

A Little Information Technology Can Be a Dangerous Thing

The current recession ends the longest post-WWII expansion on record. That expansion's length led some analysts to claim, or at least suggest, that the business cycle was extinct. Of course, we now know that it still lives. But, changes have occurred in its behavior.

Analysts use gross domestic product (GDP), our broadest readily available measure of economic performance, to track the business cycle. A significant change in the behavior of real GDP (output) movements began around 1984.¹ To wit, the growth rate of output became more stable, less volatile after 1984, reducing swings in the business cycle. That observation raises important questions. What caused the volatility of output growth to fall after 1984 and will that lower volatility continue in the future?

Measuring the Economy's Output

To begin, GDP measures the total value of final goods and services produced. The household sector demands some output for consumption, dividing into durable and non-durable items. The business sector demands some output for investment and capital accumulation, dividing into non-residential fixed investment, residential fixed investment, and changes in inventories. The government lays claim to some output through government purchases. Finally, the rest of the world lays claim to the rest of output through the excess of exports over imports, that is, net exports or the trade balance.

Measuring the Volatility of the Economy's Output

Over eighty percent of the reduced volatility of output growth after 1984 reflects the effect of three different components – durable consumption spending, residential investment, and inventory investment. Why do those components now contribute much less to output volatility?

Two important macroeconomic changes may offer much of the answer. First, the 1980s and 1990s witnessed massive financial innovation and deregulation. Borrowers now face many more sources of funds; borrowers and lenders also face interest rates that respond more to market forces. Financial innovation revolutionized credit markets, especially those markets that finance consumer-durable and home purchases. Flexible-

¹ See "New Economy, New Recession," March/April 2002 issue of *Southwest Economy* posted on the Federal Reserve Bank of Dallas web site at <http://www.dallasfed.org/htm/pubs/swe.html>.

rate mortgages, the elimination of regulation Q (ceiling rates on deposits), and the securitization of home mortgages and other durable-good credit provide important examples. Today, unlike thirty years ago, durable consumption spending and residential investment follow less of the boom-bust pattern that formerly exacerbated the business cycle and enhanced the ups and downs of output growth.

Second, the Japanese taught us better inventory control. The information revolution also made it easier to track and economize on inventories. And inventory control feeds on itself. As successful inventory control reduces the volatility of output growth, then it becomes easier to predict the needed inventories over time, reducing the typical boom-bust pattern.

Finally, monetary policy reduced the volatility of output growth. The policy actions of the Federal Reserve, largely under the leadership of Alan Greenspan, but also that of Paul Volker, were more often right than wrong.

That's the good news. The bad news: Information technology (IT) investment became more volatile and more synchronized with output movements. IT investment now contributes much more to output growth volatility than it did in the past.

Understanding the Current Recession

The current recession differs from typical post-WWII recessions. As just noted, durable consumption spending and residential investment did not follow normal recession patterns. The financial innovations and deregulation fostered sustained spending in those sectors as we tipped into recession. The buoyancy of that spending, however, also reflects the eleven interest rate cuts engineered by Alan Greenspan and the Federal Reserve during 2001. That easing of credit market conditions strengthened durable consumption spending and residential investment.

The inventory cycle, however, did not differ too much from past recessions.

So on balance, only two of the three major factors that explain the reduced volatility of output growth after 1984 played major roles in moderating the downturn during the current recession – consumer durable spending and residential investment.

So what caused the current recession? – Largely the decline in non-residential fixed investment. And within that category, falling IT investment played the major role.

Economic Recovery: How Strong?

What, then, will the recovery look like? The consensus view argues either for an extremely slow go, or for a double dip, although the double-dip view seems more remote with each passing day.

Confession: I still see the possibility of a double-dip recession. A sustained oil-price shock (already underway?) or another significant terrorist attack could topple the economy back into recession. Consumer and business confidence provide important underpinnings for economic growth.

Consumption spending and residential investment remained strong throughout the current recession. The big dip occurred in non-residential fixed investment. Do not expect big movements in either consumption spending or residential investment in the near term, since households continued to accumulate indebtedness over the recession. The fiscal lever also seems an unlikely candidate. Japan's economy remains in its decade long recession and although recovery in the European countries matches our own recovery, Germany provides a notable dark cloud on the European horizon. Thus, don't expect net exports to assist or promote economic growth in the U.S. That leaves one slender hope for a strong recovery – non-residential fixed investment. Place your bets there.

In sum, the recovery will, at best, proceed ever so slowly and do little to reduce the unemployment rate that drifted higher over the current recession. But, you say, "Didn't output just increase by 5.8% in the first quarter of 2002?" Yes, it did. But 3.1% of that growth represented inventories falling more slowly in the first quarter of 2002 than they fell in the fourth quarter of 2001. Got that? One wag remarked, "Addition by lesser subtraction!" Continued growth requires real "additions" to the growth in household, business, and/or foreign spending. Another old saw says "The stock market predicted four of the last nine recessions." Could the current stagnation in the stock markets provide the best forecast of future economic performance? Hmm, I wonder?

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