorable to all groups in earlier stages of that process, it may undermine one or a few groups' interests in later stages. These disadvantaged groups, of course, are often far-sighted enough to anticipate that in the long run they will be worse off and thus act accordingly to oppose a seeming Pareto improvement.

Early on in the Clinton administration, we put forward a National Action Plan to address the problems of global warming. Among the myriad of actions was a small one which represented a Pareto improvement: making better use of the nation's hydroelectric sites. The government enterprises that currently run many public dams sell electricity at far below the fair market price. The plants set prices at or slightly above their cost of production but, because hydro-electricity is much cheaper to produce than the more common coal-generated electricity, the prices of the government enterprises are lower than the marginal cost of electricity produced by the entire generating system. In many cases, the government enterprises

⁸ Some failures in these fields are not so obvious. I describe two examples below: the possibility of using auctions to allocate the subsidies under the export enhancement program (EEP) and the "self-help" agriculture program. We managed to get the possibility of EEP auctions included as part of the 1996 farm bill, but there have not yet been any regulations implementing the idea.

⁹ There are other explanations which could also play a role—but they too are far from complete. For example, the "prospect theory" associated with Kahneman and Tversky (1991) argues that people are "loss averse," that they are far more sensitive to losses from the status quo than to gains. This might help to explain why the status quo often seems to have such sway; losers scream louder and invest more in blocking policy changes.

lack the budget to finance additional investment which would allow them to produce more electricity, still at a price far below the cost of coal-generated power. Our proposal addressed these concerns by allowing private firms to bid for the right to make these incremental investments and sell the additional electricity at market prices. We designed the proposal to be a Pareto improvement, ensuring that current recipients of "subsidized" electricity would continue to receive the amount of electricity previously produced at the existing prices. The proposal was good for our budget (substantial revenues were anticipated from selling the rights); it was good for the economy (marginal cost pricing combined with replacing expensive electricity with cheap electricity); and it was good for the environment (increasing the non-carbon-emitting production of electricity). And since those who were already getting electricity at subsidized prices from the government would be able to continue doing so, no one would be hurt.

But of course, the answer depended on what *implicit* property rights people thought they already had and how this initiative might affect existing property rights. If those who currently had access to subsidized electricity thought that eventually they would be able to get an increased supply at the subsidized price by public investments in upgrades of existing sites, then the change was, from their perspective, a change for the worse.

Probably more important was the principle: once the principle of opportunity cost pricing was accepted, once it became clear that, in effect, those who were obtaining hydro-electricity at "cost"—but far below market price—were in effect being subsidized, it would be only a matter of time before the subsidy was eliminated. Our modest initiative was viewed as the "thin edge of the wedge," a "slippery slope" down which those who benefitted from the current setup simply did not want to risk going.¹⁰

There were two problems. The first was that the reform would make the effective subsidy transparent and, in doing so, would undermine its political viability. The second was that we could not make a credible commitment that these subsidies would be continued. The two problems are related: the increased transparency made it less likely that the subsidies would be continued and put further pressure on our inability to make commitments.

The concern about increased transparency is important, but does not fully account for the resistance. After all, we now make the cost of the myriad tax expenditures transparent. Yet this information, calculated annually, reported in the budget, and highlighted by the Congressional Budget Office's regular compendium of "worst offenders," has not sufficed to make much of a dent on even the most egregious examples, from ethanol to the subsidy for corporate jets.

The problem of commitment stems from the inherent nature of government itself. Government is the primary enforcer of contracts. It uses its monopoly on the

¹⁰ While such arguments obviously have persuasive value, it is questionable how valid they really are; for instance is it empirically true that the probability of a subsidy being eliminated at time t+1 rises if the subsidy is reduced at time t, taking into account the fact that the reduction of the subsidy may imply a change in the political weights involved?

legal use of force to create the possibility of private commitment. There is no one, however, whose job it is to guard the guardian. The government cannot make commitments because it always has the possibility of changing its mind, and earlier "agreements" cannot be enforced.

The inability to make commitments causes another set of inefficiencies: the cost of creating next-best credibility-enhancing mechanisms. While those in government at one date cannot commit future governments, they can affect the transactions costs of reversing the policies.¹¹ Public choice scholars such as James Buchanan (1975, 1991) have argued that the Constitution represents a form of commitment, since it increases the costs of some policy reversals such as those pertaining to civil rights. My analysis suggests three extensions to these arguments: first, there are a range of forms of actions which affect transactions costs and thereby make change difficult; second, these transactions costs, by making change difficult, can impede what would appear to be Pareto improvements; and third, while some transactions costs may have been desirable for those who created them, changes in the world may make them obstacles to efficient reform.

The issue of commitment is especially important in establishing the compensations which are frequently associated with Pareto-improving policies. For example, in the United States an elaborate set of government arrangements keeps the price of milk well above its competitive market price. An attempt to expand this legally sanctioned cartel-like arrangement was pushed forward under the euphemism of "self-help," but the cartel arrangement's lack of budgetary cost and nice-sounding title did not make it any less objectionable. A cartel by any other name is just as odious. The annual welfare cost is huge and would have been even greater under the proposed expansion. Poor children are hit especially hard—the higher price of milk, for instance, seriously erodes a substantial fraction of the value of the government subsidy for Women, Infants, and Children (WIC) and for school lunches.

It should be possible to eliminate this cartel and still be able to compensate dairy producers with direct non-distortionary payments that leave them better off. Dairy farmers would be reluctant to agree to this change because the direct compensation is more visible than price fixing, and thus more vulnerable to political pressure for cuts later on. Even if the government promised to maintain the dairy payments, in the absence of a commitment mechanism it is unlikely that the dairy industry would believe those payments would be as politically secure as price fixing, especially if they can get away with a sweet-sounding name such as "self-help." Capitalizing the value of the cartel profits and receiving that amount as lump-sum payments at the termination of the program eliminates that risk but introduces a new one: the industry cannot commit itself not to try to reinstate the cartel at some later date.

Another example is provided by our attempt to rationalize the U.S. air traffic control system, and to institute congestion pricing. The failures of our current system

¹¹ One example of this effect in action comes from Vickers and Yarrow (1988). They argue that the British government deliberately sold shares in some privatized enterprises at below market prices to a broad spectrum of the population in order to create a forceful constituency which would resist renationalization.

have moved from amusing stories—government computers that still use vacuum tubes that have to be purchased in Poland—to real fears of an inability to handle the demands of the coming decades. We devised an effective set of reforms that included user fees more closely reflecting "market" prices.¹² But the owners of corporate jets and small planes—who currently get close to a free ride—were an effective lobby in stopping these reforms, because they realized that the move to a more market-based system would inevitably entail their having to pay their fair share. There was simply no commitment that we could make that had any credibility.¹³

The limitations on the ability to make commitments are reflected too in how Congress goes about its business. Congress recognizes, for instance, that gridlock caused by local interests might prevent military base closings, although the country as a whole would benefit from these closures. It set up a base closure commission, committing itself to vote the entire set of recommendations of the commission up or down. Similarly, Congress has recognized that special interest pressures would, under normal procedures, make ratification of trade treaties as negotiated all but impossible—and that foreigners' recognition of this would make trade negotiations all but impossible. Accordingly, Congress has repeatedly passed "fast track" legislation, committing itself to vote trade agreements up or down, without amendments.

2. Coalition Formation and Bargaining

The second hypothesis for the failure to gain near-Pareto improvements is based on the theory of coalition formation and bargaining. One of the strongest objections to those who believe that Coase-style bargaining will reach efficient outcomes is that with imperfect information, such bargaining often results in suboptimal outcomes (Farrell, 1987). To convey information about bargaining resolve, fallback positions, and so on, there is often recourse to inefficient signals. Bargaining in life is also not a one-shot episode. Each round affects the fallback position for the next. Although the two sides in, say, a labor dispute may not fully realize it, each is solving a complicated dynamic program problem with uncertainty and imperfect information. Strikes are a manifestation of "bargaining" inefficiency in the private sector; the failure to enact Pareto improvements is a manifestation in the public.

One vivid example comes from the attempts to reform one of the most glaring inefficiencies in our environmental laws, the legal framework for dealing with toxic wastes: Superfund, as it is commonly called. For toxic waste sites with more than one responsible party—the vast majority of targeted sites—transaction costs represent 20 percent or more of the total cost to responsible parties (Probst et al., 1995). For insurers the numbers are even higher. According to a Rand study, only

¹² The Clinton administration introduced a bill to corporatize the Air Traffic Control System, a less drastic move than the privatization which has occurred in many other countries, but the bill languished in Congress with a remarkable lack of support among both parties.

¹⁸ In a sense, this reason for government failure is analogous to the problem of incomplete contracting widely discussed in the market failure literature.

12 percent of total insurance company outlays have been spent cleaning up toxic waste sites, while 80 percent has been spent on their clients and their own legal fees (Acton and Dixon, 1992). These seem like unnecessarily large transactions costs. Surely there must be an alternative which can benefit the environment, provide strong incentives not to pollute in the future, and have economic benefits today, with only the lawyers being worse off.

We were convinced that such an alternative existed, and carefully crafted an approach that incorporated a new legal framework and clean-up standards, combined with an effective way of disposing with the myriad of outstanding insurance cases. We worked hard and long with environmentalists, the affected businesses, and the insurance industry to forge a consensus that was not just sound and fair, but perceived that way by the affected parties. That consensus helped the measure sail through the House Committee on a 40-3 vote, a rare display of bipartisan unity on such a controversial subject. It failed, however, to be enacted before the midterm elections in 1994. When the new Republican Congress arrived, the grand coalition fell apart. The business community believed that they could get a better bargain; in fact, all that they got was continued stalemate. They realized that they were in a new dynamic bargaining game and that the solution that worked for the previous game might be improved upon. It was, they hoped, no longer an equilibrium. Each side was holding out-very much like a strike, where massive amounts of resources are wasted while waiting for a resolution of the bargaining problemin part to demonstrate resolve, in part in the hope that the political dice would, in the coming years, roll in their favor.¹⁴

The awareness of the dynamic nature of the bargaining game has further repercussions. Legislation can help crystallize some groups, and attenuate the strength of others. It affects the coalitions which are formed, and thereby the outcomes of political processes. Participants in the political game today realize this, and hence actions which in the short run might look like a Pareto improvement can look far riskier from a long-term, dynamic perspective.

3. Destructive Competition

Superfund also illustrates another explanation for the failure of Pareto improvements to be enacted. In market economies, we are used to extolling the virtues of competition. Yet we recognize that in the absence of perfect competition, sometimes competition can be destructive. In imperfectly competitive markets, firms can get ahead not just by producing a better product at lower costs, but also by raising

¹⁴ There are several interpretations of the stalemate. One is that the business interests believed that they were in a new game and need to signal their "strength" again by demonstrating their willingness to continue under the old, inefficient regime. Another interpretation is that these business interests hoped to have a still more favorable climate in 1996 in which the president and Congress would agree to an settlement even more beneficial to them. Alternatively, the stalemate in Superfund was not just a bad equilibrium in a bargaining game with rational players, but partly due to the lack of understanding of the players themselves. Another factor in the stalemate may have been lobbyists, a small but influential group who, unlike the groups they were lobbying for, had little incentive for a speedy resolution of the issue.

the costs of their rivals (Salop and Scheffman, 1983). Destructive competition is most prevalent in zero-sum games where the gains of one are at the expense of another. Political games, with position to be won or lost, are particularly prone to this kind of behavior.¹⁵ Competition in political markets is far from perfect, and the scope for destructive competition is therefore all the greater.

As the 1994 election approached, Robert Dole in his role as Senate minority leader was reluctant to give Clinton a victory—even a victory which could be characterized as bipartisan. Such a victory would have vindicated Clinton's claim that he could break the Congressional gridlock. Even though Dole recognized (or should have recognized) that were his campaign successful, it would likely mean that new Superfund legislation would be postponed indefinitely, he decided to use his considerable power over the agenda to kill the bill in the Senate.

4. Uncertainty About the Consequences of Change

Finally, imperfect information can create an impediment to mutually productive bargains. In some models of the stock market, no trading takes place because of information asymmetries. By indicating one's willingness to sell at x, an informed seller shows that the stock is really worth less than x (ignoring risk aversion); buyers, knowing that the seller would only sell if they were overpaying, thus refuse to trade. These information asymmetries limit trade even when differences in risk preferences and circumstances might, with symmetric information, lead to mutually advantageous exchanges (Akerlof, 1970). The reason is simple-the buyer is never sure whether the seller is willing to sell because of inside information which lets the seller know that the buyer is overpaying, or whether there are grounds for a mutually beneficial exchange. Similarly in politics, there is often a generalized skepticism about proposals offered by an adversary that leads politicians to think that anytime an adversary makes a proposal, it must involve the adversary benefitting at their own expense.¹⁶ This skepticism derives not just from the standard asymmetric information in economic models, but also from the fact that many people lack the training or patience to understand the consequences of policies.

There is a certain sense in which the "zero sum" view of the world is true. Competition for electoral votes or House seats is truly zero sum: if the Democrats gain, then the Republicans lose. If your objective is simply vote maximization, then you will not find any opportunities to cooperate.¹⁷ Furthermore, if you define your gains in relative terms—how much I won compared to how much another group won—then any game turns into a zero-sum game: my relative gains are your relative losses. The fact that the political game—with a winner

¹⁵ See Frank and Cook (1995). While recent economic literature has emphasized certain advantages of contests and rank-order tournaments (for example, Stiglitz and Nalebuff, 1983; Lazear and Rosen, 1981), the increased potential for "destructive competitive actions" is clearly one of the disadvantages.

¹⁶ This idea is elaborated on, in a somewhat different context, in Stiglitz (1992).

¹⁷ Even here there are opportunities to collaborate because although it is a zero-sum game, there are other players: outsiders. An example of this is the flurry of legislation in the months before the 1996 election which many saw as a collaborative effort by the incumbent president and incumbent Republican Congress to stay in office.

and a loser—is zero-sum leads many politicians to see all of the world in a similar vein. The fact that information is imperfect and the games we play are often not transparent means that there is always uncertainty. Your gain may indeed be at my expense.

But policy, as opposed to politics, is not zero sum. Some policies are Pareto improvements. One of the hardest tasks of economists is to explain this-a task made all the more difficult by much of the political rhetoric. Nowhere is the problem greater than in the area of international trade, ironically an area where economists have the most developed and convincing arguments for mutual gains. The main political argument for free trade is that it creates jobs. The Administration even had an official number that was used to convert the value of exports into a number of jobs. Unfortunately, this rhetorical justification could be easily turned against us, and it was. At one Congressional hearing, a Senator asked me if each \$1 billion of exports created 20,000 to 25,000 jobs, then would it not also be true that each \$1 billion of imports cost America 20,000 to 25,000 jobs. I had to restrain myself from pointing out that our imports are probably more labor-intensive than our exports and thus that each \$1 billion dollars of imports probably "cost" even more than 25,000 jobs. What I did point out, however, is that the economic justification for free trade is not that it creates jobs-this is a matter for macroeconomic policy combined with flexible labor and product markets—but that it allows us to take advantage of our comparative advantage, resulting in higher wages and lower prices (Congress of the United States, 1997). In contrast, the rhetorical link between trade and jobs puts the discussion squarely back in the zero sum framework. Similarly, when we look to our trade deficit as a measure of our success, we are again forced back into the zero sum framework-for the world's trade surpluses by definition must be zero. It is perhaps ironic that the one area in which economists have true opportunities for Pareto improvements is the one which the political process most often looks at from a zero-sum perspective.

The uncertainty about the consequences of policies has an important implication: complicated policies and arguments have little place in political discourse. The public has neither the background nor the patience to digest a complicated message, so this "simplicity constraint" makes it more difficult to put together politically appealing reforms which are Pareto improvements. For academics, this is a hard pill to swallow: we pride ourselves in the subtlety of our arguments, not in their obviousness, in the cleverness of our solutions, not necessarily in their simplicity. For analysts of government behavior, this "simplicity constraint" is hard to model, but this makes it no less real. We note, however, that the simplicity constraint can move: a few years ago, public discourse involving extended discussions of adverse selection and moral hazard effects would be unthinkable, yet today they are commonplace. In this spirit, I hope that some of the ideas I put forward while at the Council—such as inflation puts,¹⁸ or the creation of what would be in effect

¹⁸ Inflation puts would give the holder of the bond the right to sell the bond to the government at a fixed price if the rate of inflation (or the nominal interest rate) exceeded a certain level, thus limiting

Arrow-Debreu securities for reinsurance markets associated with natural disasters will see the light of day sometime in the future.

While political rhetoric may contribute to our problems, and the necessity of keeping it simple may make finding Pareto improvements all the more difficult, the manner in which so much decision-making occurs—the secrecy, the midnight committee meetings—exacerbate our problems. In the next section I will discuss steps we can take to build a climate of openness and transparency that allows good policies to be recognized and promoted.

Secrecy vs. Openness in Decision-Making

Secrecy aggravates the government failures identified above. First, it makes it harder to establish credible commitments. Those excluded by secrecy from the process feel fully justified in trying to change the outcomes. Moreover, proposals arrived at in secret are less likely to have paid due attention to the concerns of those left out, and in doing so they have increased the incentives of those groups to overturn the results should an occasion to do so arise in the future. Second, secrecy aggravates the problem of positional goods and destructive competition. It short-circuits the consensus process and makes it more likely that outcomes will lead to a greater divergence between winners and losers. Third, by making information scarce, it contributes both to both the perception and reality of asymmetrical information, and puts into play a dynamic which is more likely to lead to biased and unrealistic information.

In a world of secrecy, you will always suspect that some interest group is taking advantage of the secrecy to advance their causes over yours, to steal, if not directly from you personally, more broadly from the public. Why else the secrecy? There is plenty of evidence to support these anxieties: the special tax provisions put into every tax bill at the last moment are perhaps the most glaring example.

This penchant for secrecy extended into the Clinton administration. Why, I wondered, was there such a focus on secrecy in a Democratic administration, in a democratic society? We were no worse than previous administrations, and I suspect we did better than most, but why couldn't we do still better? Whatever our position, eventually it would have to be debated in the open, in Congress. If our positions were well thought out, then surely we would be able to withstand pressures from the special interest groups that would, in any case, eventually be mobilized. Should a committed democrat (or Democrat) believe that it requires stealth to advance policies that are in the national interest?

The one argument that may have some merit is that hiding information may sometimes provide a tactical advantage in the political bargaining game. But my

the down-side risk of holding bonds. The value of inflation puts, like any option, would depend on the variance of inflation. They would thus allow traders to take positions on the variance of inflation, not just its mean as they can now do with indexed and unindexed bonds.

own experience is that all too often, secrecy is neither justified by national security interests, nor as a prerequisite for rational and thoughtful debate, nor even as a tactical necessity in a broader strategy, but rather, secrecy serves as a cloak behind which special interests can most effectively advance their interests, outside of public scrutiny. There is an old expression that sunshine is the most powerful antiseptic. In this sense, I understood why discussions concerning privatizing the production of enriched uranium—the critical ingredient of nuclear bombs—had to proceed in secrecy. It was not because national security would have been jeopardized, but because there rightly might have been a public outcry if it was known that we were risking nuclear proliferation for at most a meager few hundred million dollars.¹⁹ I also understood why discussions concerning ethanol had to be conducted in secret—again, private interests seeking favorable treatment might have might have failed to get what they wanted had there been an open public discussion, especially amidst accusations that campaign contributions seemed to affect public policy.

But the secrecy mind-set plays out even when there appears no rational reasoning for secrecy: Why did discussions of issuing indexed bonds—hardly a matter of national security—have to proceed in secrecy? Would bond markets really be rattled by discussions of the possibility of issuing a new Pareto-improving instrument?

Incentives for Secrecy

Other forces besides special interests and the fear of exposing policy mistakes help maintain the climate of secrecy. Secrecy creates rents, because the hidden information is potentially valuable. Whenever a valuable commodity exists, markets are created. Those on both sides of the market have an incentive for continuing with the artificially created scarcity. In this market, there are at least two active parties: government officials and the press. Their exchanges do not directly involve money, but they are just as real. A reporter who gives good coverage, walking carefully the line between pandering and honest reporting, gets access to "leaks." Part of the exchange was an occasional puff piece. We could tell which reporter was in the hands of which administration official. If all that was at stake was an occasional puff piece, these would be innocent gift exchanges. But, at least from my vantage point, all too often the reporting was distorted, the world seen through a particular lens, not the balanced kind of reporting that is required for informed public decision-making. Less secrecy would not only increase the flow of information; it would reduce the rent-creating and rent-seeking activities which lead to a distorted flow of information.

Ironically, one of the most powerful arguments for secrecy was premised on the continued existence of secrecy itself. When the press got wind of an intraadministration dispute over a policy issue, it would often turn the issue into a big story, writing about it as if the administration were confused and divided. Although

¹⁹ Even these estimates were based on calculations which ignored the constraints that Congress, under political pressures, had imposed on the privatized enterprise. For a very good discussion of the privatization of the United States Enrichment Corporation, see Aizenman (1997).

these were mostly big stories only for the cognoscenti inside the Beltway, they were enough to worry many White House officials. Their answer was ever tighter control to ensure that further stories did not appear. Since it was impossible to entirely eliminate articles about intra-administration disputes—the incentives to leak were too powerful—this approach just increased the cost of the stories that did appear. If instead they had increased the number of stories—increased transparency—they would have found that the press and public would come to a better understanding of the deliberative process or, more likely, simply become too bored to raise much of a problem.

America has led the way in trying to create a more open, transparent political process. There are landmark pieces of legislation, like the Freedom of Information Act, which stand in marked contrast to the way that many governments around the world, even other democracies, conduct their business. I remember, with some misgivings, having had to sign a pledge to conform to the Official Secrets Act when I served as a consultant to the British government some years ago. It is ironic, though, that there remains an obsession with secrecy despite America's social consensus in favor of openness.

Expertise and Democratic Values

There is another arena in which democratic processes and rational decisionmaking seemingly come into conflict, in which the resolution is not so apparent. For a large number of issues, expertise is required. This is, of course, the case in the running of any complicated business. Good managers either have the expertise themselves, or know how to hire it. It is not apparent, however, that the political process sorts well for those who have these abilities. Indeed, as I mentioned earlier, I was struck by the non-scientific tone of political discourse; since "expert" arguments could not be well evaluated by the electorate, they had little play among those whose focus was on the electorate.

In recognition of this problem, we have established independent agencies in many areas to move critical parts of decision-making at least slightly further from the political scene. Ultimately, there is political responsibility for the performance of these agencies, such as the Federal Trade Commission or the Securities and Exchange Commission. Deciding how far to remove what decisions is a key issue in a world of increasing complexity.

Most of us, for instance, would not want the statistical agencies, like the Bureau of Labor Statistics or the Bureau of the Census, to be influenced by political pressures. There is therefore a consensus that statistics should be collected at some distance from the political process. But what about some central issues of macroeconomic policy, such as the trade-off between inflation and unemployment? Fiscal policy is under control of Congress and the President, which assures some representativeness, but it is by no means clear that it assures the country's best expertise. (Though to be sure, there are incentives for politicians to seek out the best advice.) As for monetary policy, while the level of expertise at the Federal Reserve Board of Governors is fairly high, its representativeness can be questioned, since not all of its members are even appointed by the president or ratified by the Senate. In either case, how much secrecy should surround the deliberations?

Making Financial Markets into Tyrants

There is a newly emerging tyranny attempting to suppress democratic discourse about issues of economic policy that are vital to prosperity—a tyranny said to be imposed by financial markets. The financial markets, it is said, will be rattled by open discussions. It is ironic that those who put forward this argument are often the same people who argue for the rationality of market processes—processes which should therefore depend not on the cacophony of voices that are heard in public discourse, but on the reality of the underlying fundamentals. Markets can be rattled; for example, Alan Greenspan's allusion to "irrational exuberance" did lead to a market downturn. But while rattled markets may allow a few short-term speculators to make or lose a few million dollars, there is little evidence that these effects are long-lived, unless they trigger systemic effects such as those associated with bank runs.

Furthermore, the more often we speak, the less information our individual statements words will convey. If members of the Federal Open Market Committee discussed their views about monetary policy more openly and more often, the most likely effect would be a dampening of financial market volatility. In a sense, the market for information would be thicker and possibly more stable as each individual's particular pronouncements would matter less.

The World Bank has taken a similar stand with developing countries and has strongly encouraged them to become more open and transparent. Secrecy lowers the risks and costs incurred by government officials who are corrupt. The evidence in the World Development Report 1997 (World Bank, 1997) catalogs the costs of the extreme lack of transparency that is so frequently found in countries with corrupt governments. We have also tried to reflect these fundamental values in the way that we ourselves operate.

Adversarial vs. Consensus Systems

So far, I have provided four arguments for why potential Pareto improvements often are not adopted, and I have shown how the secrecy that surrounds much of the conduct of government business makes it all the more difficult to recognize and design Pareto improvements. There are other aspects to the process by which public decisions are made which also affect the scope of government failure, in particular the ability to achieve Pareto improvements.

In particular, the adversarial process in which political discourse occurs makes achieving Pareto improvements all the more difficult. It shapes both the amount of information available and, more importantly, the way in which the information is used. In the market arena, we often recognize the virtues both of competition and cooperation, and the market economy involves both cooperation within a firm and competition among firms. The political process involves a similar mixture of adversarial and consensus-based systems. We strove to reach consensus within the Clinton administration, but we were embedded in a highly adversarial political process. (To be fair, however, the consensus-based rhetoric sometimes only lightly clothed an underlying adversarial process.)

I believe that a shift to greater reliance on consensus processes is more likely to lead to Pareto improvements. To see why, let me describe some of the contrasts between a consensus-based system and an adversarial system.

The first concerns the differences between dialogue and debate. Consensus requires an open dialogue. You need to get people to understand your position and persuade them it is the right one. In contrast, the adversarial system is based on debate which is more for public consumption than an attempt to forge common ground for a consensus. Each party deliberately hides weaknesses in its case, lest its position be undermined. The objective is not to craft a proposal that minimizes the inevitable risks associated with new policies, but to win a victory in the political process.

The second contrast relates to national interest versus private interests. The success of a consensus-based system requires some shared conception of the national interests. The adversarial system only requires that each group express its own interests and that these interests be aggregated by voting or some other procedure. In the consensus-based system, in contrast, each player needs to have both the process and the social outcome in that player's utility function. Reaching consensus is an outcome that is valued in its own right, and reaching consensus in a democratic and open way is a process that is valued in its own right.

It is worth noting that in public discourse, everyone appeals to the national interest, even when seeking their own private interests. In arguing for ethanol subsidies, of which it was a major beneficiary, the Archer Daniels Midland Company appealed to the favorable impact on the environment and the economy. Among both environmentalists and economists, there is a virtual consensus that the ethanol subsidy is bad for the economy and bad for the environment. We were so convinced of this conclusion that the Office of Science and Technology Policy and the Council of Economic Advisers put together a biomass proposal that almost Paretodominated ethanol subsidies—only the Archer Daniels Midland Company (and a few smaller producers) would be worse off, and we could have compensated them.

The false appeal to national interests is particularly pernicious in the international arena, where it is easy to convince those who don't understand economics that protecting a particular industry's profits increases the total number of American jobs and the American economy. In this case, appealing to a zero-sum version of the world is easy. The zero-sum model is, obviously, harder to apply as a basis for claiming that purely domestic "special interest" decisions benefit the country as a whole. This is why international issues are probably more subject to capture.

The third contrast refers to when issues are believed to be settled. In a consensus-based system, an issue is over when everyone has come to a mutually acceptable agreement. Because the process by which a decision is made is viewed to be fair, even the "losers" feel committed to upholding it; and because the consensus process typically provides some accommodation to all parties, there is a sense

in which no one need feel defined as a loser. As a result, once an issue has been decided, it is likely that the issue will stay closed, at least until a major change in the world occurs. In an adversarial system, issues are never closed—if you have enough votes to bring something back, you will. The issue is never over. No government can commit the succeeding one. Of course, each side recognizes this, and therefore great efforts are made to create inefficient transactions costs, costs which make reversals all the more difficult, and which give greater pride of place to the status quo.

A consensus-based system is thus able to mitigate some of the problems I discussed earlier—such as inability to commit and the resort to destructive competition. In this way, it may make it possible to implement Pareto-improving policies that would not be achievable under an adversarial system.

At the World Bank, we have been studying the economic impact of these participatory/consensus processes. My predecessor as Chief Economist, Michael Bruno, emphasized the importance of consensus building in ending inflations (Bruno, 1993). The reason for this should be obvious: if workers believe that they are not being fairly treated, they may impose inflationary wage and other demands, making the resolution of the inflationary pressures all but impossible. At the microeconomic level, aid agencies and non-governmental organizations have been experimenting with ways of providing decentralized support and encouraging community participation in the selection, design, and implementation of projects. Recent research provides preliminary support for this approach. One study found the success rate for rural water projects that involved participation was substantially higher than the success rate for those that did not (Isham et al., 1995). It is not just that localized information is brought to bear in a more effective way; but the commitment to the project leads to the long-term support (or "ownership" in the vernacular) which is required for sustainability.

It is this commitment and involvement which many believe is the key to success of "choice" experiments in education—an effect far more important than the farfrom-perfect competition that such experiments create among schools.

I do not want to sound Pollyannaish: participation and consensus formation should be valued in their own right, and may lead to better outcomes, but this is not necessarily the case, especially where expertise plays a large role. Studies have noted that there was little correlation between non-expert assessments of environmental hazards and the assessments of experts (EPA, 1987; Slovic et al., 1993). If the objective of environmental policy is to achieve better health outcomes—and not just better feelings about the environment—then the decision-making process must rely heavily on expertise. At the same time, the boundaries between participation and expertise are not fixed. Education processes, and more generally, what we at the World Bank call capacity building, can expand and enhance participation by helping people better understand the issues.

Of course, consensus formation should not be misconstrued as stifling discussion and debate, which is one of the virtues of the advocacy process, which allows people to comply with the majority while registering their dissent and protecting their own view.

Conclusion

Let me conclude with the following general observations. Before I came to Washington, one of my good friends advised me strongly against accepting the offer. He argued that the academic's role in our society was to be the critic. As an insider, I would not be free to express my views. Anyone who has served in my position knows the tension: they carry on with the belief that they can be more effective as an inside player, articulating within the administration the economic rationale for their positions as clearly and simply as possible. There is close to a perfectly elastic supply of those willing to serve as outspoken outside critics. (There is also a tendency for the insiders to try to exploit the asymmetries of information which they themselves have worked to create: how often does one hear, "if you only knew the full story. . ." Fortunately, in economic issues, such secret details rarely change the overall picture.) In my time in Washington, I did have to be less outspoken publicly than I would have liked, but I have become a potentially more informed critic.

Having spent so much time looking at the implications of information problems for market failure, it was natural for me to address the issue of explaining government failures through an analysis of information problems there. In this lecture, I have stressed the difficulties of achieving Pareto improvements. What I have really shown is how hard it is to construct these Pareto improvements amidst the problems of commitment and the dynamic bargaining games that characterize the political process. Those who said that I would leave the White House with a more jaundiced view of the role of government were only partly correct. While special interests do often dominate over the general interests and while seeming near-Pareto improvements are often resisted, these failures do not undo the great achievements of the public sector, from mass education to a cleaner environment. These failures should focus our attention on re-examining both how and what the government should do.

Making government processes more open, transparent, and democratic, with more participation and more efforts at consensus formation is likely to result not only in a process that is fairer, but one with outcomes that are more likely to be in accord with the general interests. Maybe eventually we will be able to bring Coase to the public sector, so that Pareto improvements will actually be adopted.

• The ideas expressed in this lecture are solely the responsibility of the author and do not necessarily reflect the views of the institution which he is or has been affiliated with. This paper is a revised version of the lecture delivered by the author to a joint session of the Society of Government Economists and the American Economic Association at the annual meetings of the Allied Social Science Association in Chicago, Illinois, on January 4, 1998. Jason Furman offered invaluable insights throughout the evolution of the paper and Jessica Seddon provided able research and editing assistance. Comments from Brad De Long, Alan Krueger, Timothy Taylor, and participants at the Society of Government Economists lecture were very helpful in preparing this written version.

References

Acton, Jan Paul, and Lloyd Dixon, Superfund and Transaction Costs. Santa Monica, California: RAND Institute, 1992.

Akerlof, George, "The Market for Lemons: Quality Uncertainty and the Market Mechanism," Quarterly Journal of Economics, 1970, 84:3, 488-500.

Aizenman, Nurith, "National Security for Sale," *The Washington Monthly*, December 1997, 17–23.

Bruno, Michael, Crisis, Stabilization, and Economic Reform: Therapy by Consensus. Oxford: Clarendon Press, 1993.

Buchanan, James M., The Limits of Liberty. Chicago: University of Chicago Press, 1975.

Buchanan, James M., Constitutional Economics. Oxford: Basil Blackwell, 1991.

Congress of the United States, "Hearing before the Joint Economic Committee: The 1997 Economic Report of the President," February 10, 1997, Washington: Government Printing Office.

Dixit, Avinash, and Mancur Olson, "Does Voluntary Participation Undermine the Coase Theorem?" Princeton: Princeton University. Processed, 1997.

Environmental Protection Agency, Unfinished Business: A Comparative Assessment of Environmental Problems. Washington, D.C.: EPA, 1987.

Farrell, Joseph, "Information and the Coase Theorem," Journal of Economic Perspectives, 1987, 1:2, 113–29.

Fischer, Stanley, "Why are Central Banks Pursuing Long-Run Price Stability?" In Achieving Price Stability, A Symposium Sponsored by the Federal Reserve Bank of Kansas City, 1996.

Frank, Robert H., and Philip J. Cook, The Winner-Take-All Society: How More and More Americans Compete for Ever Fewer and Bigger Prizes, Encouraging Economic Waste, Income Inequality, and an Impoverished Cultural Life. New York: Simon and Schuster, Free Press, Martin Kessler Books, 1995.

Greenwald, B., and J.E. Stiglitz, "Externalities in Markets with Imperfect Information and Incomplete Markets," *Quarterly Journal of Economics*, May 1986, 101:2, 229-64. Isham, Jonathan, Deepa Narayan, and Lant Pritchett, "Does Participation Improve Performance? Establishing Causality with Subjective Data," World Bank Economic Review, 1995, 92, 175–200.

Kahnemann, Daniel, and Amos Tversky, "Loss Aversion in Riskless Choice: A Reference-Dependent Model," *Quarterly Journal of Economics*, 1991, 106:4, 1039–61.

Lazear, Edward P., and Sherwin Rosen, "Rank-Order Tournaments as Optimum Labor Contracts," *Journal of Political Economy*, 1981, 895, 841-64.

Nalebuff, B., and Stiglitz, Joseph E., "Information, Competition and Markets," *American Economic Review*, May 1983, 73:2, 278-84.

Olson, Mancur, The Logic of Collective Action. Cambridge, Massachusetts: Harvard University Press, 1971.

Probst, Katherine, Don Fullerton, Robert Litan, and Paul Portney, Footing the Bill for Superfund Cleanup. Washington D.C.: The Brookings Institution and Resources for the Future, 1995.

Salop, Steve, and D. Scheffman, "Raising Rival's Costs," American Economic Review, 1993, 73, 267-71.

Slovic, Paul, Mark Layman, and James Flynn, "Perceived Risk, Trust, and Nuclear Waste: Lessons from Yucca Mountain." In R. Dunlap, M. Kraft, and E. Rosa, eds. *Public Reactions to Nuclear Waste*. Durham, North Carolina: Duke University Press, 1993.

Stiglitz, Joseph E., "Contract Theory and Macroeconomic Fluctuations." In L. Werin and H. Wijkander, eds. *Contract Economics*. Oxford, UK; Cambridge, MA: Blackwell, 292–322, 1992.

Stiglitz, Joseph E., Whither Socialism. Cambridge, MA: MIT Press, 1994.

Vickers, John, and George Yarrow, Privatization: An Economic Analysis. Cambridge: MIT Press, 1988.

Wilcox, David W., "Policy Watch: The Introduction of Indexed Government Debt in the United States," *Journal of Economic Perspectives*, Winter 1998, 12:1, 219-28.

World Bank, World Development Report 1997: The State in a Changing World. Oxford: Oxford University Press, 1997. Copyright of Journal of Economic Perspectives is the property of American Economic Association and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.