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SUPPLY SIDE ECONOMICS:
OLD TRUTHS AND NEW CLAIMS

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ABSTRACT

This paper, prepared for the annual meetings of the American Economic Association, examines the claims that were made at the beginning of the decade by the "new" supply-siders and contrasts their views with the traditional supply-side economics that has been a prominent part of economics since Adam Smith. The analysis gives particular attention to the pace of recovery and growth and to the revenue effects of the 1981 tax cut.

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I am pleased that the American Economic Association has chosen to devote this session to assessing the idea of "supply side economics." Experience has shown that the notion is a malleable one, easily misused by its supporters, maligned by its opponents, and misinterpreted by the public at large. Perhaps now, five years after supply side economics became a slogan for a changing economic policy, it is possible to assess what supply side policy really means and how the policies adopted under that banner have fared.

The term supply side economics originated as a way of describing an alternative to the demand side emphasis of Keynesian economics. The essence of Keynesian analysis is its conclusion that the level of national income and employment depend on the level of aggregate demand and that easy money and expanded budget deficits, by stimulating demand, can increase output and employment. Although this may have been an appropriate emphasis during the depression years of the 1930s when Keynes developed his theory, by the 1960s and 1970s it was clear to most economists that it was wrong to focus exclusively on demand and to ignore the factors that increase the potential supply of output -- capital accumulation, technical progress, improvements in the quality of the labor force, freedom from regulatory interference, and increases in personal incentives. Many of us also concluded that the

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persistently high level of measured unemployment did not reflect inadequate demand but was due to government policies like unemployment insurance, welfare restrictions, and the minimum wage that reduced the effective supply of labor.

In all of these ways, many of us were supply-siders before we ever heard the term supply-side economics. Indeed, much of our "supply side economics" was a return to basic ideas about creating capacity and removing government impediments to individual initiative that were central in Adam Smith's Wealth of Nations and in the writings of the classical economists of the nineteenth century. The experience of the 1930s had temporarily made it easy to forget the importance of the supply factors but by the 1970s they were returning to the mainstream of economics.¹

It is important therefore in any discussion of supply side economics to distinguish the traditional supply side emphasis that characterized most economic policy analysis during the past 200 years from the new supply side rhetoric that came to the fore as the decade began.

I. The Shift in Policy

Economic policy took a few hesitating steps in the traditional supply-side direction in the late 1970s with deregulation in the transportation industry, a significant reduction in the tax on capital gains, and the partial taxation of unemployment compensation. But it was only in 1981 that Congress enacted the major tax bill that has become the centerpiece of supply-side economics.

¹These ideas are discussed in Feldstein (1981, 1982).

The emphasis throughout that tax legislation was on changing marginal tax rates to strengthen incentives for work, saving, investment and risk-taking. For individual taxpayers, the basic features of the Economic Recovery Tax Act of 1981 were a 25 percent across the board reduction in personal tax rates, an extra tax reduction for two-earner families, an increased exemption for long-term capital gains, and the creation of universal Individual Retirement Accounts that effectively permit the majority of American employees to save as much as they want out of pretax income and pay tax on those savings on a consumption tax basis. Personal tax brackets were also indexed to prevent inflation from raising real tax burdens (although this indexing was only scheduled to begin in 1985). For businesses, the 1981 legislation contained accelerated depreciation schedules that significantly reduced the cost of investment in plant and equipment and an increased tax credit for research and development.

The Reagan administration also began an unprecedented reversal of the share of GNP absorbed by government nondefense spending. Those outlays declined from 15.1 percent of GNP in fiscal year 1980 to 14.1 percent of GNP in FY 1984. When the Social Security and Medicare outlays are excluded, this spending declined from 9.3 percent of GNP in 1980 to 7.4 percent in 1984. These spending reductions were significant not only because they released resources that could be used to finance tax rate reductions but also because they were often achieved by shrinking programs that in themselves had adverse incentive effects.

President Reagan also provided strong support for the anti-inflationary Federal Reserve policies. The sharp fall in inflation between 1980 and 1982

significantly reduced the effective tax rates on the return to corporate capital, increasing the real after-tax return to savers as well as reducing the uncertainty of saving and investment.²

II. Excessive Claims

These policies were a major step in the direction recommended by supply side economists of both the new and old varieties. What distinguished the new supply siders from the traditional supply siders as the 1980s began was not the policies they advocated but the claims that they made for those policies.

The traditional supply siders -- and, although I dislike labels, I consider myself one of that group -- were content to claim that the pursuit of such tax, spending and monetary policies would, over the long run, lead to increased real incomes and a higher standard of living. We recognized that the key to this process was increased saving and investment and knew that that would take a long time to have a noticeable effect.³

The "new" supply siders were much more extravagant in their claims. They projected rapid growth, dramatic increases in tax revenue, a sharp rise in saving, and a relatively painless reduction in inflation. The height of supply side hyperbole was the "Laffer curve" proposition that the tax cut would actually increase tax revenue because it would unleash an enormously depressed supply of effort. Another remarkable proposition was the claim

²The effects of inflation on effective tax rates on investment in plant and equipment are analyzed in the papers collected in Feldstein (1983a).

³Some of us were also nervous about the magnitude of the enlarged tax cut that emerged from the bargaining between the Congressional Democrats and Republicans. I advocated making a large part of the personal tax cut an immediate indexing of the tax brackets (to eliminate the risk of a real tax cut that was either bigger or smaller than needed to offset bracket creep during the years 1981 to 1985) and phasing in much of the remaining tax cut only as spending cuts were achieved.

that even if the tax cuts did lead to an increased budget deficit, that would not reduce the funds available for investment in plant and equipment because tax changes would raise the saving rate by enough to finance the increased deficit. It was also claimed that the rapid rise in real output that would result from the increased incentive to work would slow the rate of inflation without the need for a rise in unemployment because the increased supply of goods and services could absorb the rising nominal demand.

Probably no single individual made all of those claims -- at least not at the same time. And anyone who feels the need to defend his name can argue that the Administration's 1981 economic program was not enacted exactly as proposed. Nevertheless, I have no doubt that the loose talk of the supply side extremists gave fundamentally good policies a bad name and led to quantitative mistakes that not only contributed to subsequent budget deficits but that also made it more difficult to modify policy when those deficits became apparent.

III. Growth and Recovery

To assess the claims of the new supply siders, it is useful to compare the actual growth of real GNP between 1981 and 1985 with the growth that the supply siders initially projected. The record shows that real GNP increased 10.9 percent between 1981 and 1985, only slightly more than half of the 19.1 percent predicted in the Reagan administration's original economic plan.⁴

This 45 percent shortfall in economic growth cannot be blamed, as some

⁴America's New Beginning: A Program for Economic Recovery. The White House, February 18, 1981, page S-1. This official forecast predicted less growth than some of the more ardent new supply-siders anticipated.

of the new supply siders would now do, on a failure of the Federal Reserve to supply as much money and credit as the plan originally envisioned. The President's 1981 Program for Economic Recovery assumed that "the growth rates of money and credit are gradually reduced from the 1980 levels to one-half those levels by 1986" (page 23) while the actual money growth rates have hardly declined at all since 1981.

Although the original forecast of nearly 5 percent a year real growth from 1981 to 1985 was improbable on the basis of both historic experience and economic theory, the shortfall was clearly exacerbated by the recession that depressed GNP from the third quarter of 1981 until the final quarter of 1982. The new supply siders were naively optimistic when they claimed that the double digit inflation of 1980 and 1981 could be halved in a few years without any increase in unemployment simply by increasing output enough through improved incentives to absorb the excess demand.

Most of the new supply-siders have now conveniently forgotten the substantial discrepancy between their growth forecast and the subsequent experience. But some of the supply-side extremists even claim that the recovery was delayed because individuals preferred to "consume leisure" and were waiting to return to work until the final stage of the tax rate reduction had occurred. Anyone who believes that that explains the 10.7 percent unemployment in December 1982 has not studied the data on the composition and timing of unemployment or on the relation between the spending upturn and subsequent reductions in unemployment. And those who wish to believe that the cut in the tax rate stimulated a major increase in the number of people wanting to work will be disappointed by the data on labor force participation rates.

During the first four quarters of the recovery, real GNP increased at about the average pace of the previous recoveries. In the second year of the recovery, the rise in GNP exceeded the past norm. But now, 11 quarters after the recovery began, the cumulative rise in GNP has settled back to the middle of the range of past recoveries.

How much of the recovery has been due to the stimulus to increased supply that was provided by the new policies?⁵ I have already commented on the lack of evidence of an induced increase in the number of people wanting to work. But it would be equally wrong to view the recovery as the result of the fiscal stimulus to demand as some traditional Keynesians have done (e.g., Tobin (1984)).

In fact, the rise in nominal GNP since 1982 can be more than fully explained by the traditional relationship to the lagged increase in money (M1). The division of the nominal GNP increase between real GNP and inflation was, however, more favorable than would have been expected on the basis of past experience; somewhere around 2 percent of the 15 percent rise in real GNP since the recovery began cannot be explained by the increase of nominal GNP and the past pattern of inflation and might therefore be attributed to supply side factors. However, the rise in the exchange rate fully explains the relatively favorable inflation experience and leaves no unexplained rise in real GNP. Of course, it might be argued that supply side factors contributed to the dollar's rise. Only further research will resolve whether supply side influences have contributed to the rise in real GNP since 1981.

⁵The remainder of this section is based on Feldstein (1986).

Let me emphasize that, to a traditional supply sider like me, the positive but apparently modest supply-side effect is neither surprising nor disappointing. Although we would expect some increase in work effort from the reduction in the highest marginal tax rates, past evidence all points to relatively small changes. The favorable effects of improved incentives for saving and investment can only be expected after a much longer period of time.

IV. Tax Revenue

Perhaps the most dramatic claim of some of the new supply siders was that an across-the-board reduction in tax rates would be self-financing within a few years because of the increased output that results from the enhanced after tax pay.⁶ It is, of course, very difficult to disentangle the effects of the tax legislation from other things that influenced tax revenue. But a very careful study by my colleague Lawrence Lindsey (1985a,b) indicates that in 1982 the response of taxpayers did offset about one-third percent of the effect of the tax cut on Federal receipts.

Lindsey reports that about 65 percent of the induced offsetting rise in tax revenue reflects higher pretax wages, salaries and business profits than would have been anticipated without the change in tax rates and tax rules, 25 percent reflects an increase in realized capital gains, and the remaining 10 percent is due to reductions in various itemized deductions. These induced offsetting effects are very small among taxpayers with incomes below \$20,000. Only among taxpayers whose initial marginal tax rates exceeded 50 percent was there evidence that the rate reduction did not reduce federal revenue at all.

⁶The administration never made such a claim although the unusually strong real growth that it predicted for the first five years would have been sufficient to recoup between half and three-quarters of the proposed 30 percent tax cut.

Only time will tell whether this first-year tax response overstates the long term effect (because it reflects a shift in the timing of income receipts and deductions rather than a more fundamental change in behavior) or understates the long-term effect (because it takes time for taxpayers to adjust their behavior to new tax rules). But the effect for 1982 is clearly an economically significant one. Although the increase in taxable income fell far short of the claims made by the over-optimistic new supply-siders and may have been due in large part to a restructuring of income (e.g., from fringe benefits to cash) rather than an increase in work effort, the rise in taxable income is a reminder that the traditional revenue estimation method that ignores the behavioral response to tax changes can be very misleading (Feldstein 1983b).

V. Conclusion

The experience since 1981 has not been kind to the claims of the new supply side extremists that an across-the-board reduction in tax rates would spur unprecedented growth, reduce inflation painlessly, increase tax revenue and stimulate a spectacular rise in personal saving. Each of those predictions has proven to be wrong.

But it would be unfortunate if this gave a bad reputation to the traditional supply side verities that the evolution of a nation's real income depends on its accumulation of physical and intellectual capital and on the quality and efforts of its workforce. Moreover, nothing about the experience since 1981 would cause us to doubt the time-honored conclusion of economists that tax rules influence economic behavior and that high marginal tax rates

reduce incentives.

Indeed, the evidence suggests that the reduction in tax rates did have a favorable effect on work incentives and on real GNP and that the resulting loss of tax revenue was significantly less than the traditional revenue estimates would imply. Traditional supply side considerations are undoubtedly important in the design of economic policies in general and of tax policies in particular. But the miraculous effects anticipated by some of the new supply side enthusiasts were, alas, without substance.

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Bibliography

- Feldstein, Martin, "The Retreat from Keynesian Economics," The Public Interest, Summer 1981, 64, 92-105.
- _____, "The Conceptual Foundations of Supply Side Economics," in Supply Side Economics in the 1980's, proceedings of a conference sponsored by the Federal Reserve Bank in Atlanta and the Emory University Law & Economics Center, May 1982.
- _____, Inflation, Tax Rules and Capital Formation, Chicago: University of Chicago Press, 1983a.
- _____, Behavior Simulation Methods in Tax Policy Analysis, an NBER Project Report, Chicago: University of Chicago Press, 1983b.
- _____, "The 1983 Economic Recovery: Lessons for Monetary and Fiscal Policy," 1986, forthcoming.
- Lindsey, Lawrence, "Taxpayer Behavior and the Distribution of the 1982 Tax Cut," NBER Working Paper No. 1760, 1985a.
- _____, "Estimating the Revenue-maximizing Top Personal Tax Rate," NBER Working Paper No. 1761, 1985b.
- Tobin, James, "Unemployment in the 1980s: Macroeconomic Diagnosis and Prescription," in Andrew Pierre (ed.), Unemployment and Growth in the Western Economies, New York: Council on Foreign Relations, 1984.