

Are Increases in Productivity Growth a Double-Edged Sword?

Stephen G. Cecchetti*

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Does the productivity miracle have a dark side? Can it be a threat to our prosperity? Productivity growth has increased to the point now where many of us believe that the sustainable growth rate of the U.S. economy has risen from 2 ½ percent as recently as five years ago to between 3 ½ and 4 percent today. The increased growth has increased expected growth in corporate profits, driving the stock market up. Higher share prices both spur corporate investment and, through the wealth effect, increase household demand for goods and services. So, higher productivity growth results in higher GDP, allowing businesses to invest and individuals to consume. What could be bad?

Some people, including government officials, think it may be, and their argument is that the increased equity valuations may create a demand for goods and services that have yet to be produced. If this were so, then the result would be that demand exceeds supply, and prices would rise. In other words, the dark side of expected future increases in productivity is inflation today. The prudent monetary policy response in this case is to tighten policy now, to keep demand from outstripping supply. Is this right?

Well, let's deconstruct the argument and get to the fundamentals. We start with the fact, and it is a fact, that the economy is now growing more quickly than it has for some time. In the first half of the 1990s, U.S. GDP grew at just over 2 ¾% per year. Over the second half, growth has averaged over 4 ½%. Attempts to explain this acceleration, by Federal Reserve Board economists Daniel Sichel and Stephen Oliner¹ for example, suggest that higher growth has come, in roughly equal parts, from three sources: (1) information technology investment; (2) increased hours worked; and (3) pure technological progress --- what economists call "multifactor productivity." The consensus is clearly that there has been an increase in productivity growth, but the implications are unclear

The higher economic growth rate means that we should get more rapid increases both in workers' real wages and in corporate earnings. The latter encourages investment and drives up the value of equities. Overall, though, we are made wealthier with higher incomes, allowing us to achieve a higher standard of living both today and in the future.

* Professor of Economics, Ohio State University, and former Director of Research at the Federal Reserve Bank of New York.

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¹ See Oliner, Stephen D. and Daniel E. Sichel, "The Resurgence of Growth in the Late 1990s: Is Information Technology the Story?" February 2000.

A few other things will happen as well. Among them is that the returns to new investment will rise, and so both the real and nominal interest rate will go up. If the U.S. is the only country experiencing the growth miracle, then we will be able to offer investors higher rates of return than elsewhere in the world, and we will suck capital in from elsewhere. Our large and growing current account deficit, which is the mirror image of the capital inflows, is clear evidence of this. It is important to emphasize that in such a circumstance the current account deficit is unambiguously a good thing. The only policy that would turn the external balance around would be one that made the U.S. a bad place to invest. Surely, this is not our goal.

So it all seems pretty clear. Consumption and investment will both increase in response to the productivity acceleration. But then, output has gone up as well so there should be no problem. Where are the imbalances that have led people to express concern? I can think of two possibilities. First, there is timing. The newly wealthy consumers will try to increase their purchases right away, and the goods may not be there to quench their enlarged appetites. Since supply has increased, for this story to work, the problem must be one of composition --- it may be that there are too many investment goods and not enough consumption goods being produced. You can't turn a factory that makes machine tools into a restaurant or a sports utility vehicle assembly plant. So, if the composition of demand changes more rapidly than supply can accommodate, prices will have to adjust and the result can easily be a burst of inflation. The facts bear some of this out, as the prices of consumption goods have risen significantly more (nearly 2% per year) than those of industrial and transportation equipment, for producers' use (less than 1% per year). Differential productivity improvement could explain this difference as well. It still takes four musicians to perform a Mozart quartet for our listening pleasure, but it may cheaper to produce a bulldozer.

The second justification for concern is that people are overestimating future growth rates of the economy, and as a result, overestimating future corporate earnings growth. Right now, for example, Wall Street analysts are expecting long-term earnings growth of about 15%. But, for the arithmetic to work out, corporate earnings cannot grow any faster than nominal GDP. If they did, then labor's share of national income would have to eventually shrink to nothing. The only possible conclusion is that these forecasts are unrealistic. From this we might conclude that equity valuations are too high (price-earnings ratios even on industrial stocks are at twice their historical norm), and people are not really as wealthy as they think. Deluded into thinking that they can achieve a higher standard of living than is truly justified by future growth, people are now consuming too much. Firms, noting the relatively low cost of capital available through equity issuance are investing too much. This will surely raise demand above supply, and lead to inflation.

The answer to the question I have posed in the title is yes, if they lead to unjustified expectations of future increases in growth, increases in productivity growth can be a double-edged sword.