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COMING SOON TO AN ECONOMY NEAR YOU: THE BUSINESS CYCLE

Daniel Schwanen

Amid all the cheery forecasts about endless economic growth in the United States, there is an ominous sign: The growth rate of real M2, a common definition of the stock of money, is about to fall below the growth rate of real GDP. The last six times this has happened, real GDP has subsequently suffered a serious slowdown. Many people seem to believe that won't happen this time because of the influence of the "New Economy" on productivity. While it is true that higher productivity growth can reduce the amount of inflation the economy experiences when unemployment is low, it is still too early to tell whether recent high rates of growth of productivity are permanent, or mainly a cyclical phenomenon.

Au milieu de prévisions optimistes anticipant une croissance économique soutenue aux États-Unis, un phénomène inquiétant se produit: le taux de croissance de l'agrégat monétaire M2, une mesure bien connue du stock monétaire, va bientôt chuter sous celui du PIB réel. Les six dernières fois que cela s'est produit, la croissance du PIB a ralentit de façon marquée. Plusieurs observateurs croient que cela ne se produira pas cette fois-ci, grâce à l'effet de la « Nouvelle économie » sur la productivité. Bien qu'il soit vrai qu'une croissance accrue de la productivité puisse atténuer l'inflation qui aurait normalement lieu dans une économie où le taux de chômage est faible, il est trop tôt pour savoir si la forte croissance de la productivité enregistrée récemment est un phénomène permanent ou simplement cyclique.

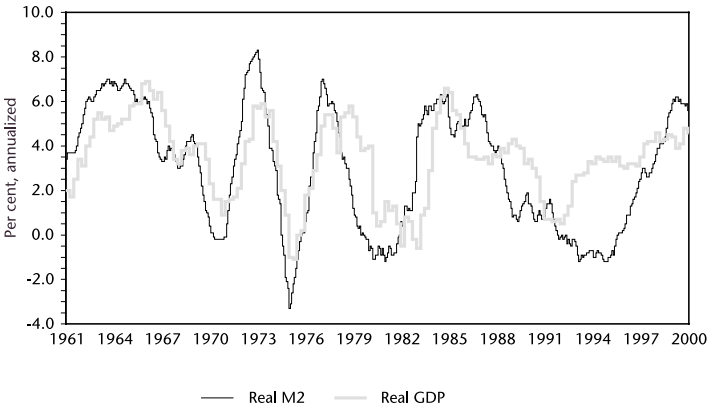
It's late in 2001 and the US economy is entering a recession. Sound far-fetched? Although newspapers have recently carried an increasing number of articles mentioning an impending economic slowdown, most analysts expect the US economy to continue growing at a good clip for the foreseeable future. That it could actually shrink, after two decades of economic expansion interrupted only by a short-lived recession in the early 1990s, may seem inconceivable to many. And yet ...

What's absent from many commentaries on current US economic conditions is a discussion of the growth in the economy's stock of money, and what it likely indicates about economic expansion in the coming months. Even in this high-tech age, the economy has not weaned itself from the need for money balances in order to settle economic transactions. This makes the stock of money a key economic bellwether. Indeed, in recent decades one of the most predictable economic patterns has been that expansions and contractions in the growth rate of money balances have heralded similar changes in the growth rate of the economy a few months later.

This relationship is illustrated in Figure 1, on page 54. It compares the growth in "M2," a measure of the US money stock comprising cash, other liquid balances, and close substitutes, with the growth in US real gross domestic product (or GDP). In fact, the chart shows the growth rate in "real M2," which is calculated by subtracting the rate of inflation, as measured by the US GDP deflator, from the rate of growth of undeflated M2. Real M2 shows how large a money stock is available to support the expansion of economic activity over and above any price increases that take place. (The chart shows growth over two-year periods, to better capture trends rather than more jerky monthly and quarterly movements, but changes are expressed at annual rates because of their greater familiarity).

In the six times in the past 40 years that falling money growth rates have crossed a rising GDP trend (1966, 1969, 1973, 1978, 1984, and 1988), the US economy has subsequently experienced a significant slowdown. The crossover has therefore been a qualitatively reliable signal, even if the precise impact of shifts in money growth on GDP normally varies according to a number of circumstances. Indeed, in the early 1990s, a well-documented shift in the "velocity" of M2—the ability of a given stock of money to finance the economy's transactions—meant that the US economy recov-

Figure 1
US real M2 and GDP (two-year change at annual rates)



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ered from recession even as its real money supply was, for a while, actually shrinking. But even in those years bursts and pauses in the growth rate of GDP can also be traced to preceding spurts of growth or deceleration in M2. As can readily be seen from the chart, another major crossover between a decelerating M2 and a rising GDP growth rate is in the works. It would not be surprising if, once again, the crossover that appears to be coming signalled a sharp economic slowdown in the United States.

In some ways, a crossover is to be expected. The US Federal Reserve Board ("the Fed") has been raising interest rates since June 1999 precisely in order to make the spending plans of economic agents better correspond to what it perceives to be the long-term non-inflationary growth potential of the economy.

Inflation in the United States has been well contained recently, notwithstanding strong and unusually sustained economic growth. However, on average in the past, inflation has tended to continue rising well beyond the peaks registered in economic growth, as can be seen from Figure 2. This suggests that the Fed has tended to react too timidly to prevent undesirable inflation, and then, when its mistake has become apparent, to tighten the monetary screws further, thus aggravating downswings in real M2 and GDP that were already under way.

Today, however, the prevalent view is that so far the Fed's tightening has occurred early enough and has been strong enough to ensure a "soft landing" for the economy. In a nutshell, this "soft landing" scenario envisages a growth rate over the next few months that is low enough to avoid accelerating inflation, but that is still positive and even impressive by historical standards.

Although the concept of a soft landing is not new—the 1990 slowdown was also widely expected to end in a soft landing; it didn't—it is now being associated with the view that we have entered a "New Economy," the chief characteristic of which is a permanently higher rate of productivity growth. If a permanent shift in productivity growth really is at hand, it would allow Americans (and Canadians, as their main trading partners) to enjoy more "real,", i.e. non-inflationary, income growth from their resources, work, and investments than has been the norm over the past 40 years.

If productivity growth does remain strong, we need not fear further monetary tightening— there will be no need for it: Inflation can be held in check even with economic growth continuing at a pace that normally would cause productive capacity to be stretched to the limit, and prices to climb as a result. Indeed, under an optimistic scenario, the decline in real M2 might even be reversed in short order as cost reductions originating in relentless advances in productivity effectively raised the economy's speed limit. A similarly benign scenario unfolded after the 1986 oil price collapse and 1987 stock market crash sufficiently dampened inflationary expectations that the Fed eased on interest rates, causing the growth rate of M2 to turn upward again, after a sudden deceleration not unlike the one we are experiencing today.

It is therefore quite important, as we try to gauge what the outcome of the Fed's tightening will be this time, to understand how different the behaviour of the economy really is today, compared to the four-decade historical period I have been examining here.

On average the 1990s did witness a much-improved performance over the dismal productivity growth of the 1970s and 1980s, although not the 1960s. The dissemination through the economy of new information and communications technology (ICT) is often cited as the source of this improvement. Indeed, this upsurge in productivity is consistent with the reasonable assumption, contained in some economic models, that there is a long lag between when companies start investing heavily in computing and communications power and begin the costly adaptation to these new technologies, and when the payoff arrives as they learn to use them to their fuller potential. This explanation may account for both the poor

US productivity growth in the 1980s, despite the introduction of new technologies, and the more recent upswing. Given surging ICT investments in the past few years, such models certainly suggest that continued strong productivity growth could be in the cards.

But the reality is that beyond the sharp productivity gains in ICT equipment industries themselves, the link between investments in ICT and extraordinary productivity growth across the economy in general has been elusive. To be clear: The question is not whether ICT is transforming old ways of doing things across the board—they clearly are—but whether booming investments in ICT, spurred on by the sharp declines in the price of computing and communications equipment, are generating extraordinary economy-wide returns, which would justify, among other things, the past few years' giddiness in the stock markets.

Recent work in the neoclassical growth accounting framework, which is often used to calculate the contribution of ICT to economic growth and productivity, suggests that outside these industries themselves the main impact of the technological revolution has been through capital "deepening" rather than through large gains in the productivity of investments. This means that so far most of the gains to labour productivity have come, not from using the technology in a smarter fashion, but by adding large amounts of high-technology equipment.

This accounting exercise unfortunately does not tell us much about whether the investment boom will continue at the same pace in the future. One argument that suggests it will assumes that investment in ICT garners the same rate of return as any other investment, and that given the rapidly falling cost of computers, companies can invest a lot more in them and still earn a competitive rate of return—even though computers depreciate quickly. But investment in high tech can also be seen as being driven by the "animal spirits" of stock market investors who anticipate extraordinary private returns to these types of investments. If such returns do not materialize and financial markets revise their valuation of these investments downward, or if an economic slowdown reduces the cash flow available for investment, growth in high-tech capital expenditures could well be sharply reduced.

Taking a longer view of the recent good economic performance in the United States, one notes some similarities with more traditional patterns. Thus, as Figure 1 indicates, the more recent phase of economic growth has been preceded by a powerful expansion in real M2. And it is remarkable that, when all is said and done, the yearly average productivity gains during the most recent upswing really are quite similar to those experienced on average during previous upward phases of the economic cycle—although this expansion certainly has been extraordinarily prolonged.

Indeed, the fact that productivity growth has traditionally been highly correlated with the ups and downs of the economic cycle, as Figure 3 on page 56 shows, is often forgotten in the discussions on the sustainability of fast productivity growth. One therefore has to take care interpreting the recent productivity outburst as necessarily indicative of what can be expected over the longer term—and hence of how sustainable the current rapid, non-inflationary growth of GDP is. Productivity growth is almost certain to fall off sharply as the US economy cools down.

It turns out that the unexpectedly low inflation of the past few years in the United States can also be explained, at least in some models, by the drop in import prices, which have been kept low by the strength of the US dollar since 1995 and the post-1998 weakness of many Asian economies. Both factors also contributed to the current record US trade deficit.

There is no question that structural changes in the American economy, such as welfare reform and the deregulation of key industries, have helped lower the unemployment rate which the US can expect to experience without a resurgence in inflation. This is solid, permanent good news. But beyond these one-off improvements, and the boom in the ICT sector itself, it is hard to distinguish how much of the recent good performance has been due

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Figure 2
US real GDP and inflation: two-year change

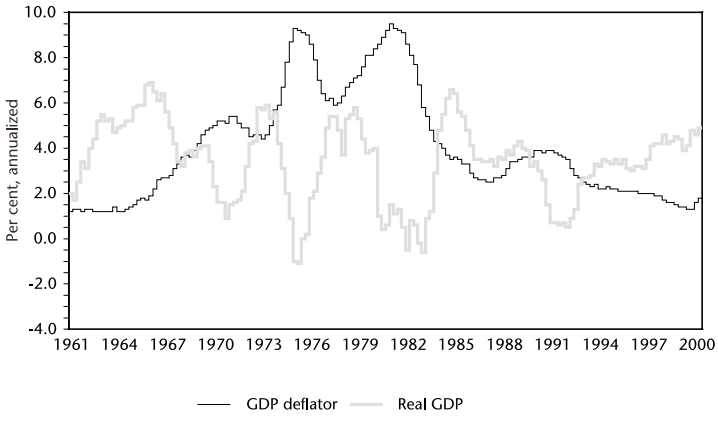
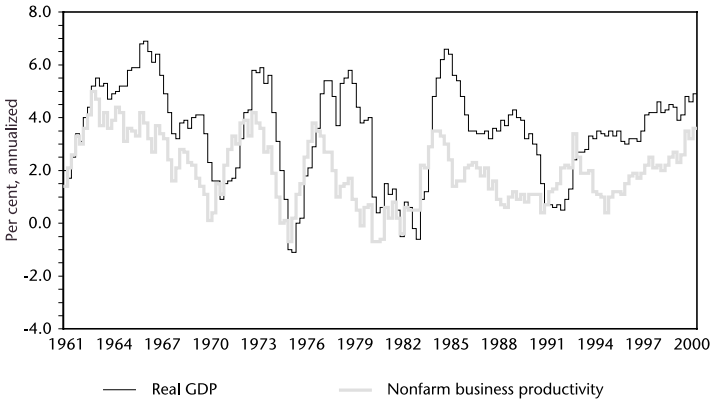


Figure 3
US real GDP and labour productivity — 2 year change



My bet is that a significant economic slowdown will hit our US neighbours by the end of next year.

to the intrinsic properties of ICT investments—which would suggest that good times are here to stay—and how much is due to transient monetary, cyclical, and external factors. The United States economy of the 1990s would not be the first to experience the spread of new products and technologies, productivity advances, low unemployment combined with low inflation, and public sector surpluses, only to face tougher economic times—and even some reversals—in subsequent periods.

At any rate, the behaviour of US M2 suggests that over the next year or so the benign "New Economy" scenario will receive its most serious test yet. My bet is that, unless money really doesn't make the world go round any longer, a significant economic slowdown will hit our US neighbours by the end of next year.

New evidence suggests that Canada is now playing "catch-up" to the United States in terms of productivity performance. If so, this could shelter us somewhat from any US downturn. Still, Canadian policy-makers, recently inundated with a barrage of good news forecasts for economic growth and fiscal surpluses would do well to reflect on the possibility of an impending re-acquaintance with business cycles.

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