A productive debate about monetary policy ... A country’s rate of productivity growth determines how rapidly it can expand its standard of living. Although a 1% or 2% annual change in a country’s productivity growth rate may seem a small matter, it becomes significant when sustained over a long period. In practical terms, productivity growth enables people to have more of what they want over the course of their lives, whether it takes the form of food, clothing, shelter, or leisure time.

Measuring productivity requires an ability to gauge all the factors of production—such as hours worked, equipment, and energy used—as well as the goods and services produced. These estimates have never been exact, but they become increasingly difficult to specify as the composition of output shifts toward services, and the qualities that add value to inputs shift away from easily quantifiable physical attributes. Compounding the estimation problem even further, the information needed to determine today’s pace of productivity growth will not be available for several years. What this means is that any conclusion about an upshift in U.S. productivity growth, though provocative, must be regarded as tentative.

With that caveat, consider a hypothesis about the current U.S. economic expansion that we have sketched in this space before. New technologies have become available and have taken root more firmly here than elsewhere, perhaps because the United States has a more entrepreneurial business culture and flexible market structure than most other countries. In the course of deploying the new technologies, businesses become more adept at creating new products and services that people value highly—and at producing everything more efficiently. Measured productivity rises but quite possibly continues to understate the true amount.

Meanwhile, U.S. businesses begin to step up their rate of investment spending. As they compete with households for resources, interest rates ordinarily rise. Higher interest rates discourage some people and firms from borrowing and, simultaneously, encourage some people and firms to save more. However, suppose that capital from abroad, attracted to the profitable investment environment, flows into the United States. The dollar strengthens as foreign residents buy dollar-denominated assets. The cost of capital (interest rates) need not rise to attract either domestic or foreign savings. The strong dollar stimulates imports at favorable prices, while relatively low interest rates stimulate housing and durable goods sales. Many people, realizing that they have become permanently wealthier, begin without delay to consume at a faster rate. The expanding trade deficit represents both the amount we are consuming in excess of our production and the source of capital that enables the virtuous cycle to keep on spinning.

Suppose the Federal Reserve in our hypothetical example seeks to promote sustainable economic growth by achieving price stability. At the federal funds rate it selects, our textbook monetary authority will supply whatever reserves the banking system wants. As the virtuous cycle whirls, labor compensation and productivity growth rates accelerate in tandem, keeping the rise in unit labor costs low and steady. Growth in the nominal stock of money accommodates growth in the overall pace of economic activity. As a result, although the volume of goods and services consumed expands dramatically, inflation can still remain low and stable.

Recall that a stable real rate of interest is the linchpin of the virtuous cycle. If the rest of the world begins to compete more aggressively for resources, the real interest rate will rise and the rate of U.S. economic growth will slow. The textbook Federal Reserve cannot neutralize this force. However, if it does not raise the federal funds rate, it will supply more money than the economy needs, and inflation will accelerate.

Consider another effect of the real interest rate. Suppose that U.S. productivity growth continues to accelerate at successively faster speeds. The virtuous cycle will spin correspondingly faster, and the real rate of interest will rise correspondingly higher. By adjusting the federal funds rate up, the textbook Federal Reserve will be able to notch inflation down further as the economic expansion continues.

Favorable productivity developments unquestionably generate positive benefits. As they ride the swelling productivity waves, monetary policymakers must be able to discern the implications of interest rates and money demand through the spray. The public must recognize a treacherous undertow: Inflation cannot be pounded into submission by the relentless force of technological progress alone. Inflation remains a monetary phenomenon controlled through monetary policy.