

The Economy in Perspective

Golden eggs, golden omelets... Productivity growth is the economist's term for situations in which an economy can obtain more output than before from the same amount of input. Productivity growth enables an economy to deliver rising standards of living to its participants, and the stronger the growth trend, the wealthier the society becomes. One of the most common estimates of productivity is real output produced per hour of labor input. By this measure, the U.S. economy has improved its ability to raise living standards over the course of this decade. When the expansion began in 1991, productivity seemed to be increasing at a trend rate just below 1% annually. As 1999 unfolds before us, productivity's growth trend appears to be roughly double that amount and possibly even more.

What is clear is that microprocessors and their derivative information technology products are profoundly affecting the way we live and conduct business around the globe. Once people perceive the advantages of deploying the new technologies, the rate of investment spending should pick up. Firms will want to acquire new plants and equipment—but especially equipment—embodying those technologies. Initially, investment spending should increase much more rapidly than overall spending in the economy, since the new technologies will boost the relative value of having a larger capital stock. After the adjustment is complete, of course, the rate of investment spending will moderate back toward the growth rate of the economy as a whole.

As investment spending surges, economywide employment should be temporarily weaker than normal because of the substitution of capital for labor occurring in many firms. Consequently, personal income growth and consumption expenditures should appear to respond more sluggishly to overall economic activity than is typical in an expansion. And if technological change initially makes investment goods cheaper to produce than consumption goods, relative price changes should reinforce these patterns, since any fall in the price of investment goods should further spur their production and sales.

After all the adjustments are complete, labor compensation rates will have risen in real terms to reflect labor's new, greater value when combined with the capital stock. However, this will take time, since labor rates adjust only sluggishly to market conditions. Initially, there will be some scope for nominal pay to rise, even if its pace

falls short of labor's increased value. Under these conditions, labor demand will intensify, driving unemployment rates down without creating the typical symptoms of wage pressures. Eventually, however, these pressures should appear.

As households begin to recognize that they are wealthier, that is, that they can consume more and have more leisure over their lifetimes than before, they might rationally begin to step up their consumption plans right away. In a closed economy, consumption can increase only if saving diminishes, which is to say that investment must slow. But in an open economy, an inflow of foreign savings in the form of capital investments can permit domestic consumption and investment to continue at higher rates than would otherwise be possible. Such capital inflows are likely if they can finance new technologies that are expected to produce large real returns. As foreign residents seek to purchase dollar-denominated investments, the dollar's foreign exchange value should rise. Then the stronger dollar should make imports cheaper, exports more expensive, and the trade deficit larger.

The picture that emerges is one of an economy adjusting to new technologies by simultaneously increasing its capital stock and its consumption spending. Foreign capital facilitates this process, but the cost is a burgeoning trade deficit. With real compensation increasing less rapidly than productivity growth, labor demand strengthens and unemployment falls.

Somewhere along the path from the old economy to the new one, real interest rates must rise to support the capital formation process. Hence, if monetary policy is to be "neutral," it must engineer an increase in the nominal federal funds rate. Otherwise, policy could provide too much money growth in the new economy, which would support more inflation. Excessive money growth could also create sufficient liquidity to finance even more investment and consumption than should be occurring along the adjustment path.

A problem for everyone on this journey is that we cannot know the full extent of the change in productivity growth that is under way. If the process is ending now, after nearly a decade of economic expansion, monetary policymakers may need to be especially vigilant about their instrument settings. But if we are still a long way from the journey's end, there may be less risk in preserving the status quo.