REAGANOMICS AND ECONOMIC GROWTH:
A SUMMING UP

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This has been a useful conference. Instead of being barraged by Wall Street Journal editorials or superficial public opinion polls, we have spent two days seriously analyzing the cornerstone of the Reagan economic agenda: to strengthen the economy and enhance long-term economic growth. How successful have we been, and what is our summary assessment of this aspect of Reaganomics?

I will begin with a cautionary note about measurement. When we talk about "increasing economic growth," we are presumably referring to the appropriate discounted value of a comprehensive consumption measure: something like the Measure of Economic Welfare that Tobin and I discussed a decade ago. This conference may have fallen into the trap of defining growth as growth in measured GNP—a trap in which the Reagan administration is itself ensnared. In fact, we may have become even further mired in the mercantile fallacy by unconsciously defining growth as growth of the capital stock, or even worse, growth of the business fixed capital stock. But monetizing the economy by drawing people from households or schools into factories or trenches—while increasing measured GNP—may not increase an appropriately measured index of economic welfare.

The Short Run

In order to evaluate the Reagan program, it is useful to follow Alan Blinder's distinction between the short run and the long run. The short run corresponds to policies that take as given the path of potential output; the long run examines measures that affect potential output.
This conference paid little attention to the issue of whether the administration’s choice of a recession was wise or not for the short run. The costs and benefits of inflation are a subject for another meeting. But, for a given inflation path, we might ask whether output was higher because of the Reagan policies. Have they shifted the Phillips curve—temporarily or permanently?

While no one has presented evidence that the natural rate of unemployment has declined markedly since 1980, some of the results presented here suggest that the Phillips curve has been temporarily "fooled." Blinder found that, except for the MPS model, the "REAGAN" policy resulted in a substantial expansion of output, without a simultaneous rise in price. In the WEFA model, there was essentially no price increase associated with higher output; in the DRI model, higher output was accompanied by lower prices.

There are two possible reasons for this surprising outcome. First concerns the productivity effect in the models. There may be some misspecification (as was seen in the original Brookings-SSRC model) that allows price reduction to come from cyclical productivity increases. A second possible way to fool the Phillips curve is the Patman effect: a lower user cost of capital may actually lower prices. The Patman effect is probably at work in the DRI model. Here, the core rate of inflation is determined by labor costs and the costs of capital; a big reduction in the cost of capital gets fed right through into prices. Thus a reduction in the cost of capital, coming from the 1981 cuts in capital taxes, probably led the DRI model to predict a one-shot reduction in the price level as the cost of capital came down. Hence the 1981 measures raised output and lowered prices. Thus spake DRI.

Another central issue, discussed by Lawrence H. Summers, is whether the Reagan policy mix produced a less costly disinflation because of the credibility effect. The "credibility hypothesis" states that having a tough guy in the White House—perhaps encouraging an even tougher guy at the Fed—causes inflation to decline more quickly and at less economic cost than it would simply on the basis of the given path of unemployment and capacity utilization.

One of the major benefits of recent policy—both in the United States and in Britain—is that we have a clear test of the credibility hypothesis. Several recent studies reached the same conclusion as Summers: The cost of the 1980–83 disinflation was not reduced by the particular mix of monetary and fiscal policy, or by having a credible, preannounced policy. In fact, the cost of disinflation has remained pretty much unchanged since Arthur Okun surveyed these costs in 1976.

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1. The Summers paper is included in this volume.
The Long Run

Let us turn to the longer-run issues of growth in potential GNP. A pro-growth policy is one that increases the growth of appropriately measured potential output. This increase can come either through growth of inputs or growth in total factor productivity. I will examine these in turn.

Growth of Inputs

The major way to increase growth in inputs is to accumulate durable productive assets more quickly—for example, tangible and human capital, resources, and so forth. The most important and accessible way for a nation to increase its asset growth is to save and invest more. The Reagan record here is mixed.

Private Capital. Fullerton and Henderson found that from 1980 to 1982, the tax treatment of investment led to a 3 percent decline in the overall cost of capital, and a decline in the cost of business fixed capital of somewhat over 10 percent. With no change in the interindustry distortion and a Cobb-Douglas production structure, the overall capital stock would respond by increasing 3 percent over the relevant time horizon, and potential output would increase somewhat less than 1 percent.

It appears that Alan Blinder's results are of the same order of magnitude as the Fullerton-Henderson result. For the WEFA and DRI models (where there is no significant offset from interest rates), he finds that business fixed investment is up by 3 to 5 percent at the end of the 1980s. On the other hand, residential construction is down a couple of percent.

Putting these numbers together, and ignoring any offset from crowding out or from monetary policy, I would estimate that the Reagan-supported measures of 1981 and 1982 would lead to a 3 percent higher private capital stock. Running these numbers out to the end of the decade, and assuming an output elasticity of 0.20 with respect to capital, I calculate that the investment incentive results in a 6 to 10 basis point increase in the potential GNP growth rate.

In the calculations that follow, I have made all calculations in "basis points," or more precisely, in "hundredths of a percentage point added to the annual growth of potential GNP for 1981–90." We must use such small numbers, because, as Ed Denison taught us more than twenty years ago, it is very hard to move the potential GNP growth rate, and adding 10 basis points to the growth rate is doing pretty well.
Unfortunately, as CEA Chairman Feldstein has been telling everyone inside and outside the Reagan administration, the calculation cannot stop there. The Reagan policy, combined with other events, has produced an unprecedented deficit and significantly higher real interest rates than we have seen for decades. This raises the question of whether there is "monetary" or "deficit" or "government debt" crowding out.

Let us return to Alan Blinder's remarks. There is no doubt that monetary policy has been very tight since October 1979. But Ronald Reagan was elected in November 1980, so obviously the tight monetary policy preceded (and therefore in the Granger-Sims sense, caused) Reaganomics. However, the real question—and this is where the relation between monetary policy and Reaganomics becomes tricky—is whether monetary policy would have been less tight under a second Carter term?

My view is that monetary policy has been tighter under Reagan. First, it is clear that the Reagan administration has been cheering on the monetarist activities of the Fed since late 1980 or early 1981. Second, and just as important, I think that some of the monetary tightening was in response to the loosening of fiscal policy in 1981. The Fed was, and is, playing "fiscal chicken"—saying in effect it will not lower real interest rates until the fiscal authorities lower the deficit. Thus the net effect of Reagan policies was a monetary policy that was tighter, longer than it would have been under a second Carter regime. Under Carter II, monetary policy would probably have been loosened earlier—somewhere between late 1981 and October 1982.

How much crowding out of capital could occur as a result of higher deficits? At one extreme, suggested by the DRI-Donald Regan view, there is no crowding out. At the other extreme, we can look to Martin Feldstein's inspiration and Ben Friedman's analysis. Friedman argues that by the end of the 1980s, we could have an increase in the public debt-GNP ratio of about 20 percent of GNP. A situation of full portfolio crowding out occurs when there is one-to-one displacement of private capital by increase in public debt. This occurs when (1) public and private wealth are perfect substitutes and (2) when wealth is perfectly inelastically supplied. I don't think we could be much more pessimistic than this in looking for crowding out. In the Friedman-Feldstein case, crowding out of capital would lead to a 15 basis point slowdown in economic growth over the 1980s.

So I estimate the limits of crowding as between 0 and 15 basis points subtracted from growth over the 1980s. You can take your choice, but the DRI-Reagan end of the spectrum is probably more realistic. We have not

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2 Presented at this conference.
found near dollar-for-dollar substitution of private for public wealth since World War II. And the pool of foreign wealth holders, willing to hold dollar assets, is very large.

Whichever numbers one chooses, it is essential to see that one’s view on the crowding out debate drives one’s conclusion about whether the effect of Reagan’s policies on private capital has been positive or negative.

Public Capital. As far as public capital is concerned, I think the Reagan administration has fallen into the trap of misplaced concreteness. Their view seems to be that capital is only productive if it is private and if you can bomb it. This may explain their interest in bombs and their disinterest in anything except business fixed investment.

Let us take a broader view, examining the effect of Reagan policy on all durable assets, whether private business or not. The most important of these is government investments. Using Charles L. Schultze’s generous data (those in his table 1), we find a 0.7 percent decline in the public investment-GNP ratio from 1979 to 1984. Assuming this is replaced by non-investment items, and assuming the same rate of return on public as private capital, an order-of-magnitude effect would be a $-6$ basis point contribution to growth in potential GNP to 1990. If, on the other hand, we follow Schultze and exclude a number of items in true OMB style, we get a low estimate of $-4$ percent.

Growth in Total Factor Productivity

Let us now turn to the other means for increasing the growth of potential output—that is, increasing total factor productivity. Here I want to concentrate on advances in knowledge, one of the most important tools for increasing productivity.

As we have learned from Kendrick, Denison, and others, the accumulation and effective use of knowledge is the most precarious part of economic growth. It is also potentially a very powerful factor. If we examine the careful studies of Mansfield, we see very high social rates of return on R&D—on the order of 50 percent per annum.

I was disappointed that this conference spent so little time on R&D. To begin such an analysis, I believe we must separate basic research from applied research and development. If we do that, we see a long downtrend in the share of basic federal research to GNP. It was 0.26 percent of GNP in 1965 and declined to 0.21 percent of GNP in 1981; it then dropped sharply to 0.17 percent of GNP for 1983. Basic research, effectively applied, is the essential federal role in assuring continued high-quality economic growth. And it has received short shrift from the Reaganauts.
Now it is true that the overall federal R&D to GNP ratio is turning up, at least in the projections. But as Donald A. Nichols has pointed out, this is solely because of defense R&D. Will defense R&D have the same payoff as civilian R&D? Not bloody likely. Experts in this area think that basic research in defense is a pretty close substitute for basic nondefense federal research. But in applied research, and particularly for development—which is after all the bulk of federal research and development—defense R&D basically buys hardware. Defense R&D may improve the technology of destruction, but it is unlikely to have a big payoff for economic growth.

However, rather than being influenced by the wisdom of experts, let us allow Special Analysis K of the budget to explain exactly what $12 billion of defense R&D is buying the nation. This is what the Reagan administration describes as its major efforts in research and development in the Department of Defense: protection against chemical agents; peacekeeper and Trident II efforts; ballistic missile defense; advanced technology bomber; anti-satellite system; upgrading the M1 tank; Bradley fighting vehicle system; deep strike interdiction version of an existing fighter aircraft; more reliable fighter engines; air-to-air missile; new trainer aircraft for undergraduate pilot training; lightweight antisubmarine torpedo; larger range antisubmarine missile; subsystems to improve detection, tracking, and targeting. You may draw your own conclusions as to whether research in these areas is likely to have significant spillovers for civilian R&D.

There have been studies of the spillover effects of defense R&D. One of the most careful was done by the other DRI (Denver Research Institute). About fifteen years ago, they very carefully sifted through a list of space and defense research projects for innovations that were transferable to private industry. They found nothing better than the high-speed welder.

In the energy area, the R&D bias is just as striking. The Reagan program has increased energy R&D in particle physics and in weapons-testing areas. Big-ticket items include the synchrotron, the Fermi accelerator facilities, and the breeder reactor. But there have been significant R&D cuts in fossil fuels, in solar, and in conservation. Whatever the intrinsic wisdom of this reallocation, it is hard to see how it will enhance economic growth.

Finally, I will highlight one more problem in the R&D area that is worrisome: Defense and space today take about 32 percent of our national R&D dollars. And the defense part is growing very rapidly. If you want to worry about crowding out, this is the place to focus. When you increase the dollars for defense R&D, you are bidding away resources from civilian uses. And be reminded that the unemployment rate among Ph.D.'s in science and engineering in 1981 was 0.8 percent, so there is not a lot of slack in that sector.
I summarize the R&D discussion by my entry on table 1. I would put a debit of at least 3 basis points for the cuts in federal R&D—using figures Schultz presented plus a 50 percent rate of return on civilian R&D. If we include a higher rate of return on basis research (following a recent study by Mansfield), we could see a decline as great as 8 basis points.

A final topic, which I won't discuss, is regulation. On the basis of recent work that Robert Litan and I have done, I would add a handful of basis points for the Reagan regulatory reform program. 3

Summary Assessment

Adding up the numbers in each category we have reviewed, I estimate that the Reagan program has contributed something between minus 0.23 to plus 0.06 percent per annum to potential GNP growth for the 1980s. The best guess appears to be that the Reagan policy has actually hurt the nation's potential growth.

One other lesson of the Reagan policy seems clear to me: Using monetary policy to cause a sharp disinflation has very serious negative side effects. In plain language, it was a disaster. It reduced investment. It raised deficits and

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**TABLE 1**

**NET EFFECT OF REAGAN ECONOMIC POLICIES ON LONG-TERM ECONOMIC GROWTH, 1981–1990**

*(In hundredths of a percentage point per annum)*

<table>
<thead>
<tr>
<th></th>
<th>Increase in growth rate</th>
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<tr>
<td></td>
<td>(&quot;basis points,&quot; or hundredths of a percentage point per annum)</td>
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<tr>
<td></td>
<td><strong>Low</strong></td>
</tr>
<tr>
<td>Private capital</td>
<td></td>
</tr>
<tr>
<td>Investment incentives</td>
<td>+6</td>
</tr>
<tr>
<td>Crowding out</td>
<td>-15</td>
</tr>
<tr>
<td>Public capital</td>
<td>-6</td>
</tr>
<tr>
<td>Federal support of R&amp;D</td>
<td>-8</td>
</tr>
<tr>
<td>Regulation</td>
<td>0</td>
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<tr>
<td>Total effect of Reagan program on economic growth</td>
<td>-23</td>
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</tbody>
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Source: From papers presented in this conference as explained in the text.

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the public debt. It increased the value of the dollar and hurt traded goods. It spilled over perversely to the rest of the world, because those countries linked to us through relatively open capital markets found their real interest rates moving up and their economic activity declining. Finally, less developed countries are teetering on the edge of bankruptcy as they find their debt service ratios skyrocketing. We have learned that monetary disinflation is very costly.

**Dismantling the Welfare State**

But this discussion may be missing the whole point of Reagan economic policy. The key to understanding Reaganomics is not the growth-accounting framework, and it is certainly not a demand-oriented macroeconomic model. If we want to understand the Reagan program, we must go back to the 1982 Economic Report of the President. This states that economic prosperity is found only in those countries that make decisions in markets; conversely, countries that rely on state decision-making inevitably suffer economic decline. The political figures of the Reagan administration appear to think of economic growth not as winning a basis point here and a basis point there. Rather, their program is designed to change the structure of incentives and to stop the pattern of dependency.

This conference, a Reaginit would say, has been looking at the mote but not the beam of economic growth. We have argued about whether the productivity slowdown has been 2.3 percent according to Denison, or 1.9 percent according to Kendrick. But the Reagan philosopher says, in effect: "Look instead at the triumphs of capitalism. Observe that per capita GNP is $15,000 in capitalist United States, but only $150 in socialist India. You must cut taxes and red tape if you want enterprise to flourish. The West’s malaise, from San Francisco to West Berlin, arises from a cycle of dependency. Our historical mission is to reduce this dependency."

I will suggest four areas in which the Reaginites have tried to follow this path consistently and, by their standards, may have had some success.

First, they have completely changed the pattern of social regulation. Economic regulation was never really an important issue to this group of people. Some of them liked it, some of them didn’t, but they didn’t see it as significantly hampering economic growth. But they did see social regulation as interfering with production, investment, and innovation. They stopped social regulation dead in its tracks. After a proliferation of regulatory agencies and programs, there has not been a major new social regulatory program since 1981.
The second area is social dependency. Some, like Dick Nathan, believe that our social programs have bred a cycle of dependency, a new underclass in our society. The Reagan people appear to think that such a cycle was seen in social security, in AFDC, in unemployment insurance, and in the international arena where other nations became dependent on our foreign aid. Although social pressures prevented "cold turkey" withdrawal from such programs, the administration set out to shrink these programs as much as possible. One result, as Gary Burtless has recently shown, is the recent behavior of the insured unemployment rate, which has mysteriously declined relative to overall unemployment. Has the cycle of reliance on unemployment insurance declined?

A third area is energy, where again the Reagan administration saw state programs as encouraging a harmful dependency on government programs. Many economists would agree that price controls and entitlements breed inefficiencies. Recently, the question of standby price control and allocation systems was raised in conjunction with our international obligations under the IEA. The Reagan people made it clear that they will have nothing to do with that: If there is an oil price emergency, people are going to find oil themselves.

The fourth area is industrial policy and free trade. Here too the Reagan people have tried to stay true to their philosophy of minimizing business's dependence on government financial or trade assistance. They resisted a savings and loan or WPPSS bailout. Some significant backtracking on steel, autos, and milk has occurred, but these were politically rather than ideologically accepted.

How seriously should we take this broader view of Western economies caught in a giant web of dependency and sloth? Can we see a resurgence of initiative and innovation in the brave new libertarian resurgence? By my reading, the Reagan view is neither absurd nor convincing. But there is no evidence at hand to convince us of its practical importance. The Reagan administration's dismantling of the welfare state is a shot in the dark whose only casualties so far are the economy and the poor.