I interpreted this session as asking for answers to a definite question: What can macroeconomic policy specifically contribute toward stimulating innovation and promoting long-term growth? By the way, I am glad that we are talking about macro policy, as if there really were such a thing, and not just about monetary policy. Poor old Jan Tinbergen must be rotating in his grave at the way it is often supposed that the single instrument of monetary policy can be assigned any number of targets. When I was a boy, Tinbergen explained to us that a government with 12 policy objectives generally will need 12 instruments to achieve them. I do not fault our monetary policymakers for becoming neurotic about the fact that they are expected with their one policy instrument to accomplish every conceivable objective. Tax and expenditure decisions have macro effects too, and of course they can be shaped to have allocational implications as well. Nor is monetary policy neutral as between classes of expenditure. If it were otherwise, there would be no point in talking about the use of macroeconomic policy in the interests of long-term growth.

The first item on my wish list is easy: Protagonists should stop making grossly inflated, hyped-up statements about what their favorite policy option can accomplish. One way to promote rational policy on economic issues is to stop promising too much. Among the wisest words on macroeconomics I have heard over the past 20 years were Charlie Schultz's pronouncements on supply-side economics—he said there is nothing wrong with supply-side economics that dividing by 10 could not cure. A flat tax may be a bad idea or a good idea—and its effects on...
innovation and growth are not the only relevant considerations—but the most it could legitimately be said to do on the growth side is to add a tenth of a percent or two to the long-term growth rate, and even that effect is likely to be uncertain and delayed. It would have been nice if some academic proponents of the flat tax had insisted at the time that Mr. Forbes was overpromising wildly and in such a way as to discredit the proposal among any rational observers.

Exactly the same could be said about proposed reductions in the tax rate on capital gains. The effects on long-term growth might be anything from negligible to small, but you would never know that from listening to protagonists. Just to show that this is not an ideological point, I will add that proposals for increases in training programs or improved access to health care for displaced workers or for those just entering the labor force may eventually work against the trend toward widening inequality, and may or may not prove to be an effective anti-poverty program, but they will provide only small increments to the rate of long-term economic growth, and they should not be advocated on those grounds. I put this item first, not just because it is annoying but because the hype runs a great risk of turning intelligent people against policies that would, on their own modest grounds, be reasonable things to do.

This injunction is directed against theorists as well as advocates. It has become fashionable to manufacture powerful policy options for faster long-term growth by a mere flick of the theorist’s wrist. Anyone familiar with logarithms can invent a model in which making one small policy change will alter the whole steady-state growth rate of the economy. We all know you can change levels, and the level of human capital affects the level of output, as anyone will agree. Merely assume, say, that a high level of schooling will increase the rate of growth of human capital, or merely assume that a high level of research activity will increase the rate of growth of the stock of productive knowledge, and the result is two easy ways in which tax policy can affect the permanent rate of growth of output, because no one doubts that feasible incentives could raise the level of schooling or R&D. But how do we know that more time spent in school per year will speed up the proportional growth rate of human capital, or that a step-increment in $x$ will cause $y$ to grow faster, and not just generate a one-time shift? That is a spoilsport’s question.

It follows from the first item on my list that the second item will be very hard to come by. However, certain commonplaces bear repeating. For instance, investment is good for growth, whether it comes in the form of plant and equipment, or research and development, or the formation of human capital. So, whenever there is a choice, growth-oriented macro policy should opt to favor investment over consumption. (I do not mean that growth is always worth buying at the expense of current living standards, only that anyone who wants more growth should want more investment.)
It may be a little late in the day to say this, but I wish we could agree
to define as a contribution to growth anything that increases potential
output in a permanent way. Then it would be possible to say, in good
conscience, that any policy that induces an increase in the fraction of GDP
invested is a policy that promotes growth. It may not make any
permanent change in the growth rate; the point is that asking for that is
asking too much, and unnecessarily. It is no mean achievement to shift
the steady-state growth path upward, parallel to itself. The advantage of
this semantic change is not only that it removes a temptation to make silly
claims but also that it allows one to see clearly what the long-run scope
for macro policy might be. Then the various proposals that I began by
dismissing as serious factors in the steady-state rate of growth could be
reassessed, modestly and realistically.

Just to confess how old-fashioned I am, I do not count a pro-saving
macro policy as \textit{ipso facto} a pro-investment policy. My preference would
be for more complex policy moves that improve both the incentive to save
and the incentive to invest. A tax or budgetary change that improves the
incentive to save would have a much better chance of contributing to
growth if it were accompanied by fiscal or monetary policy choices that
operate more directly on aggregate demand for goods and services, and
especially demand for investment goods. Even a temporary surge of net
investment will add to the stock of capital—physical, human, or intellec-
tual—and therefore to potential output. There is no reason in theory or
practice why such temporary bursts of investment have to be reversed.

Let us agree to count as growth-promoting any act that permanently
enlarges the stock of tangible capital, or human capital, or knowledge
capital, in the sense that it causes the stock of capital to be forever larger
than it would have been if that act had not occurred. Then, of course,
there is a reasonable growth-promoting role for macro policy in general
and monetary policy in particular, as part of macro policy. One route for
doing this has already been mentioned: At any level of aggregate output,
anything that shifts the composition of demand in favor of invest-
ment—in the broadest sense—is growth-promoting. The most obvious
vehicle for this route is the tax-and-subsidy system, and the same goes
for the expenditure side of the budget. Any overall fiscal stance can be
weighted to stimulate investment in plant and equipment, education and
training, and research and development.

A second vehicle is an old model, but I do not see why it is not
capable of many more miles, if properly maintained. I have in mind the
old proposition that any overall macro posture can be achieved through
many different combinations of fiscal ease or tightness and monetary ease
or tightness. Growth is served by combinations that feature relatively
tight fiscal policy and relatively easy monetary policy, because the fiscal
side favors national saving and the monetary side favors domestic
investment. Growth-promoting macro policy would like the expected
return on investment to be high and the expected cost of capital to be low. That again suggests that tight fiscal policy and relatively easy monetary policy mixes are favorable to investment, but only if the overall package is compatible with economic stability at high levels of employment and output.

I hope the next thing I want to say is a platitude; it used to be, but I am no longer sure. Capitalist economies do not behave like well-oiled equilibrium machines. For all sorts of reasons they can stray above or below potential output for meaningful periods of time, though apparently they are slightly more likely to stray below than above. Even apart from considerations of growth, macro policy should lean in the general direction that will nudge aggregate demand toward potential, whenever a noticeable gap appears. The relevant point is that this strategy is also growth-promoting. Whatever the level of real interest rates, excessively weak aggregate demand—and the prospect of weak and fluctuating aggregate demand—works against investment. Few things are as bad for the expected return on investment as weak and uncertain future sales. The case of slight overheating is less clear; but most of us believe that the direction of investment, and probably the volume too, will be better adapted to underlying circumstances if measured inflation is kept low and under control. Successful stabilization contributes to growth, too. So all we need to do is put together a fiscal and monetary package that favors investment and avoids inflation, although not, certainly not, at the cost of weak output. We want to make investment profitable, not merely cheap. It's a piece of cake, really!

Here I will just mention an old question that I do not feel knowledgeable enough to answer. Perhaps others in this group already know. It is generally accepted that long rates of interest are the relevant ones for decisions about investments that will not pay off for many years. Open-market operations affect short rates directly; any influence on long rates is passed along the yield curve indirectly, by normal market processes. Would there be any point in conducting open market operations at maturities all along the yield curve, so that monetary policy could operate directly on long rates, in either direction, if that were desirable for economic growth, or for any other purpose? My impression is that "Operation Twist" in the 1960s is not thought to have been a great success; but perhaps the attempt was not pursued seriously and skillfully. It may be that the market influences on the yield curve are so various and so strong that monetary policy ought to lay off. Presumably that argument would not extend to the debt management operations of the Treasury, however. But this is no place for me to get in over my head.