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## CAN WE GROW FASTER?

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#### ABSTRACT

It is essential to distinguish between limits on national output and limits on its rate of growth. In the short run if output is below potential, demand stimulus can temporarily increase output and employment, with growth rates that cannot be sustained once the economy reaches full employment, potential output. This barrier is commonly called the NAIRU. The paper discusses the possibility that the economy can reach lower unemployment rates than previously thought, without increasing inflation. As to raising the sustainable rate of growth of potential output, the paper discusses skeptically various proposals: fiscal austerity, tax cuts, downsizing government. Many proposals can at best raise the level of output, not its sustainable growth; many can do neither; some are perverse. Government policies to raise national saving, private and public investment in tangible and human capital, science and technology are the best hopes, but the payoffs are likely to be slow.

### CAN WE GROW FASTER?

#### by James Tobin

The capacity of the American economy to produce and to grow is commanding unusual attention. Current rates of growth of real (i.e. inflation-corrected) Gross Domestic Product (GDP) are in the range 2 to 2.5 percent. They compare unfavorably with the 3.9 percent spurt 1982-1989 and the 3.5 to 4.0 percent average rates sustained 1946-1972. "A rising tide lifts all boats" was a favorite aphorism of Jack Kennedy and Lyndon Johnson. Were the economy to grow 3.5 percent per year from 1996 to 2050 instead of 2.5 percent, GDP in 2050 would be \$68 trillion instead of \$36 trillion. That 86 percent gain would solve a host of problems that now look intractable, notably Social Security and Medicare. Such is the magic of compound interest.

That greater national output and faster GDP growth are desirable does not mean they are feasible. It is too much to expect that any government action can raise the GDP growth rate forever or until 2050 or indeed for more than a few years. Maybe good policy can raise the level of GDP for years ahead, but generally not its growth rate.

To keep raising GDP year after year, it would be necessary to keep repeating the dose. Consider for example a commonly asserted cause-toeffect chain resulting from a cut in marginal income tax rates. People choose to work more; employment and GDP rise. The change in behavior takes a bit of time, maybe a year or two. During that period, growth rates are higher. But once workers' adjustments are complete, the rates of growth of employment and GDP revert to what they were before. Employment and GDP remain at higher levels, but to boost them again tax rates would have to be cut again.

The same is true of other "pro-growth" medicines, like those involving

Federal Reserve interest rate reductions or cuts in budget deficits. Proposals billed as growth-increasing are more accurately GDP-increasing; the increases in growth rates are transient.

Pro-growth prescriptions stress incentives to produce more. At the same time they typically augment purchasing power in the hands of households and business firms, thus expanding aggregate demand for goods and services. Frequently actual GDP rises in response. To read accurately past experience with these policies, it is crucially important not to interpret demand-side effects as supply-side successes. Unfortunately confusion of supply and demand, the most fundamental distinction in economics, is all too common in public and political discussion.

### DEMAND AND SUPPLY: BUSINESS CYCLES AND SUSTAINABLE GROWTH

Here I try to set forth a coherent framework in which levels and growth rates fall into place and supply-side and demand-side are kept straight.

The economy is subject to two supply constraints. One is the level of its capacity to produce goods and services. The other is the rate at which this capacity is growing. The output of the economy in a given year is limited by its available productive resources — labor, capital goods, land and other natural resources — and by their productivity. This constraint determines Potential Gross Domestic Product (PGDP). PGDP grows as population and labor force grow, as workers improve in skill, as capital is accumulated, and as scientists, inventors, and innovative entrepreneurs create new products and technologies. These factors change quite gradually. In Figure 1 the smooth track is the estimated PGDP (log scale), full employment output 1952-1995. The slope of this track is the PGDP growth rate, shown as 2.5 percent

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recently.

The PGDP growth rate can be decomposed into growth of labor input in hours per year and growth of productivity per hour. In the glorious quartercentury after World War II both components were 1.75 to 2.0 percent per year, and now they are 1.0 to 1.25 percent. The slowdown in labor force growth is demographic: birth rates are low; by now women are already in the work force. It is not a matter of political concern, although income tax cuts are touted as a work incentive. No proposals to subsidize child-bearing or open the gates to immigrants are on the table. The hand-wringing is about the decline in productivity growth since about 1973. It happened in other advanced capitalist democracies too, and its causes are mysterious.

Most of the time the economy is not operating at full potential, but with excess unemployment and idle industrial capacity. Actual GDP falls short of PGDP — as shown by the wiggly track in Figure 1. The shaded shortfall of actual from potential, the GAP, is the business cycle. Occasionally this GAP is negative; the economy has overshot its normal capacity, as in the Vietnam escalation 1966-1969. Figure 2 shows how fluctuations in the GDP GAP and in unemployment are synchronized, with the GAP's amplitude from two to three times that of the unemployment rate, a regularity known to economists as "Okun's law."

Business cycles, ups and downs in GAPS and unemployment rates, reflect fluctuations in demand, that is in spending on goods and services. When actual GDP falls short of potential, the supply constraint is not binding. Aggregate demand is calling the tune. New demands can be met as employment of labor and utilization of capital are increased. A business cycle recovery, from 1982 to 1989 or from 1992 to 1996 is a demand-side phenomenon, an expansion of demands for goods and services and for the workers to produce them. Frequently government policies provide stimuli — in the 1980s tax cuts, defense expenditures, and eased monetary policies. During recoveries GDP growth rates are high, unsustainably high.

The PGDP growth rate, the 2.0 or 2.25 or 2.5 percent, is often called sustainable growth. It is the growth of GDP at which the unemployment rate and the GAP remain constant. Along the PGDP path the GAP is not just constant; it is zero. Along a lower parallel path with the same growth rate, the GAP would also be constant, not zero but, say, 3 or 5 percent. The economy is not limited to "sustainable growth" unless it is operating at full capacity. By the same token, it cannot grow at an unsustainable rate once it reaches the PGDP path.

#### THE "NAIRU" AS CAPACITY CONSTRAINT

What determines the capacity constraint? For a large and diverse market economy, it cannot be a simple measurable physical limit. A peacetime freemarket economy cannot mobilize the nation into the kind of three-shift everybody-works command economy that won World War II. The symptoms of a normal economy overheated by excess demand are escalations of price and wage inflation. The unemployment rate is an important barometer of inflation pressure. When unemployment and GAP are low, employers have both means and incentive to bid up wages, and workers have more bargaining power. Product prices rise along with labor costs.

What numerical unemployment rate defines "full employment" and corresponds to PGDP? What is the lowest inflation-safe unemployment rate, the notorious NAIRU, the Non-Accelerating-Inflation-Rate-of-Unemployment? The

theory is that, at unemployment rates lower than the NAIRU, rates of wage and price inflation rise. Before 1995 the consensus estimate of the NAIRU was six percent. Now that unemployment has been below 6 percent ever since August 1994 without evidence of "accelerating" inflation, NAIRU estimates are being revised downward, and PGDP correspondingly revised upward.

Much of the concern and anger excited by low growth rates is misdirected. The critics are really complaining of the NAIRU: the number is too high or the very concept is flawed. If the NAIRU constraint on GDP were relaxed, GDP could grow faster, but only temporarily. For Alan Greenspan and his colleagues at the Fed, it is the NAIRU — not the 2.0 to 2.5 percent ceiling on sustainable (PGDP) growth — that stands in the way of monetary stimulus of demand. Were they convinced that the economy had room for noninflationary expansion, they would presumably accommodate or actively stimulate extra demand. That is what they have done the past two years.

The important truth in the NAIRU concept is that GDP cannot be expanded indefinitely by demand stimulus. The practical issue is the location of this constraint. Are we now at or above potential output? Or is there still room for expansion?

NAIRU is not a precise number such that a further tenth of a point reduction of unemployment suddenly and irretrievably unleashes a torrent of inflation. Rather it is the midpoint of a zone, within which inflationary pressures are somewhat more widespread and more likely the lower the unemployment rate. Nor is the numerical value of NAIRU an eternal constant. It moves with economic, social, technological, and demographic change. Evidently it was about 4 percent in the 1950s and early 1960s, rose to 5 and then to 6 or higher in the 1970s, before drifting down recently. Neither econometricians nor central bankers know for sure where NAIRU is at any particular time. Federal Reserve Chairman Greenspan and his fellow policy-makers on the Federal Open Market Committee must balance two risks. On the one hand, they might be keeping unemployment unnecessarily high, depriving the economy of extra output there for the taking. On the other hand, the economy may already be at or below NAIRU, so that expansionary monetary policy would accelerate prices and necessitate a corrective spell of tighter money and higher interest rates. The policy choice depends both on the Fed's estimates of this tradeoff of risks and on its relative value weighting of the two evils, unemployment and inflation.

Concretely, consider enough monetary demand stimulus to cut unemployment by half a point over one year. This would raise GDP by one percent (\$75 billion). During the year the growth rate would be a point above the sustainable rate. The addition to the level of GDP would persist year after year, although the GDP growth rate would revert to its sustainable rate.

This policy would be inflation-safe if NAIRU had fallen to a bit below 5 percent. That possibility is suggested by the striking absence of inflationary pressures at unemployment rates as low as 5.3 percent. Other statistics suggest that labor markets are not as tight as unemployment rates alone might indicate: the increased prevalence among the unemployed of job losers relative to job leavers; and the abnormal scarcity of vacancies indicated by helpwanted advertisements. See Figures 3 and 4.

Yet no one can guarantee that the NAIRU is not still close to 6 percent. If so, the one-year stimulus policy would bring higher inflation and tighter monetary policy.

## DO NOT MANDATE PRICE STABILITY AS THE FED'S PRIMARY OBJECTIVE

Since 1983 the Volcker and Greenspan Feds have pragmatically fine-tuned the macro-economy, balancing the two objectives of high employment and low inflation. U.S. macroeconomic performance has been by far the best among the G-7 countries.

Nevertheless a movement of growing strength among financial leaders, central bankers, and conservative economists throughout the world would dedicate monetary policy to "price stability" ahead of all other goals. Inflation hawks want stable zero inflation. The objectives of our Employment Act of 1946, "maximum employment, production, and purchasing power,' would be scrapped. This would be a very serious mistake. The cost in jobs and GDP of moving the inflation trend from its present three percent to zero would be considerable. Some of the cost would be permanent, not just transitional. The reason is that the relative wage adjustments inevitable in a dynamic economy are easier to make if they do not entail absolute cuts in money wages in declining sectors. Therefore they can be made with less unemployment when average inflation is moderately positive than when it is zero or negative. (Akerlof, Dickens, and Perry 1996)

In any case, zero inflation is an amorphous concept. Alan Greenspan is prominent among the many students of price inflation who believe that official price indexes overstate inflation by anywhere from 0.6 to 2.0 percentage points a year. Yet there is danger that inflation hawks inside and outside the Fed will weaken its resolve to keep the economy moving even as fast as current estimates of its sustainable rate of growth, and indeed might dilute its determination to avert outright recession. Under a new doctrine labeled "opportunistic disinflation" leaked from the Fed, patches of softness in the economy would be seen as opportunities to whittle away at the inflation trend, rather than as occasions for expansionary policy.

#### FISCAL AUSTERITY AS GROWTH POLICY

Monetary policy cannot be expected to lift the long-term sustainable growth rate. The Fed's role is to make sure that any productivity gains that occur spontaneously or as a result of supply-side policies are realized in jobs and output and do not go to waste in recessions and unemployment.

What policies can raise the level of capacity output or its rate of growth or both? Several proposals are prominent in current policy debates: (1) Reducing federal budget deficits and balancing the federal budget. (2) Cutting taxes, in particular marginal tax rates. (3) Downsizing government, in particular federal nondefense expenditure programs.

Advocates of fiscal austerity see it as positive supply-side policy, on the grounds that it increases the proportion of national output invested in productive future-oriented activities instead of present-oriented consumption. Attention is centered on business acquisitions of plant and equipment. Residential construction and purchases of consumer durables count too. Some government outlays are capital investments. Human capital embodied in the education, skill, and health of the population, especially the young, is no less important than buildings and machines. And one component of national wealth is the country's accumulation of claims on foreigners net of their claims on us.

Government deficit spending, it is argued, "crowds out" private investment by diverting private saving to purchases of government securities.

Aggregate national saving and investment are diminished. Budget balance then augments the supply of saving available to finance productive private investments. Interest rates in the capital markets fall to attract the additional private demands that can now be accommodated. As these investments come on line, capacity output (PGDP) is increased by their (marginal) productivity. The productivity and wages of workers benefit, because they are equipped with more and better tools.

This is a good story if properly used, but there are a few pitfalls:

First, the payoffs from durable long-term investments will be spread over many future years. Gains to PGDP will scarcely be perceptible within normal political horizons. A 2002 budget balance would, by my back-of-envelope calculation, raise PGDP in that year by 1 or 2 percent. This is the estimated result of reducing the federal debt outstanding in that year by 12 percent of PGDP and placing 5/6 of that amount of private wealth into productive domestic capital and 1/6 into repayment of foreign debt. Public debt interest rates would have to fall by 50 to 150 basis points to induce these reallocations. If it is assumed that a 3-point increase in the percentage share of national saving and investment in PGDP, relative to what would take place otherwise, continues thereafter, PGDP will eventually be another 6 or 7 percent higher. Increases in per capita consumption would be much smaller, only 1 or 2 percent, because the gains in PGDP cannot be maintained unless most of them are reinvested.

Second, an instance of a general point made at the beginning, higher national saving and investment is a recipe for a higher level of PGDP, not for a permanent increase in its growth rate. True, while the new higher level is being approached, the rate of growth will be a bit higher, more so for PGDP

than for consumption. But it will be tapering off. This follows from conventional "neoclassical" growth theory, which takes the sustainable growth rate to depend on demographic and technological factors independent of saving rates. Younger economists' ventures in "endogenous growth theory" seek ways in which growth rates are permanently changed by changes in national saving rates. These are still too speculative to guide policy.

Third, if the budget is balanced at the expense of public investment programs, the eventual economy-wide benefits are diminished by the losses of the social returns on those programs. The fervent apostles of budget balance stress the burdens of government debt on our children and their children, who will be taxed to meet interest charges. But meanwhile many of those children would lose irretrievably if deficits were attacked by cutbacks in public outlays for education, nutrition, and health. Since the federal government does not distinguish capital and current account budgets, as state governments do, all line items are fodder for deficit cutters.

Fourth, the potential gains from fiscal austerity will not be realized unless the economy continues to operate at capacity. The immediate impacts of cuts in deficit spending are demand-side-contractionary. They reduce spending on goods and services and destroy jobs. If taxes are raised, taxpayers curtail spending. If transfers to the aged, the poor, and the sick are diminished, the beneficiaries cut their spending too. If military procurement and highway- or school-building are slashed, the impacts are direct and obvious. The social gains of austerity require that the resources released by these contractions, or their equivalent, be employed elsewhere, producing the desired new investments. This is the task of monetary policy. It's up to the Fed to engineer the declines in interest rates needed to offset the fiscal

contractions. This transition was accomplished smoothly in 1993-94, and little active help from the Fed was needed. But this may not always be so.

#### TAX-CUTTING AS GROWTH POLICY.

Fiscal austerity is the priority of one school of conservative economics. Another school, loyal to the supply-side doctrines of Reaganomics, urges tax-cutting as the centerpiece of macroeconomic policy. What are the mechanisms by which cuts in tax rates are supposed to generate additional national output and higher growth of output, and as byproducts extra tax revenues? The proponents appeal to incentive effects — simple and obvious, the stuff of Econ 101, as University of Chicago Nobel economist Gary Becker is endlessly reported to have said.

Faced with a lower marginal tax rate, individuals will work more hours per week, more weeks per year, more years per lifetime. They will save more, because the government will take less of their interest, dividends, and capital gains. They will invest more in businesses, real estate projects, education and training, because they will be allowed to keep more of the profits, rents, and extra wages. Supply-side effects of this kind are basic economics. No one doubts their existence, but there are other effects too. The question is how important the incentive effects are, and what they add up to in relation to PGDP. The empirical evidence does not justify counting on these changes in behavior for any noticeable additions to PGDP or its rate of growth.

Consider. for concrete example, a 15 percent income tax cut for a married couple with two dependent children with pre-tax income, all wages, of \$35,000. In 1995 such a family paid \$2767 in income taxes (zero on the first

\$16,550 and 15 percent on the other \$18,450) and \$2677 in payroll taxes (excluding the half paid by employers), altogether \$5455, 15.6 percent of pretax income. The couple's marginal tax rate was 22.65 percent, the sum of 15.0 income tax and 7.65 payroll tax. A reduction of 15 percent, 2.25 points on the income tax rate would lower the family's marginal tax rate to 20.4 percent, enabling the family to keep 79.6 cents of an extra dollar earned, up 2.25 cents, 2.91 percent, from the former after-tax gain of 77.35 cents. Those marginal improvements are an incentive for family members to seek more work (which proponents assume they will find). Even if they work no more hours, however, even if their pre-tax income remains \$35,000, the family benefits. The reduction of 2.25 points (15 percent of 15 points) on the income tax rate gives the family \$415 a year (2.25 percent of \$18,450), a take home gain of 1.4 percent.

The example illustrates the point that tax-cut proposals are not purely incentives to change behavior. They give taxpayers more after-tax income even if they do not change behavior. These benefits have "income effects" that counter the incentive effects and may overcome them. Households might choose to work less, not more. This is the more likely if in addition to tax rate cuts the legislation offers new tax credits or deductions. This too is taught in Econ 101 in many universities.

What is the empirical evidence? A CBO study (1996) reviewed empirical studies of the effects of tax-rate changes on aggregate labor supply in hours. The summary conclusion was that a one percent increase in after-tax wage rates would lift labor supply by 0.0 to 0.3 percent. The incentive effect — "substitution elasticity" in economists' jargon — lies between 0.2 and 0.4; the "income elasticity" lies between -0.2 and -0.1. In the example above the

2.91 percent increase in take-home wage could be an incentive for a rise in hours of work between 0.58 and 1.16 percent, while the income effect could take away from 0.14 to 0.28 percent. Adding \$1000 in tax credits would magnify these income effects by 3.33 times, burying the incentive effects. No supplyside miracles here. And even if positive supply-side effects dominate, they are one-shot increases in labor supply and GDP, not permanent increases in growth rates.

Some tax cuts are designed as investment incentives. As demand stimuli, they have the virtue of expanding PGDP at the same time. This was the purpose of the Investment Tax Credit introduced by the Kennedy administration and turned off and on and off several times since. There is evidence that a good share of the intended response to the ITC was lost in subsidizing ongoing gross investments rather than incremental ones and in higher prices of capital goods,

On the macroeconomic scene, the supply-side payoffs of capital investments occur gradually over future years, while the demand impacts are felt right away. If there is no room in the economy, the Fed will raise interest rates and no net increase in aggregate investment will occur. As the Fed knows, investment booms can be just as inflationary as consumption booms. A true pro-growth policy, at times of full employment, would offset tax-cut investment incentives by cuts in government consumption spending or by tax deterrents to private consumption.

Incentives for investment are fruitless without saving to match. When labor and other resources are idle, investment spending can put them to work and saving from the new wages and profits will do the job. Consumption will

increase along with saving and investment as long as there is room in the economy for both. At full employment, however, along the PGDP track, lower national consumption is a requisite of higher national saving and investment. At full employment there is no way new investment spending itself can generate the needed saving.

Tax-cut incentives for household saving are popular in Congress. IRAs for a variety of ostensible purposes are multiplying. As growth policy via higher national saving and investment, they are likely to be useless or perverse, for two reasons. One is that taxpayers can usually qualify for the tax benefits while consuming no less, or indeed often more; they qualify for IRAs, for example, by using funds they already have, obtain by borrowing, or would save anyway. The other is that the lost tax revenue raises government dissaving unless Congress offsets it by raising other taxes or cutting expenditures.

A similar problem afflicts the proposal to cut capital gains tax rates, by 50 percent in the Dole program. The rationalization is the incentive given for investments, especially innovative entrepreneurial ventures. Risk-taking investors themselves might be somewhat ambivalent, because the rate cut means that the government absorbs a smaller fraction of losses as well as of gains. Anyway that rationalization does not apply to the trillions of unrealized capital gains on assets acquired in the past. Cutting the tax due on their realizations just gives windfalls to their holders, windfalls likely to raise consumption spending. (It's true that tax collections will increase in the short run, as owners "locked in" appreciated assets seize the opportunity to sell them.)

The best way to give a tax incentive to save rather than consume is to allow a deduction of net saving — purchases of capital assets net of borrowing and asset sales — in reckoning taxable income. To minimize windfalls to taxpayers who would be saving anyway, the deduction should be given only for the excess of net saving over a threshold which would rise with income.

The difficulty of targeting tax incentives to desired purposes afflicts many actual and proposed rate cuts, credits, and deductions, and many outright subsidies too. For example, though meant for students unable to afford college or other post-high-school education, or to attend private elementary or secondary schools, subventions to all who do enroll are mostly windfalls to persons doing these things anyway. There are sharper, more discriminating tools available.

### DOWNSIZING GOVERNMENT AS GROWTH POLICY

Budget-balancers and tax-cutters converge on the ultimate goal of downsizing civilian government. They frequently seek to reach the goal by squeezing government between the pincers of tax cuts and budget balance. The idea is that an economy with small government is more productive than an economy with small government, even if the budget is balanced in both. This can be rationalized by the inefficiencies and distortions of higher taxes. It is often reinforced by the allegation that government expenditures are inherently wasteful. There are many anecdotes but little evidence to support so sweeping a generalization. European countries with larger civilian governments have had higher growth rates than the United States and have been more successful in other dimensions. A discriminating approach to costs and

benefits would give governments credit for supplying public goods, coping with "externalities" and maintaining social safety nets. In the U.S. today, further cuts in federal discretionary nondefense programs are bound to come mostly from public investments — in education, research and development, public health and safety, medical research, environmental protection, and infrastructure. It is hard to see how such downsizing can increase potential GDP or speed up economic growth.

### KEEP DEMAND-SIDE AND SUPPLY-SIDE EFFECTS STRAIGHT

Whatever their supply-side effects, tax cuts are demand-side stimuli unless they are matched by concurrent cuts in government spending. Deficitincreasing tax cuts may be welcome when the economy is operating short of potential; they can help to arrest recessions and to fuel recoveries. But in times of full employment, with the economy constrained by NAIRU, the Federal Reserve will oppose additional aggregate demand by raising interest rates. The tax cuts will mainly raise consumption, while the hikes in interest rates curtail investment. The net result is unfavorable to growth.

Supply-siders invariably count demand-side effects in support of their supply-side proposals. They often cite the increases in GDP and in tax revenues that accompanied the Kennedy-Johnson tax-cut of 1964. This legislation, proposed as early as 1962, was primarily designed as a demandside stimulus, to keep a cyclical recovery going, reduce unemployment to the 4 percent then regarded as the NAIRU (though not so named), and close the GDP GAP. Matching cuts in spending were not proposed. Some productivity byproducts due to incentive effects were claimed; they broadened Congressional support. The measure had its intended demand-side effects, but there is no

evidence that it increased potential GDP. When Vietnam war spending was added to the budget in 1966, the economy was overheated and inflation rose for the rest of the decade.

Worse still, supply-siders are grossly mistaken to claim the 1983-89 recovery as vindication of Reaganomics and to assert that the same recipe can lift growth rates again now. The 1981 tax cuts and the build-up of defense spending were fiscal demand stimuli unprecedented in peacetime. With unemployment and excess capacity at their highest rates since the Great Depression, the economy could easily meet the new demands upon it. Inflation, which had touched double digits in 1979-80 and fallen to 5 percent in the subsequent recession, actually continued to abate during the 1983-89 recovery. Interest rates declined too; the Federal Reserve was accommodative. As the 10 percent GDP GAP of 1982 was closed, actual GDP grew 4.4 percent per year, about two points above the sustainable PGDP rate. It is ridiculous and dangerous to advocate repeating in 1996 the Reaganomic policies of the 1980s. The slack that was in the economy in 1982, when unemployment exceeded 10 percent, is not there now, when unemployment is only 5.3 percent.

Nothing at all happened on the supply-side in the 1980s; neither PGDP nor its rate of growth were raised. Reagan fiscal policy powered the demandside recovery of the 1980s, but it was not essential. The U.S. economy recovered from its seven previous postwar recessions without anything like such drastic policies. The Federal Reserve could have managed a 1980s recovery by itself; absent the bizarre fiscal policies, there was plenty of scope for lowering interest rates further. Laffer curve claims that expansion of the tax base would overcome the deficits resulting from the tax cuts were emphatically falsified. The economy of the 1980s was tilted towards private consumption and

defense, at the expense of investment — not pro-growth but anti-growth. The reckless experiment left the federal government with a large debt and a heavy burden of interest payments.

#### CONCLUSIONS

Although politicians freely promise faster growth, government has no handy set of effective tools. Maybe the Federal Reserve can raise GDP somewhat by exploiting further the apparent downward drift in the NAIRU. But the Fed cannot raise the economy's rate of growth for very long. Fiscal austerity, balancing the federal budget, can increase national saving and investment, with modest eventual payoffs in higher GDP and consumption. But public investments of high social productivity should not be sacrificed in the name of budget balance. Supply-side tax cuts are not likely to achieve the gains in output and growth their advocates claim. Often in practice these measures result in less work, less saving, less investment rather than more. When tax cuts appear to have had positive macroeconomic results, these were due to their demand-side stimuli in periods of economic slack.

The search for a holy grail that will lift permanently the growth rate of productivity seems pretty hopeless. This melancholy conclusion deprives the "pro-growth" apostles of the miracles of compound interest in calculating the payoffs of their policies in 2050. True supply-side policies are hard work, painstaking and slow, as distinct from free-lunch supply-side fantasies.

A list of sensible policies, one might say conservative policies, includes basic science, R&D, education and training, public infrastructure, and carefully designed incentives for both private and public sectors to consume less and save and invest more. With patience over decades for gains

measured in tenths of a percentage point, these policies can pay off. With luck, new technologies may bring dramatic improvements. The computer and communications revolutions may well bear fruit in the next century.

Meanwhile the United States is probably doing better economically than its people think. Our macroeconomic performance is the envy of Europe and Japan. The complaint that Americans are worse off than in the 1950s does not bear close scrutiny. Just compare the inventories of consumer durables "everybody" had then and has now. Statistics of GNP, family incomes, and real wages would look better if the admitted upward bias in changes in price indexes were corrected. With a stroke of a pen we could have 3.5 percent growth.

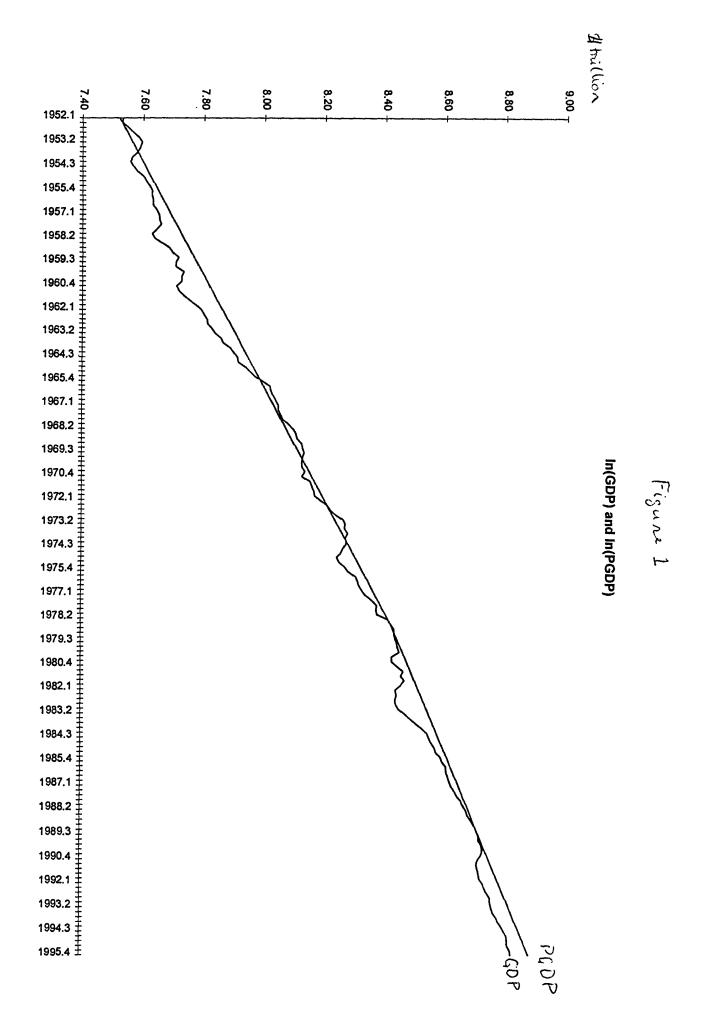
We have yet to figure out how to cope with the revolutions in demographics and medical science which raise the proportion of the aged in the population and make it possible but costly to keep them alive and healthy. This compound of good and bad news raises problems in all advanced capitalist democracies. They are not just the fault of spendthrift politicians.

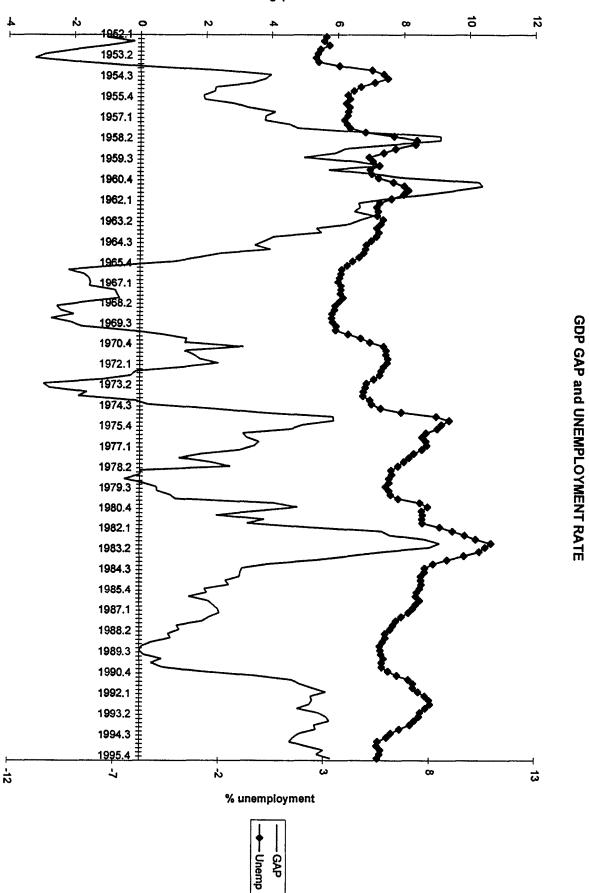
The United States stands out from its sister democracies in ways that should not be sources of pride: our acute poverty, inequality, and insecurity. Nothing in economic science and economic history says that these are inevitable byproducts of overall prosperity and growth, or that good economic performance is incompatible with progressive taxation, a decent safety net, and a public sector large enough to deal with the host of environmental and social problems that markets by themselves cannot solve.

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Congressional Budget Office, "Labor Supply and Taxes," January 1996)





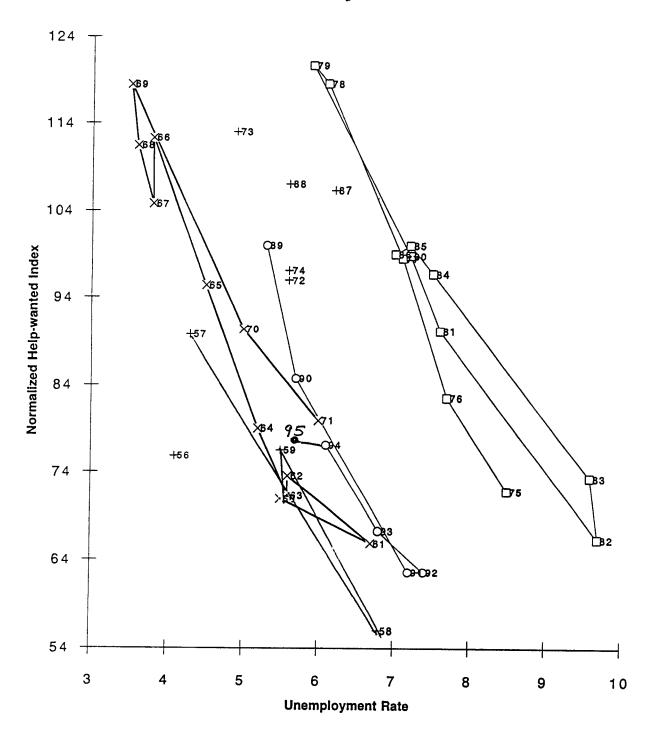
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% gap

## Figure 3

## Empirical Beveridge Curve Points: U.S. 1956-95

The proxy for vacancies is the Help-wanted index relative to the labor force. The curve for the 1950s and 1960s was favorable for combining low vacancies with low unemployment and low inflation. The situation deteriorate in the 1970s, and the curve for the 1980s was unitavorable. However, in the 90s the curve appears to have shifted back to the benign curve of the 1960s.



## Figure 4

Job Leavers/Losers Ratio and Help-wanted Index, J. 5. 1967-9:

Unemployed workers are either leavers, who quit ob coluntarily or losers, who were laid off. When labor markets are tooht, the leavers/losers ratio could be expected to be high bounded ause workers can guit with reasonable expectation of finding and the job. The figure shows that this ratio confirms the message of Foure 3. The ratio has recently been rising but it is still to 1995 guite low considering how low unemployment is.

