

Commentary: Macroeconomic Implications of the New Economy

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Martin Baily's paper is a detailed and useful survey of the macroeconomic implications of the new economy, or the information economy. The focus of much of the paper is rightly on productivity growth, and in particular on:

- the resurgence in productivity growth since 1996;
- the recent cyclical decline in productivity growth;
- the role of information and computer technology in productivity growth; and
- international differences in productivity growth.

The paper also looks at the implications for fiscal policy of the uncertainty of projections of productivity growth and at the connection between recent changes in cyclical behavior and information technology.

Growth accounting and international comparisons

I.

I agree with Martin Baily's survey of growth accounting results. It effectively covers the important research of Oliner-Sichel, Gordon,

Jorgenson-Stiroh, and Martin Baily himself at the Council of Economic Advisers. The survey demonstrates clearly that the resurgence in productivity growth since 1996 was due, to a large extent, to information and computer technology. I agree that part of the productivity growth increase was cyclical and that the recent slowdown in productivity growth is mostly cyclical as the overall economy has slowed. The bottom line that total factor productivity increased by 0.5 percent in the 1990s and that trend labor productivity growth is now probably in the 2 to 2.5 percent range seems reasonable to me.

I was glad to see that Martin documented the close connection between the increase in productivity growth and the increase in real wage growth. That the two are connected is, of course, the implication of elementary economics and is the reason why we care about productivity growth.

An important part of Martin's survey of productivity is the international comparison. We know, of course, that the productivity resurgence did not occur in Europe and Japan—at least not as much as in the United States. The facts that Martin assembles from the McKinsey Global Institute and from Scott Bradford and Robert Lawrence suggest an important source of these differences with important policy implications—namely, that competition (“competition against best practice”) drives productivity increases.

The data suggest that international differences in these competitive pressures may be a key factor in international productivity growth differences. The *price* differences are particularly telling in my view. The difference between the price of a good in one country and the lowest price of that same good in the world is a good measure of competitive forces. The data Martin assembles show that prices in the United States are, on average, 15 percent above the lowest prices in the world, while U.K. prices are 42 percent above, German prices are 60 percent above, and Japanese prices are 85 percent above.

I think these data deserve careful study. They suggest that greater openness and freedom of entry will lead to greater productivity growth

in regions where it has been lacking. I am sure that more trade liberalization—either through a new global trade round or through regional free trade agreements—is a key way to reduce these price differences and enhance productivity growth.

Fiscal policy implications of uncertain forecasts

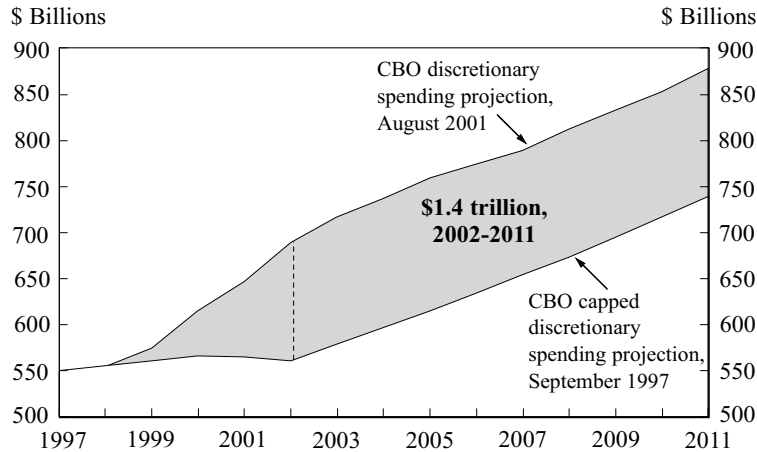
II.

Now, let me briefly focus on some fiscal policy issues mentioned by Martin. He rightly argues that forecasts of productivity growth are very uncertain. Since projections of future budget surpluses depend on productivity growth, these are also uncertain. This uncertainty leads Martin to the conclusion that we should favor “fiscal discipline over large tax cuts.”

I have no quarrel with the need for fiscal discipline, especially over the long term, but I think his stated preference for fiscal discipline over tax cuts is rather asymmetric. Why not say “fiscal discipline over large spending increases”—or at least a more balanced “fiscal discipline over large spending increases and large tax cuts”?

Chart 1 illustrates my point. It shows two CBO projections of discretionary spending by the federal government. One projection was made in 1997, before large surpluses were being projected. The other projection was made this summer. There is a huge difference: The dramatic increases in spending will cost the federal government and cut surpluses by \$1.4 trillion between 2002 and 2011—*roughly the same size as the recently enacted tax cut over the same period*. Of course, the \$1.4 trillion did not occur as one big spending package, but that does not make it any smaller. My point here is that there is a lack of balance in arguing that fiscal discipline should take the form of an aversion to tax cuts and not to spending increases. Of course, Martin Baily and others may have very good reasons to argue for spending increases over tax cuts as a way to use the surplus, but fiscal discipline does not favor one over the other.

Chart 1
Discretionary Spending Increase
Since 1997 Balanced Budget Agreement



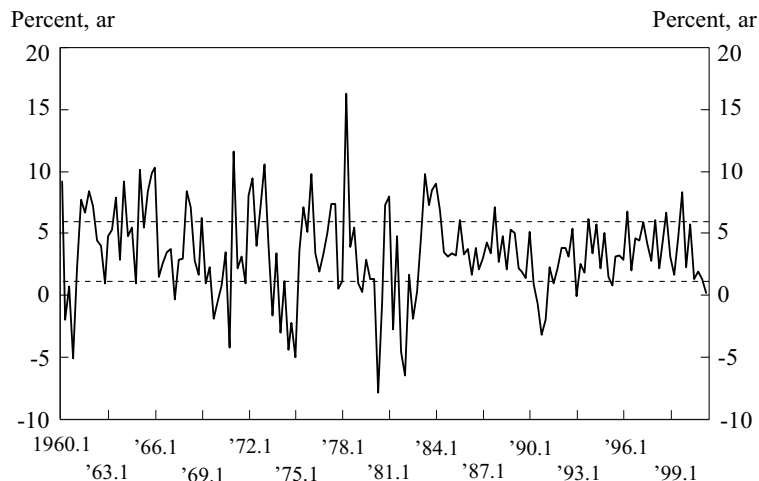
Changes in cyclical performance

III.

Finally, let me talk about the changes in cyclical behavior in the United States, which Martin discusses in his paper. Chart 2 shows that there was a sharp decline in cyclical volatility in the early to mid-1980s. I have been writing about this change for several years, and have dated it with the end of the 1981-1982 recession. Careful econometric work by Charles Nelson and others seems to get a similar date, but certainly no later than 1984.

Could this change be related to the information economy, perhaps to the inventory management revolution? Well, inventory changes are certainly a big part of the business cycle. However, it is unlikely that changes in inventory policy could explain the rather abrupt change in cyclical volatility. If you look at final sales (thereby taking inventory investment out of GDP), Chart 2 would look very similar. Inventory policy seems to have little to do with the change.

Chart 2
Quarterly Real GDP Growth
With +/- 1 Standard Deviation Bands for 1982.4 - 2001.2 Period



While there are other reasons, the one that I have focused on is an improvement in overall macroeconomic policy. It was in the early 1980s that we got inflation down, and since then there has been a much greater focus on price stability. Monetary policy has been more responsive to increases in inflation and slowdowns in the economy. Moreover, if you look at other countries, similar moves toward greater focus on price stability have been followed by improved cyclical performance.

Could one link these improvements in monetary policy to information technology? Although it is speculative, I believe improved information technology in the broadest sense could have been a factor: Time series analysis (including seasonal adjustment), better econometric models, and more timely analysis of data have all helped improve macro policy formulation and implementation. But, as usual in economics and other non-experimental sciences, it is difficult to prove causality. One might even argue that the direction of causality is the other way: Perhaps the improved macro environment set the stage

for the new economy and the investment in information technology that defines the new economy.

Conclusion

IV.

In summary, I think Martin's paper shows that there are important macroeconomic implications of the information economy, and I would disagree with those who say that the implications are more microeconomic than macroeconomic.

His focus on productivity growth is welcome both in the context of the United States and in other countries, both developed and developing. In the U.S. Treasury, we have tried to make productivity growth a theme of our economic development strategy, including for the World Bank and other development institutions. I think Martin's paper shows why this is the right theme. We should choose policies—freer trade, better education, less regulation, and sounder monetary and fiscal policies—that raise productivity growth and thereby raise real wages and income per capita throughout the world.

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