in the 1870s, the English economist W. Stanley Jevons studied a century and a half of trade data and concluded that recessions of the English economy were caused by the cycles of solar activity. He was “perfectly convinced,” he wrote, that recessions “depend upon meteorological variations of the like period, which again depend, in all probability upon cosmical variations of which we have evidence in the frequency of sunspots, auroras, and magnetic perturbations.”

Regrettably, astronomers revised their estimates of solar cycles, and Jevons’s theory did not survive the revision. An American economist, Henry Moore of Columbia University, fine-tuned Jevons’s theory in 1923, giving a predominant role in recessions to the cycles of Venus in the Earth’s skies. This theory, too, failed to outlast extended contact with the data.

The discipline of economics has come a long way since then in its ability to account for recessions. Macroeconomists today consider the interaction of variables such as inventories, wages, interest rates, investments, and, of course, profits. They also look at “exogenous” variables — factors hitting the system from outside — such as technological changes, fuel-price shocks, and changes in tax policy. The literature on recessions is voluminous; indeed, if all the articles about recessions in the EconLit database were laid end-to-end, they would reach all the way to…well, they would reach awfully far.

Economists have had less to say about recoveries, however. “Most of macroeconomics presumes that the economy reverts [to growth] following a shock all by itself,” wrote University of Chicago economist John Cochrane in the 1994 edition of the NBER Macroeconomics Annual. “For this reason, we usually focus on the shocks that start recessions and their propagation mechanisms, but almost never...on policies and shocks that end recessions.”

Cochrane’s observation a decade and a half ago still holds true today. When economists speak of recoveries, they typically characterize them simply as a resumption of the natural state of the economy: growth.

Monetary Policy
Do economists have anything more to say about the causes of recoveries, and the factors determining their strength? Is good policy simply a matter of taking away the cause of the recession? Are all recoveries the result of wise monetary, fiscal, or regulatory interventions? What are the nonpolicy forces, if any, that spark recoveries? Even though these questions have not been studied by economists as much as one might expect, there is enough literature and historical precedent to supply some tentative answers.

A leading paper on the subject by Christina and David Romer of the University of California at Berkeley — aptly titled “What Ends Recessions?” — examined the eight recessions that had occurred in the United States between 1950 and the paper’s publication in 1994. (Christina Romer was chair of the President’s Council of Economic Advisers from January 2009 to September 2010.) The Romers looked at measures of fiscal policy and monetary policy and ran several regressions comparing the economy’s actual behavior with the GDP figures that would have resulted if policymakers had followed a hypothetical baseline policy. The results indicated that monetary policy had a potent, “crucial” effect on recoveries; for each one-percentage-point fall in the real federal funds rate, the researchers concluded, real GDP increased between 1.5 percent and 3.0 percent on average during the first year of recoveries. Conversely, the monetary tightening that typically occurred before the peak of the cycle had persistent effects that reduced growth during the recovery.

With regard to discretionary fiscal policy, in contrast, the results indicated slight effects on GDP except during the 1973-1975 recession. The Romers thus attributed to discretionary fiscal policy “at most a small role in recoveries.” They found a greater role for automatic fiscal stabilizers, such as the decreases that take place in tax collections during a recession as incomes fall, and the increases in payouts of welfare and unemployment benefits; these automatic changes in fiscal policy added an average of 0.6 to 0.9 percentage points to GDP growth during the first year of recoveries.
The researchers did not attempt to measure the effects of nonpolicy factors on recoveries. Instead, they lumped the effects of nonpolicy factors together as a residual value and found that such factors appeared to have “little effect on growth.”

Clean Balance Sheets
Other economists who have studied recoveries, however, believe that factors apart from monetary policy and automatic fiscal stabilizers — including both policy and nonpolicy factors — play important roles in determining the recovery process. High among these are balance sheets: those of companies, consumers, and the government. When it comes to igniting a recovery, clean balance sheets are like kindling; overburdened ones are like asbestos blankets.

George Perry and Charles Schultze of the Brookings Institution, in a 1993 article in the Brookings Papers on Economic Activity, looked at the recovery following the recession of 1990-1991 and concluded that recovery was being inhibited in part by the balance-sheet problems of highly leveraged businesses. They noted that when interest payments become high in relation to cash flow, the firm tends to become less willing to invest. Even if the spirit is willing, moreover, the flesh becomes weak: On account of their balance sheets, highly leveraged firms that do seek to continue to expand must contend with impaired access to additional credit at attractive interest rates.

Although the ratio of corporate debt to GDP had peaked in early 1991 and declined since then, Perry and Schultze argued that the decline was primarily due to falling interest rates — and that firms with already debt-heavy balance sheets might well be apprehensive of those rates bouncing back up. Those apprehensions, in turn, would curtail investment on the part of those firms and thus slow any recovery.

Benjamin Friedman of Harvard, commenting on Perry and Schultze’s article, noted that during the six-year period leading up to the 1990-1991 recession, more than half of the net value of bonds issued by U.S. nonfinancial companies essentially paid down equity. Such interest burdens, Friedman argued, “would impair the economy’s ability to mount a sustained recovery after the recession ended.”

The balance sheets of consumers are even more significant, argues an unpublished 2010 paper by Steven Gjerstad and Vernon Smith of Chapman University. Gjerstad and Smith surveyed post-war recoveries and concluded that new residential construction is the primary transmission channel for monetary policy during both downturns and recoveries — and thus, if households’ balance sheets impair their ability to spend, monetary easing will have at most a minor effect. “When household balance sheets are damaged in the aftermath of a serious housing bubble and collapse,” Gjerstad and Smith conclude, “households remain unre-

When economists speak of recoveries, they typically characterize them simply as a resumption of the natural state of the economy: growth.

and analyst Allen Sinai of Decision Economics. “You can have a credit crunch in terms of the ability of the government to finance its operations through Treasury issues and/or the ability of the private sector to obtain financing, because foreign investors don’t want to invest in a country where the credit risk is high, the currency is going down, and there’s a big overhang of debt,” says Sinai. “It’s a risk of us tumbling back down into a downturn, as may happen to some of those countries that have had to impose fiscal austerity because of the nature of their sovereign problem.”

For the quickest and strongest recovery, Sinai says, “We need to be in a situation where we’re not financially compromised — either households, companies, financial intermediaries, or government.”

Confidence
A second factor with a major role in the recovery process is confidence — what John Maynard Keynes called “animal spirits.” When Harvard’s Lawrence Summers was director of President Obama’s National Economic Council, he argued in a speech that “panic and fear” are major obstacles to recovery. “Businesses, consumers, and investors need to feel both that recovery can be sustained and that the economy is returning to a long-run sustainable path,” Summers maintained. “I cannot overstate the importance of confidence.”

For Summers, building confidence requires fiscal and monetary discipline. Federal policymakers, he argued, can contribute to confidence by eschewing any policy that might “call into question our national commitment to sound money, noninflationary growth, and sustainable devolution of government debt.” In addition, Summers suggested, policymakers can build confidence by resolving policy issues as quickly as possible to minimize periods of policy uncertainty.

Confidence can be built, but it can also be torn down. If political leaders can build confidence — and thus potentially spur investment — by expressing support for policies that businesses and investors perceive as helpful (and then consistently carrying those policies out), they can also destroy confidence with words that appear to be a prelude to adverse policy. The Panic of 1907 and its aftermath illustrate the role of language in building confidence — or undermining it. Robert Bruner, dean of the Darden School of Business at the University of Virginia and co-author of the 2007 book The Panic of 1907: Lessons Learned from the Market’s Perfect Storm, says that the panic led President Theodore
Even a natural disaster — the classic example of an exogenous event — might or might not be exogenous from the standpoint of a macroeconomic model since the effects of a natural disaster are influenced by policy factors such as building codes and investments in forecasting systems.

Perhaps the ultimate good shock is technological innovation. That was the thesis of Harvard University's Joseph Schumpeter, who held, starting in a series of articles in the 1910s, that the growth phase of business cycles is brought about by entrepreneurial innovation; successful innovators spur economic activity not only through their own efforts, but also by inspiring imitators, all of which creates a surge of investment.

Schumpeter regarded the growth of railroads, and the investment and development they generated, as a clear case of this process during his lifetime. A modern-day example is the aftermath of the 1990-1991 recession, which initially was followed by a weak recovery; in the years immediately following the trough, growth was at less than half the rate of the recoveries of the 1960s and 1980s. Only with the Internet boom of the mid-1990s — driven by the commercialization of the World Wide Web — did the recovery catch up to historical norms.

**What Happened to Joe Palooka?**

Historically, recessions during the post-World War II era were followed by rapid GDP growth. The fastest growth, moreover, occurred after the deepest recessions. Princeton University's Alan Blinder, writing in 1984 about the Reagan recovery, called this regularity the "Joe Palooka effect" in reference to an inflatable punching bag with an image of the cartoon boxer Joe Palooka on it. "Because he was weighted at the bottom, he snapped right back when you punched him to the floor," Blinder explained. "And the harder you hit him, the faster he came bouncing back."

Mr. Palooka hasn't been taking punches like he used to; the recovery from 1990-1991 recession was the first of three disappointingly slow recoveries. Growth during the first two years after the 1990-1991 and 2001 recessions were just 2.1 percent and 2.2 percent respectively — far shallower than the same periods during recoveries of the 1950s through the 1980s, which often brought growth rates higher than 6 percent.

Growth following the 2007-2009 recession also has been relatively weak and by some measures appears to be slowing further. The 1990-1991 recession also saw the advent of the so-called "jobless" recovery, as employment did not grow substantially during the year after the recession's end — a pattern that, too, repeated itself after the 2001 and 2007-2009 recessions.

Hypotheses abound. Sinai of Decision Economics suggested in an *American Economic Review* article in May 2010 that businesses may have become reluctant to hire, even during a recovery, on account of both the increasing cost of labor (when benefits and payroll taxes are factored in) and the proliferating substitutes for traditional hiring, continued on page 35
Office of the Comptroller of the Currency (OCC) announced that it would begin issuing “shelf charters,” conditional approval granted to investors seeking a national bank charter. With a shelf charter, the investors complete the preliminary paperwork to become a bank, but the charter remains on hold (“on the shelf”) until the investors are in a position to acquire a specific bank. At the same time as the OCC rule change, the FDIC announced that it would open the bidding to groups that did not currently have, but were pursuing, a national bank charter, thereby allowing investors with shelf charters to bid. Similarly, the Office of Thrift Supervision (OTS), which regulates savings banks, reinstated a “pre-clearance” process, further expanding the pool of bidders.

Although some believe that private equity ownership of banks poses new risks, Kevin Mukri, spokesman for the OCC, emphasizes that shelf charters are “not a loophole for private investors. They can’t go off and do their own thing — they have to become a national bank. They have to become subject to all the national rules and regulations.” (A national bank is one that is chartered and regulated by the OCC rather than by the state.)

So far, three investor groups have gone on to submit bids and earn final approval from either the OCC or the OTS and the FDIC. Being eligible to submit a bid doesn’t assure its success. Regulators review the management, funding, and business plans of would-be banks, and preliminary approval isn’t a guarantee of final approval. Two of the three successful bids were for banks in the Fifth District. Bay National Bank in Baltimore was acquired by the Washington, D.C. firm Hovde Private Equity Advisors LLC. First National Bank of the South, based in Spartanburg, S.C., was purchased by North American Financial Holdings, which also picked up two banks in Georgia and Florida.

Both Bay National and First National were fairly young banks, established in 2000, and they expanded rapidly, making real estate loans during the boom years of the 2000s. It’s a business model that was replicated across the nation, and whose effects reverberate more than a year after the end of the recession. In 2010, 157 banks failed in the United States, up from 140 in 2009 and 25 in 2008, bringing the total to 322 since the beginning of 2008. In contrast, between 1995 (roughly the end of the Savings and Loan crisis) and 2007, just 58 banks failed.

Tony Plath, a finance professor at the University of North Carolina-Charlotte, expects the number of failures to bottom out in 2011, although he projects that the industry may yet lose another 500 banks. The FDIC currently has about 850 banks on its confidential “watch list.” Given the small number of shelf charters, they may not be a major new source of bank acquisitions. As the supply of failed banks continues to increase, however, the industry may have to turn to new sources of demand.

—— Jessie Romero

WHAT CAUSES RECOVERIES? • continued from page 16

such as information technology, robotics, and the use of modern telecommunications technology to interact with technologically skilled workers in low-wage markets.

Diagnosing the reasons behind the new shape of American recoveries — if, indeed, the last several recoveries represent a long-term change — remains a challenge for the economics discipline. Chicago’s Cochrane notes that it is an unsolved puzzle. “In the early 20th century, we had frequent deep recessions, but we bounced out of them quickly,” he says. “Now we seem to be bouncing out of them slower and slower. Europe certainly got to a position in the 1970s and 1980s where it would get stuck without ever bouncing out, usually for various policy reasons. Maybe that’s what’s going on now in the United States, too. That would be depressing.”

It surely would. On the other hand, anyone old enough to have survived the stagflation of the 1970s and the recessions of the early 1980s knows that thoughtful policy changes can bring a powerful recovery even in exceptionally tough times. Joe Palooka may be woozy, but the ring doctor hasn’t stopped the fight yet.

—— RF

Readings


