THE REAGAN ECONOMIC PROGRAM

James Tobin
Robert Hall

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Opening Remarks

John J. Balles and
Michael W. Keran*

Keran. We would like to welcome you to the Federal Reserve Bank of San Francisco's Economic Series—a lecture series which has been going on for the past seven and one half years. The series has been designed to bring together in one place people from diverse backgrounds—academia, the business community and the financial community—with a common interest in public-policy issues. We hope that, with this joining of minds, we will all learn something useful.

Today's seminar is a special one—partly because we have not one, but two speakers. The only previous occasion of this type was four years ago, when we had a debate on the monetarist controversy by Professor Franco Modigliani, then President of the American Economic Association, and Professor Milton Friedman, who had just been awarded the Nobel Prize in economics. Recently, on rereading the summary of that debate, I found that it had an interesting and current ring to it. Basically, the debate concerned whether monetary policy should be used to stabilize the business cycle, or used to reduce the inflation rate. Four years ago, the Carter Administration clearly chose to use monetary policy to work on the business cycle. Today, we have another, new administration, which has unveiled perhaps some of the most dramatic and far-reaching economic proposals we've had since the New Deal. And we're very fortunate to have two distinguished and knowledgeable speakers to discuss the Administration's program.

Balles. Michael Keran has given me a very easy and pleasurable assignment today—the privilege of introducing our guest speakers. I join Mike in welcoming our friends from the business, banking and academic communities. From my personal standpoint, it's a great relief to be listening to rather than giving a speech, since in this way I get my intellectual batteries recharged from time to time.

Our principal speaker today, as you know, is Professor James Tobin, Sterling Professor of Economics at Yale University. Professor Tobin hardly needs an introduction to a group like this; still, I'm going to give a few highlights. Throughout his long career — his first published paper appeared 40 years ago this month in the *Quarterly Journal of Economics* — Professor Tobin has been interested in the impact of public policy on the macro economy, and especially on the twin problems of inflation and unemployment. (That first paper, for example, concerned the impact of a general wage change on employment and the price level.) Over the years he's made distinguished contributions in economics, always seeking to maintain a balance between theoretical rigor and empirical relevance—trying to avoid both measurement without theory, and theory without empirical implications. This concern with the real world, the political economy in its broadest sense, has also made him a valued advisor to presidents and to seekers of the presidency. And as you well know, he served 20 years ago as a member of the President's Council of Economic Advisers. He's been particularly active in the area of macroeconomics most relevant to the Federal Reserve—the structure of financial markets, and the links between the Fed's policy actions and the real economy via the banking system. The money-market models we use today to guide Fed policy owe a great deal to the pioneering work of Tobin and generations of his students, many of whom have found their way into the Federal Reserve System. We're fortunate to have him with us today to discuss the President's economic-policy package. Perhaps he'll also have something to say about the role of the Federal Reserve in dealing with the nation's economic problems. I'm happy to introduce to you Professor James Tobin.

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The Reagan Economic Plan — Supply-side, Budget and Inflation

Presentation by James Tobin

It's nice that you have a visitor from the East every four years, at the beginning of a new Administration. I'd like to assure everybody that the first article I published, to which President Balles just referred, was, like many of my subsequent ones, an anti-Keynesian paper.

A speaker who casts doubts on President Reagan's Economic Recovery Program is likely to be as unwelcome as a ghost at a wedding feast. After viewing the euphoria of the joint session of Congress when the President displayed his resilience and his oratorical magic, I hate to be a wet blanket. I wish that his was a cause to which I too could rally. I would like to be enthusiastic about the dawn of the New Beginning.

There are several ways in which we might view the Program. We could examine its *micro*-economics, how it reorders the nation's priorities, reallocates the country's resources, and redistributes income, wealth and power among individuals, groups, and regions. These may be the most important issues, the most fundamental new directions. The Reagan counter-revolution proposes to shift resources from public sector to private sector, from civilian government to national defense, from the Federal government to state and local governments, from beneficiaries of social programs to the taxpayers, from the poor and the near-poor to the affluent and the very rich. These proposals deserve to be considered in detail, item by item, and evaluated in terms of their economic efficiency and equity.

However, the Administration bills and sells its program primarily as a *macro*-economic policy. The President and his spokesmen appeal for support of their counter-revolutionary reallocations and redistributions not on their intrinsic merits, but on the grounds that they are necessary and sufficient to solve the problem of stagflation. Here, we are told, is the remedy, the only remedy, for high unemployment, high inflation, low growth, and lagging productivity. We are asked to swallow the micro-economic medicine not because it tastes good but because it is good for what ails us. So far, it appears, Congress, press, and public readily accept the program as the necessary remedy of our macro-economic ills.

It is the macro aspect of the program that I propose to discuss, as is only appropriate at a central bank. I'll begin by reminding you that there is precious little evidence in international experience that successful macro-economic management is inversely correlated with size of government, tax burdens, public debt, and social transfers. Some countries whose macro-economic performance we envy have much larger public sectors, more generous social welfare programs, greater tax burdens, and higher budget deficits.

The Reagan recovery program, viewed as macro policy, has a fiscal side and a monetary side. Together they are projected to accomplish the disinflation and the real economic growth shown in columns four and five of my Table 1 and columns one and three of my Table 2.

A neutral fiscal package

The fiscal policy, viewed from the standpoint of conventional aggregate demand analysis, does not seem to be a significant factor of either stimulus or contraction over the five years for which it is projected. It is important to judge the impact of fiscal policy against what is and has been going on, last year and this year, and not to use as a hypothetical reference path President Carter's January budget. The Carter budget, since it eschewed tax cuts to offset fiscal drag, would have tightened fiscal policy dramatically over the next few years. The Congressional Budget Office (CBO) compares the Reagan budget program with a more realistic baseline, the Carter

budget modified for 1982 and 1983 by some business tax reductions and by a 10 percent personal income tax reduction and by unspecified tax cuts to maintain effective tax rates constant after 1983. The CBO projections show little difference between the Reagan budget and this baseline in macro impacts. If anything, the Reagan program is a little tighter than the assumed baseline. Reagan spends less and taxes less, and the net effect is close to neutral.

Actually the high employment budget deficit (calculated for, say, 6-percent unemployment) declines slightly over the next few years under the Reagan proposals, even when the Administration's optimistic inflation scenario is replaced by the more pessimistic price forecasts of the CBO and private model-builders (see Table 3). These are conventional Keynesian calculations, without supply side optimism. (Neither do they apply to the federal government the inflation accounting we recommend to private businesses, which would of course tell us that even the actual budget is already balanced.)

The composition of the budget, as well as its totals and its balance, affects its macro-economic impact. Under the Reagan program, federal purchases of goods and services rise because of the defense build-up. Transfers and taxes fall. The changes in composition are large, but I think they don't change the macro story just told. For the same budget totals, the shift to defense purchases is expansionary. On the other hand, the shift of purchasing power from liquidity-constrained transferees with high marginal propensities to consume to higher income taxpayers is moderately contractionary. Some economists believe that defense is intrinsically highly inflationary and cite with foreboding the fact that Reagan's projected build-up is comparable percentage-wise to Johnson's Viet Nam spending binge. The analogy is far from perfect. This defense build-

Table 1
Monetary Growth Targets vs. Reagan Projections of Inflation and Real Growth Implications for Monetary Velocity
(percent per year, yearly averages)

Year	(1) Monetary (M−1B) Growth $\left(\frac{\Delta M}{M}\right)$	+	(2) Velocity Growth $\left(\frac{\Delta V}{V}\right)$	=	(3) Nominal GNP Growth $\left(\frac{\Delta \$GNP}{\$GNP}\right)$	=	(4) Price Inflation $\left(\frac{\Delta P}{P}\right)$	+	(5) Real GNP Growth $\left(\frac{\Delta Q}{Q}\right)$
1980 actual	6.7		2.2		8.9		9.0		-0.1
	Announced Policy		Implied by Other Columns		Reagan Administration Projections*				
1981	3.5 - 6		7.6 - 5.1		11.1		9.9		1.1
1982	3 - 5.5		9.8 - 7.3		12.8		8.3		4.2
1983	2.5 - 5		9.9 - 7.4		12.4		7.0		5.0
1984	2 - 4.5		8.8 - 6.3		10.8		6.0		4.5
1985	1.5 - 4		8.3 - 5.8		9.8		5.4		4.2
1986	1 - 3.5		8.3 - 5.8		9.3		4.9		4.2

*Office of Management and Budget, *Fiscal Year 1982 Budget Revisions*, March 1981, Table 6, p. 13.

Discrepancies between (3) and (4) + (5) are in original sources, and are due to second-order effects $\left(\frac{\Delta P}{P} \cdot \frac{\Delta Q}{Q}\right)$, quarterly compounding, and rounding.

up starts in an economy with a much larger amount of slack than there was in January 1966. And it lacks the compulsion to disregard costs and budget contraints that an actual war provides.

No observer of the current political scene can forbear comment on the ironies of the political parties' reversals of roles. Now the Republicans defend planned deficits against Democratic attack, advocate tax cuts not just to arrest recession but to sustain incipient recovery, and resist Democratic proposals to tilt tax reduction further toward businesses at the expense of individuals. It was a Democratic President who deliberately declined, ever since 1977, to recommend tax cuts to compensate for fiscal drag and bracket drift, and who sanctimoniously foreswore countercyclical fiscal measures to overcome the recent recession. It is the Democrats in Congress who now issue dire warnings of the inflationary effects of stimulating the economy by three years of tax reduction even when the unemployment rate is 7 ½ percent and capacity utilization is barely 80 percent. It is the Republicans — some of them, it is true, without full conviction in their new religion — who say that it is idle and self-defeating to try to balance the budget by higher and higher effective tax rates. The final irony is that it is a Republican budget, proposed by a President who is a free enterprise hero, to which the securities markets are currently registering a vote of no confidence.

The budget is taking a bad rap from those, whether liberal Democrats or conservative investment bankers, who say it is a reckless gamble to reduce taxes so much. To say this is not to agree with extravagant Administration claims that their package increases the national propensity to save, but only to say that it doesn't decrease it; clearly the tax cuts by

Table 2
Real Gross National Product and Unemployment, 1980-86
Reagan Scenario compared to Conventional Estimates

	(1)	(2)	(3)	(4)	(5)	(6)
	GNP (1980 $billion)		Unemployment (%)		GNP (1980 $billion) Conventional Estimate for Reagan Unempl.	Reagan Scenario GNP Relative to Conventional Estimate
	Reagan Scenario	Estimated Potential at 6% Unempl.	Reagan Scenario	CBO Alternative		
1980	2629	2746	7.2	7.2	—	—
1981	2658	2815	7.8	7.8	2663	.998
1982	2769	2886	7.2	7.9	2802	.988
1983	2908	2958	6.6	7.8	2914	.998
1984	3039	3032	6.4	7.7	3001	1.013
1985	3167	3108	6.0	7.5	3108	1.019
1986	3300	3185	5.6	7.2	3217	1.026

(1) and (3) Office of Management and Budget, *Fiscal Year 1982 Budget Revisions*, March 1981, Table 6, p. 13. GNP converted to 1980 dollars by deflator projections given in same scenario.

(2) and (5) Author's estimates, assuming (a) Potential GNP grows at 2.5% per year, (b) $Y^* - Y = Y[.025(U-6.0)]$ where Y^* is potential GNP (2), U is unemployment percentage (3), .025 is the assumed Okun's Law coefficient, and the equation is solved to give Y, "actual" GNP (5).

(6) = (1)/(5). For 1986, the Reagan scenario gives real GNP 2.6% higher than its unemployment projection would indicate in a conventional Okun's Law calculation.

(4) Congressional Budget Office estimate of unemployment conditional on Reagan budget with less optimistic economic forecast. CBO, *An Analysis of President Reagan's Budget Revisions for Fiscal Year 1982*, Staff Working Paper, March 1981, Summary Table 3, p. xviii.

themselves, without the expenditure cuts, would diminish saving relative to GNP. Nor is it to agree with Lafferite views that the tax cuts will actually maintain or increase revenues. That is most improbable, as I shall explain below.

In judging the fiscal package to be more or less innocuous in its macro-economic impact, I am not endorsing it. I have serious micro-economic and distributional objections, but I will confine myself here to two macro-economic reservations. First, I regret that once again opportunities are being lost to use tax reduction to gain ground on inflation. We could cut taxes that directly boost labor costs and prices, e.g. by reducing payroll levies. We could go further and offer tax inducements for disinflationary wage and price behavior. Second, we could aim for a different fiscal-monetary mix, one better designed to foster capital formation and growth. In my opinion, that would involve a tighter budget

Table 3
The Federal Budget, 1980-84
Outlays, Revenues, Deficit, High Employment Deficit

	(1)	(2)	(3)	(4)	(5)	(6)
	Budget Outlays ($billion)			Budget Revenues ($billion)		CBO Alternative Inflation Scenario
	Reagan Estimates	CBO Estimates for Reagan Scenario	Estimates for 6% Unempl. and CBO Inflation	Reagan Estimates	Estimates for 6% Unempl. and CBO Inflation	% increase in GNP Deflator
1980	580	580	577	520	554	
1981	655	660	657	600	662	10.3
1982	695	708	716	650	710	9.2
1983	732	740	761	709	765	8.6
1984	770	782	812	771	827	8.1

	(7)	(8)	(9)
	Deficit ($billion)		High Employment Deficit ($ billion)
	Reagan Estimates	CBO Estimates for Reagan Scenario	Estimates for 6% Unempl. and CBO Inflation
1980	60	60	23
1981	55	60	-5
1982	45	58	6
1983	23	31	-4
1984	-1	11	-15

(1), (4), (7) Congressional Budget Office, *An Analysis of President Reagan's Budget Revisions for Fiscal Year 1982,* Staff Working Paper, March 1981, Summary Table 1, p. xiii.

(2), (8) Reagan estimates plus subtotal for Alternative Programmatic Assumptions, Spending Rates, and Other Factors, CBO, *op, cit.,* Summary Table 4, p. xxi.

(6) CBO alternative inflation forecast conditional on Reagan program, *op. cit,* Summary Table 3, p. xviii. Compare Reagan scenario column (4) of Table 1.

(3) Column (1) plus Total Reestimates from CBO Summary Table 4, *loc. cit.,* less author's estimate of reduction in outlays due to difference between CBO unemployment projections in Summary Table 2 and 6%. In principle, column (3) differs from (1) by adding outlays due to higher CBO estimates of inflation and interest rates and by subtracting outlays, mainly unemployment compensation, due to projected unemployment rates above 6%.

(5) Column (4) multiplied by (1 + 1.5(x-1)) where x is the ratio of column (2) Table 2 to column (1) Table 2, i.e., potential GNP to projected actual GNP. The elasticity of revenues with respect to GNP is assumed to be 1.5.

(9) = (3) - (5) Negative figures are surpluses.

policy compensated by a monetary policy that would give us lower real interest rates.

Monetary policy: disinflation the Fed's job

I turn now to monetary policy, where the greatest inconsistencies in the Reagan recovery program occur. The President and his Administration have assigned the Federal Reserve responsibility for inflation. You take care of prices, they say in effect, and we'll get the economy moving again. Criticizing imperfect marksmanship of the past, the President and his economic policy-makers order the Fed to cut the rate of monetary growth in half over the next five years. This was already the Fed's policy, as anyone who listens to Paul Volcker knows. Now he has Beryl Sprinkel and other monetarists looking over his shoulder, if not waiting in the wings.

The monetary targets of the Fed and the Administration are shown in the first column of Table 1. The idea that money and prices can be detached and delegated to central bankers while Congress and the Executive independently take care of budget, taxes, employment, and output is the kind of fallacy that makes exam questions for freshman economics, a fallacy now elevated to Presidential doctrine. If Amtrak hitches engines at both ends of a train of cars in New Haven station — we still do have a railroad there — one engine heading west to New York, the other east to Boston, and advertises that the train is going simultaneously to both destinations, most people would be skeptical. Reagan is hitching a Volcker engine at one end and a Stockman-Kemp locomotive to the other and telling us the economic train will carry us to Full Employment and Disinflation at the same time.

This inconsistency is shown in Table 1. The third column is the official Administration projection of nominal GNP, equal to the totals of columns four and five, the Reagan scenarios for inflation and real output growth. Subtracting the monetary targets of column 1 from the dollar-GNP projections of column 3 gives the implied growth rates of velocity of M1B, column 2. The two numbers correspond to the two limits of the M1B target brackets.

There has never been a two-year period over which the average growth of M1B velocity has exceeded 5 percent. It would have to beat that in each of the next five years, hitting 7, 8, almost 9 percent to make the Reagan scenario come true. These increases in velocity are beyond historical experience, even in the recent decade of unprecedented financial innovation. Finance is one sector where American technology remains the best in the world, and the possibility of even faster progress in economizing cash can't be completely ruled out. But if policy-makers were to accept rescue from velocity miracles, or *a fortiori* from further regulatory changes, they would be substituting shadow for substance, appearance for reality. Although the Fed might be tempted by any escape route from the credibility impasse they have painted themselves into, I assume the Fed really means to do literally no more than what their targets say, and to do less if the spirit of the policy so dictates.

This translates, whether the Administration realizes it or not, into significantly lower rates of growth of dollar spending on GNP than the official projections (column three). Of course, another way to achieve high velocity growth is to engineer even higher nominal and real interest rates than those we're now suffering. But they would surely be inconsistent with the substantial recovery of real and nominal GNP promised by the President (columns three and five). On the other hand, if the inflation and interest rate projections of the Administration were realized, velocity would slow down.

Missing: a strategy for disinflation

As devastating as this inconsistency is to the credibility of the President's program, the scenario contains a more fatal flaw. This is the division of nominal GNP, column 3, between inflation, column 4, and real output growth, column 5. It defies historical experience to expect price inflation to subside as rapidly as shown in column 4 while output recovers as vigorously as projected in column 5. Experience tells us the combination is a most

unlikely one, given the stubborn inertia of existing patterns of inflation. Experience tells us that disinflation requires recessions, prolonged slack, and high unemployment. What entitles this Administration to expect to cut inflation in half while output is growing faster than its sustainable potential for five years?

The only answer that has trickled out of Washington is an appeal to self-fulfilling expectations. The public will read column 5. Observing the decisive budgetary moves of the new Administration, believing them to be the proper medicine for inflation as advertised, the public will act to make the predictions come true. That means they will negotiate lower wage bargains and slow down price increases. Previous optimistic inflation forecasts from the White House have not been self-fulfilling or otherwise fulfilled, but maybe this time will be different.

This is an expectations argument, but certainly not a rational expectations theory. Rational expectations require a model that makes sense, one that truly connects policy actions to results. Rational expectations not only generate but are generated from such a model. In this case no such model exists, and Robert Lucas and Robert Hall are as unlikely as Lane Kirkland and Sam Church to believe and act upon the advertised disinflation.

The two major English-speaking democracies are in conservative economic hands, but the policies and public stance of Margaret Thatcher in Great Britain are very different from those of Ronald Reagan in the United States. Their Prime Minister threatens workers, managers, and plain citizens like an authoritarian schoolmaster disciplining an unruly class. You won't have jobs, profits or prosperity until you stop inflating your wages and prices. Our President promises disinflation without tears, indeed with prosperity. He encourages unions and managements to carry on business as usual. After all, inflation is only the government's fault, and all we citizens are asked to do is to accept tax goodies and stop indulging the poor. The Federal Reserve, it is true, has been following a Thatcher-like policy but in whispers. I am one of the thousand or so Americans who hear and read Paul Volcker and know that M1B is not an army rifle. I pay attention to Henry Wallich too. I believe they will do what they say they will do, and I am duly scared. If *I* were Lane Kirkland, I would take the monetary threats seriously and tell my constituent unions to take it easy.

The Fed's muted threat is quite different from Her Majesty's First Minister's standing up in Parliament and throughout her country to say that she doesn't care how much unemployment there is for how long, or what is the real rate of growth or decline; she will stick it through whatever the pain, however long it takes to eliminate inflation. Reagan has said nothing like that, and Volcker isn't well known in Peoria or Spokane, in the shops and offices where wages and prices are made. Federal Reserve threats are heard in financial circles all right, but the bond market does not seem to be impressed. In summary, if the Reagan anti-inflation strategy depends on expectations, the Administration has done and said nothing to make expectations work in its favor.

Let there be no illusion. There is no way to reduce inflation in this country so long as wage increases proceed at 10 percent a year. There is no possible miracle of productivity that can validate such a trend in money wages. Our lost 2 percent per year productivity trend may reappear as mysteriously as it vanished. If we are very, very lucky, policy to speed investment and research and development might add another half point or full point, not this year or next but some years down the road. But with the best of good fortune we would be left with domestic core inflation of 7-8 percent unless the money wage pattern is broken — and it may be more difficult to break it when workers can claim to have earned more via improved productivity. We must also expect an adverse trend in the terms of trade between American labor and resource-based commodities imported from abroad or produced within the country. This may be equivalent on average to a half point or full point of decline in worker productivity.

I emphasize the persistent inertial trend of money wages in the central non-agricultural "fixprice" sector of our economy, because no lasting solution of our inflation is possible unless it is brought much closer to the sustainable trend of productivity. In short runs, especially month to month and quarter to quarter, popular price indexes can vary widely around this core inflation rate, from the weight of flexible prices loosely tied to U.S. wages. In the next eighteen months, for example, the volatile elements in the Consumer Price Index might be favorable, and the Administration might be able to point to some apparent successes in its battle against inflation. If mortgage interest rates stay put or fall, the housing component will contribute less to CPI inflation news than in 1979-80. Perhaps we have purchased a respite on the oil front by selling Awacs to Saudi Arabia, as well as by slowing down our economy and swallowing the decontrol of domestic oil prices in one gulp early this year. Our tight monetary policy, if it does nothing else, is appreciating the dollar against other currencies; this may be bad for the U.S. export-import position but it lowers dollar prices of some imports and world-traded commodities. Food price prospects, always uncertain, are not so favorable, given the end of the grain embargo and the low level of world stocks. My purpose is not to predict prices but to warn that transient luck in the volatile elements of price indexes does not signify final victory, any more than transient misfortune justified panic about runaway inflation acceleration in 1979-80.

At the beginning of my talk, I pointed out that countries with enviable inflation records in recent years are not invariably those with Reagan-like fiscal policies. If the successful countries have a common characteristic, it is that they have some kind of handle on money wage decisions.

Here in the United States whoever was the victor in the November 1980 election had, I thought, the rare opportunity to use the window of good feeling that Americans open at the start of a new Presidential term to gain control over our wage-price spiral. To engineer disinflation without a protracted dose of recession and economic stagnation, I believe it is necessary to give everybody assurance that everybody else is going to disinflate. Otherwise the fear and suspicion of each group that it will lose real and relative income lead it to stick to the existing inflationary pattern. This makes tough going for a Thatcher policy, and even tougher going for a contractionary policy without a clear and credible threat.

For this reason, I have favored a pre-announced schedule of gradually declining standards for wage increases over a five-year transitional period. Inducements to obey the guideposts would be provided by payroll tax rebates for employees in complying firms, and for employers too if their percentage markups do not rise. The guidepost schedule would be consistent with a macro-economic disinflationary policy to which the Administration, Congress, and Federal Reserve would be solemnly and visibly committed. Since nominal GNP growth and wage-cost inflation would decline in concert, there would be neither suppressed demand-pull inflation nor the damage to real economic performance caused by cutting monetary demand growth while money cost inflation proceeds unabated.

Such a policy clearly requires a consensus among labor, business, and government, and such a consensus clearly requires strong and persuasive leadership by a popular President. We lost that opportunity this year, just as we lost the chance to follow a "cold turkey" policy with some chance that inflation would melt faster than previous statistical evidence leads us to believe it will.

Supply-side economics: no free lunch

But can't we take hope from the recent discovery that the economy has a supply side? This remarkable revelation plays a big role in the rhetoric that rationalizes the Reagan program, although, as I argued above, the fiscal program as macro strategy does not really depend on Laffer-Kemp calculus. The official macro-economic scenario does contain a small bit of supply-side magic. Real GNP five years out is somewhat larger, relative to the pro-

jected unemployment rates, than received "Okun's law" wisdom would allow. (Table 3, column 6) There appears to be on average an extra half percent per year of real growth, beyond what would normally accompany the unemployment reductions shown. It is not clear from what source these gains are supposed to come.

From labor supply? Supply-side wisdom is that the upward drift of marginal personal tax rates is drying up the supply of productive labor. That there has been such a drift, particularly since 1977, is undeniable, though it is not as great as often alleged. The Brookings Institution tax file permits calculation of the federal marginal rate of personal income tax, averaged over all brackets, faced by a breadwinner with spouse and two children: 1960, 18.8 percent; 1965, 15.9 percent; 1970, 18.2 percent; 1975, 18.0 percent; 1980, 21.6 percent. Yet it is hard to find evidence of a weakened propensity to supply labor in recent experience. Labor force participation, overtime hours of work, multiple job holding, weekly hours of work corrected for changes in industry mix — none of these indicators seem out of line with trends and cyclical effects dating from the 1950s and 1960s. Believe it or not, most of our seven million unemployed fellow citizens really do want work, and there are many "not in labor force" who do also. Finally, I observe that although the Administration's tax bill reduces marginal rates for taxpayers, especially those in high brackets, its budget cuts will seriously impair work incentives for low-income families and individuals dependent on welfare, food stamps, and other transfers.

In the belief that a Curve deserves a Theory, I have derived rigorously a Laffer Curve based on labor supply response to after-tax real wages. Indeed, I have derived two Laffer Curves, one for Tax Revenues and one for National Saving (more precisely for Tax Revenues plus Private Saving, which exceeds National Saving by the amount of Government Purchases, assumed constant.) These are pictured in Figure 1, which also contains a rather cryptic, but I hope sufficient, explanation of their derivation. The important parameters are the Cobb-Douglas elasticity of output with respect to capital, α, and with respect to labor, $1-\alpha$, and the elasticity of labor supply $1/\beta$. In the numerical example, I took both α and $1/\beta$ to be 1/3. That is a generous estimate of labor supply response; the consensus guess is no higher than 1/6. With these values my Laffer Curve peaks at a wage tax rate of 5/6. The National Saving Curve involves also the marginal propensity to consume, which I took in the exercise to be .4 for capital income and .8 for after-tax labor income. The peak of this second, and more economically significant, Laffer Curve is at a tax rate of 3/4. I doubt that we are on the wrong slope of either Laffer Curve now, and I hope we don't go there.

A more credible supply-oriented policy is to stimulate non-residential fixed investment, in the hope that accelerating the growth of capital relative to output and labor supply will raise productivity. As one of the Kennedy team that originated the Investment Tax Credit in 1962, I have some sympathy with this goal. Clearly I do not have time to discuss adequately the Reagan Administration's investment stimuli, so I will confine myself to four short remarks.

First, as I stated earlier, I regret that we cannot adopt a mix of macro-economic policies, fiscal and monetary, that would shift the composition of output toward capital formation. Why can't we? The main reason is simply the monetarist dogma embraced by the Administration, to which the Federal Reserve is hostage. This locks us into a particular path of a particular monetary aggregate, invariant to fiscal policy and other macro-economic circumstances.

Second, there are ways to provide investment incentives in the taxation of business that do not make a shambles of economic efficiency and tax equity, as the present proposals for accelerated depreciation do. If the intention is to make amends for the overstatement of taxable profits due to historical cost depreciation, there are straightforward ways of doing so without freezing into the tax code a depreciation system that will still be there if and when

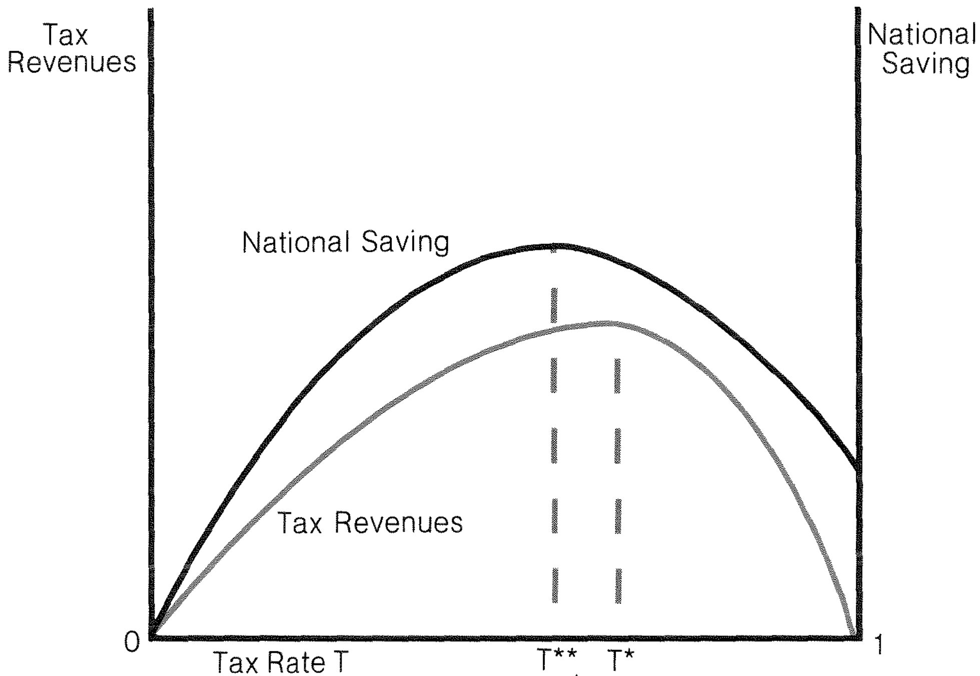
inflation abates. Anyway, this investment disincentive is offset, partially or fully, by another inflation distortion in the tax code, the deductibility of nominal interest.

Third, whatever investment incentive is enacted now should be effective immediately. Its impact is diluted by a gradual phase-in such as the Administration proposes, because this gives an inducement to delay investment projects.

Fourth, plant and equipment is not the only social capital. If we wish as a society to make better provision for the future, we should also be concerned with the preservation and improvement of human capital, natural resources, and public sector facilities and infrastructure, all of which are sacrificed in the Reagan budget, pervaded as it is by the ideology that only private business capital is productive.

The outlook, I am afraid, is for continued stagflation, with disappointing results on all fronts — inflation, unemployment, real output, interest rates, and capital formation. We will unwind the Great Society, redistribute income regressively, withdraw the Federal commitment to the environment, and we will have little or no macro-economic progress to show. The Program will not fulfill the promises that have led the country to support it. I wish I knew what will happen when the Administration, Congress, and public confront this reality.

Figure 1
Laffer Curves



α = capital share of output $\quad \frac{1}{\beta}$ = labor supply elasticity

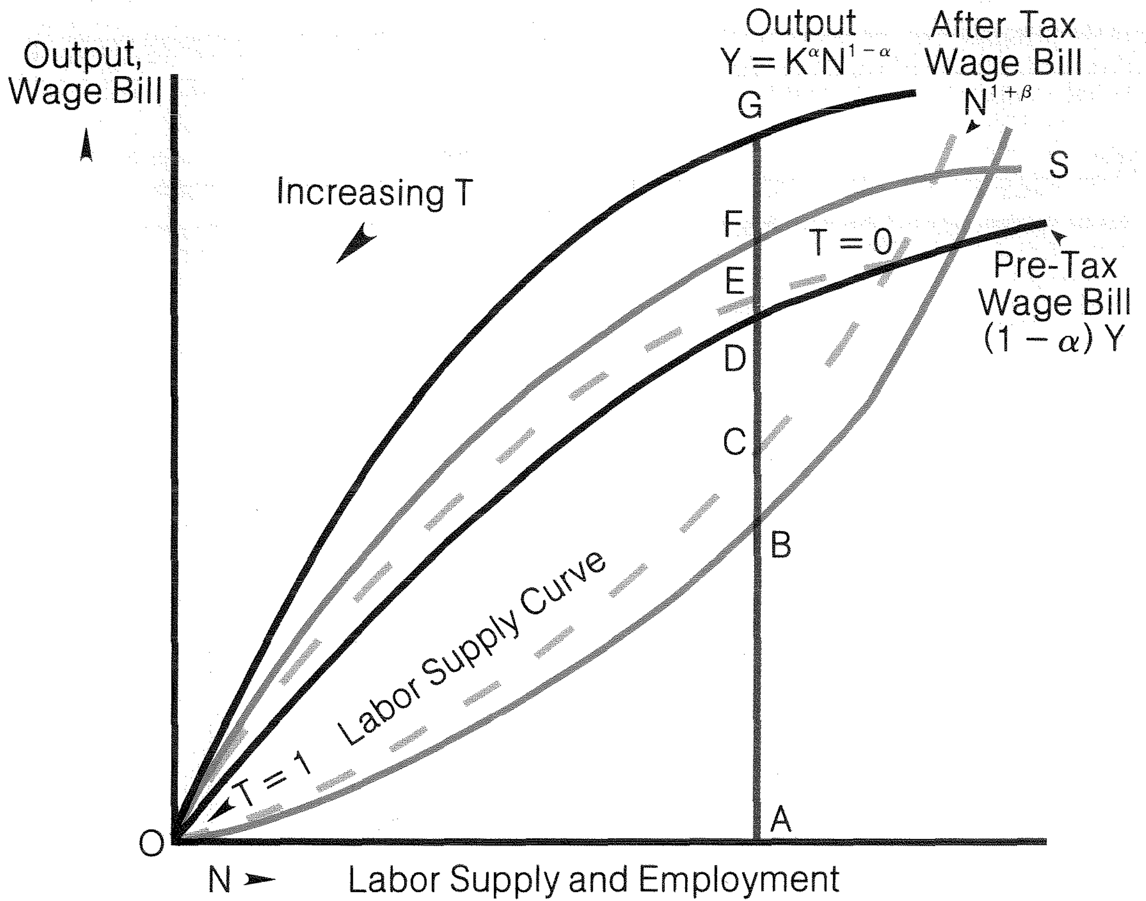
C_K = marginal propensity to consume capital income

C_W = marginal propensity to consume labor income

$$T^* = \frac{\alpha + \beta}{1 + \beta} \qquad T^{**} = 1 - \frac{1 - \alpha}{(1 + \beta)\,(C_W\,(1 - \alpha) + C_K\alpha)}$$

Figure 2

Derivation of Laffer Curves



AB: Workers' Consumption
BC: Workers' Saving
CD: Workers' Taxes
DE: Capitalist Taxes
EF: Capitalist Saving
FG: Capitalist Consumption
BF: Taxes and saving available for government purchases and private investment (G + I)
CE: Tax Revenues