

For many Americans, the recession hasn't ended. The unemployment rate in the United States has been above 9 percent for 28 of the past 30 months. More than 6 million people — nearly half of all those who are unemployed — have been out of work for longer than 27 weeks. Most of the nearly 9 million jobs lost due to the recession haven't come back; the job creation rate fell to a historic low in 2008 and is still well below its rate for the previous two decades. At the same time, corporate profits are above their prerecession levels and companies are holding a record-high \$1.9 trillion in cash reserves. Policymakers — and households — are asking what the government can do to encourage those companies to start hiring.

Policymakers also are asking what has changed since the last very severe recession, in 1981-82. Then, the overall unemployment rate reached a higher level, but returned to its prerecession level about 18 months after the end of the recession. The share of long-term unemployed workers peaked at 26 percent, compared to the recent high of 46 percent. GDP growth averaged almost 7 percent during 1983 and 1984, but only 2.5 percent during the past two years (see chart on page 13). The divergence suggests broader changes in the labor market and in the economy that may be less amenable to traditional policy tools for job creation, such as stimulus spending, tax rebates, and direct hiring subsidies.

The effectiveness of those tools, and economic growth in general, might be hampered by an environment of considerable economic, fiscal, and regulatory uncertainty. If so, then restoring the American economy to previous levels of growth and employment is likely to be a long and challenging process, but one that could be fostered by stable, credible policies that provide the private sector with the tools and incentives to recover.

The Keynesian Approach

Since the mid-20th century, federal policymakers have often taken what could broadly be called a “Keynesian” view of economic downturns: When aggregate demand falls, the government should move to fill the gap by increasing government spending or, in some cases, cutting taxes. How

much of the gap it can fill depends on the size of the “fiscal multiplier,” the amount by which a dollar of government spending increases the economy's output.

The size of the fiscal multiplier is not a static number. Instead, it depends on what is already happening in the economy, and how the economy's characteristics are represented in a model. The multiplier also can vary with the type of stimulus, whether it is in the form of government purchases or tax cuts. In some models, the multiplier is less than one, meaning that one dollar of spending yields less than one dollar of additional output, often because it is assumed that households and firms expect higher taxes and interest rates in the future. In other models, the multiplier is larger than one, especially when interest rates are at the zero bound, as at present.

The American Recovery and Reinvestment Act (ARRA), enacted in 2009, was designed to stimulate the economy. The Congressional Budget Office (CBO) estimates the act will cost \$830 billion, with about two-thirds of the cost coming from increased federal spending and one-third from tax cuts and credits. Before the ARRA was passed, the White House's Council of Economic Advisers (CEA) projected that it would save or create at least 3 million jobs by the end of 2010. The CEA used a model with a multiplier of about 1.5 on government purchases (that is, one dollar yields \$1.50 in output).

Actually measuring the number of jobs created by stimulus spending is impossible because it requires knowing for certain what would have happened without the stimulus — what economists call the “counterfactual.” Physically counting the number of jobs created doesn't paint a complete picture; recipients of ARRA funding are required to report the number of jobs they create, but there is significant over- and under-reporting, and the reports don't capture any indirect effects such as increased demand by the newly employed. As a result, official estimates of the impact of ARRA are based on models, often the same models that were used to predict its impact. The CBO estimates that the ARRA saved or created between 1.2 million and 3.3 million jobs in the first quarter of 2011, based on multipliers of between one and 2.5.

Why Aren't We Creating More Jobs?

Job growth usually rebounds quickly after a severe recession, but this time is different

BY JESSIE ROMERO

An analysis by Daniel Wilson, an economist at the San Francisco Fed, also suggests that the stimulus had a large effect on employment. Rather than using a model with an implied multiplier, Wilson compared state-level differences in ARRA funding and employment levels and found that the ARRA saved or created more than three million jobs by March 2011.

Other economists, including John Cogan and John Taylor of Stanford University, are skeptical about the ARRA's impact. They argue that very little of the money was actually used to increase government purchases. They found that the increase in purchases due to the ARRA was only 0.1 percent of GDP during 2009 and 2010. A large portion of the money was in the form of grants to states, which, instead of increasing their own purchases, used the money primarily to reduce borrowing, according to Cogan and Taylor. The implication is that the stimulus had little effect on consumption, and thus on employment.

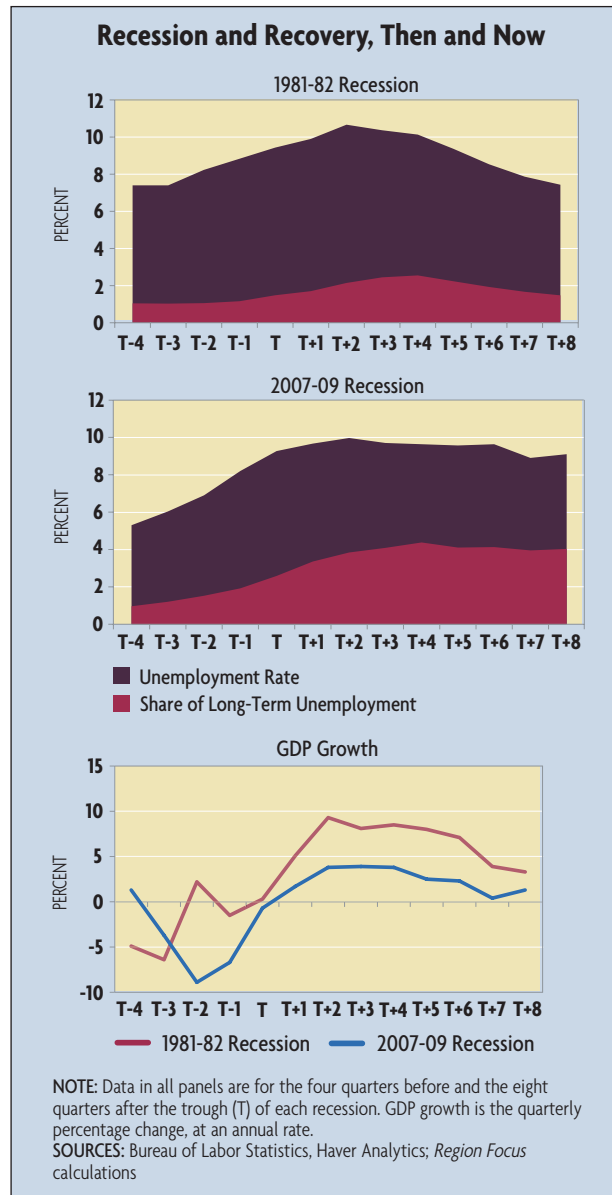
As Wilson notes, however, job creation was not the only objective of the stimulus package. A significant portion of ARRA funds went to extended unemployment benefits and Medicaid reimbursements to states. "If the sole goal was to create employment it probably could have been designed in a different way," he says. "But maintaining health spending for low-income households was a goal, and so was providing unemployment benefits and increasing the safety net in general."

Revised GDP numbers released by the Bureau of Economic Analysis (BEA) in July show that the recession was much more severe than originally thought — GDP actually declined at an average annual rate of 3.5 percent, compared to the earlier estimate of 2.8 percent — so some argue that the stimulus package was simply not large enough to counter the magnitude of the downturn. Other commentators have noted that growth slowed in 2011, when the stimulus started winding down, which suggests that it did have an effect in boosting the economy.

On the other hand, this decline could also suggest that the stimulus did not fix what truly ails the economy, given that the effects do not appear to be sustainable. For example, more than 300,000 educators' jobs were saved by the stimulus, according to the Department of Education, but now more than half of U.S. school districts are planning layoffs. The Savannah River Site, a nuclear cleanup project in South Carolina, was awarded \$1.6 billion in ARRA funding, which allowed the contractor to save the jobs of 800 full-time employees and hire 2,200 temporary workers. As of August, only 1,200 stimulus-funded workers remained, and their projects were scheduled to end in October, along with the funding. About 1,000 full-time workers have been laid off or accepted buyouts since the beginning of the year.

Temporary Tax Breaks

The government also can try to boost demand, and thus create jobs, via tax policy. That was the goal of the rebates issued to households in 2001 and 2008, and of the Job



Creation Act of 2010, which expanded several tax credits for lower-income families and allowed businesses to expense all of their investments in 2011. The ARRA included the Making Work Pay tax credit, a \$400 employee-side reduction in payroll taxes.

Forecasting how households will respond to a temporary boost in income is difficult. Economic theory says that short-term income changes shouldn't have much effect on households' spending decisions, but people don't always respond as theory would predict. A study of the 2001 tax rebates — cited by many policymakers in support of the Job Creation Act credits — found that households, particularly lower-income households, actually spent a substantial portion of the rebates. The authors, David Johnson of the U.S. Census Bureau, Jonathan Parker of Princeton University, and Nicholas Souleles of the University of Pennsylvania, concluded that the rebates likely had a large effect on aggregate consumption.

In a survey about the effects of the 2008 tax rebates, however, Claudia Sahm of the Federal Reserve Board and

Matthew Shapiro and Joel Slemrod of the University of Michigan found that most recipients used the rebate to save or pay down debt, instead of spending it. The personal savings rate at the end of 2008 reached 6 percent, and remained around 5 percent until the summer of 2011, double the rate prior to the recession, according to the BEA. Other studies have found that the rebates did have a positive effect on consumption. Overall, however, they were not enough to stave off a more than 5 percent drop in spending in the fourth quarter of 2008, and a continued decline throughout the first half of 2009.

One reason for the different responses to the 2001 and the 2008 tax rebates might be that the 2001 rebates were perceived to be part of a longer-term tax cut, whereas the 2008 rebates were a one-time event. A study by Christina Romer and David Romer of the University of California, Berkeley, found that a tax cut equal to 1 percent of GDP could raise output by as much as 3 percent, but that the effects were highly dependent on the economic conditions at the time. Countercyclical tax cuts — that is, those enacted in response to an economic downturn — tend to have a much smaller effect on the economy than tax cuts enacted to promote long-term growth.

A more significant factor in the divergence between 2001 and 2008, however, is likely that households' wealth had declined much more severely, and consumer confidence was significantly lower, in 2008 than in 2001, making consumers more cautious about spending. And that caution appears to be persisting. A new payroll tax deduction for employees went into effect at the beginning of 2011, but consumer spending has stayed fairly flat, according to BEA data. This suggests that the deductions are not having the desired effect on consumption, and by extension on employment, although they might be helping to offset a larger decline that could have been caused by higher gas and food prices.

Subsidize Private Hiring

The government can also try to encourage firms to hire new workers by offering direct hiring credits. Firms hire new workers when they believe the marginal benefits of new workers outweigh the marginal costs. Lower the cost of labor, for example by offering a tax credit for new employees, and in theory firms should be more willing to expand their payrolls. But estimates of how responsive firms are to changes in the price of labor vary widely, and most studies suggest that the effect of a hiring credit is relatively small.

Before 2010, the only broad-based national tax credit for employment was the New Jobs Tax Credit (NJTC), which was in effect from mid-1977 through 1978. (Other programs, such as the Targeted Jobs Tax Credit and the Welfare-to-Work Tax Credit, were designed to aid specific groups of disadvantaged workers. The NJTC was the first to target unemployed workers in general.) Studies of the NJTC showed it did create jobs, perhaps as many as 670,000, although it's possible that many of the companies who claimed the credit would have created jobs anyway,

according to a 1996 review by Lawrence Katz of Harvard University.

State-level programs have had modest results. Wilson of the San Francisco Fed and Robert Chirinko of the University of Illinois at Chicago have been conducting a study of two dozen state-level hiring credits. Their preliminary results point to a positive — but small and transitory — effect on employment. A 2010 study of the MEGA tax credit program in Michigan concluded that the credit might only be decisive in 8 percent to 16 percent of hiring decisions (meaning that the remaining credits are earned for jobs that would have been created anyway), and that the program could boost the state's employment by one-third to two-thirds of a percent. The study was conducted by Timothy Bartik and George Erickcek of the W.E. Upjohn Institute for Employment Research. But as the authors noted, the effects of the MEGA program might be small because the program itself is relatively small.

A recent program at the federal level was the Hiring Incentives to Restore Employment (HIRE) Act, which became law in March 2010. The Act allows employers to claim a payroll tax exemption for qualified workers (those unemployed for eight weeks or longer) hired between February and December of 2010. At the end of 2010, the Treasury reported that 10.6 million workers who were hired during that period were eligible for the HIRE exemption. But that number represents only 11.6 percent of all the people who spent more than eight weeks unemployed during that period, and it's not certain how many of those workers were actually hired as a direct result of the program.

David Neumark, an economist at the University of California, Irvine, has studied the effectiveness of hiring subsidies. While a new subsidy may have small employment gains relative to the number of jobs needed, he considers it one of the better options available. "If we're really serious about increasing hiring, then let's focus on the things that directly incentivize hiring," he says.

What's Behind the Jobless Recovery?

Following the recessions of 1990-91 and 2001, economists asked whether the "jobless recoveries" that followed were a function of those recessions being shallow, or if instead they reflected more permanent changes in the economy. During the 2007-09 recession, it was hoped that the answer was shallow, and that the recovery would follow the same path as the similarly severe recession in 1981-82, when the economy rebounded quickly and sharply. Instead, it seems that there has been "a change in how the labor market responds to shocks," says Jason Faberman, an economist at the Chicago Fed. "Even though this was a bigger shock, we're seeing the same kind of response in the labor market that we saw in 1991 and 2001. We don't see a sharp return to the labor market like we used to."

Faberman has documented a persistent decline in the job creation rate over the last two decades, exemplified by changing employment patterns after recessions. During and

after the 1990-91 recession, the job creation rate was fairly constant, but the unemployment rate remained high because the job destruction rate was high. After the 2001 recession, in contrast, the job destruction rate quickly returned to prerecession levels, but the job creation rate continued to decline well into 2003.

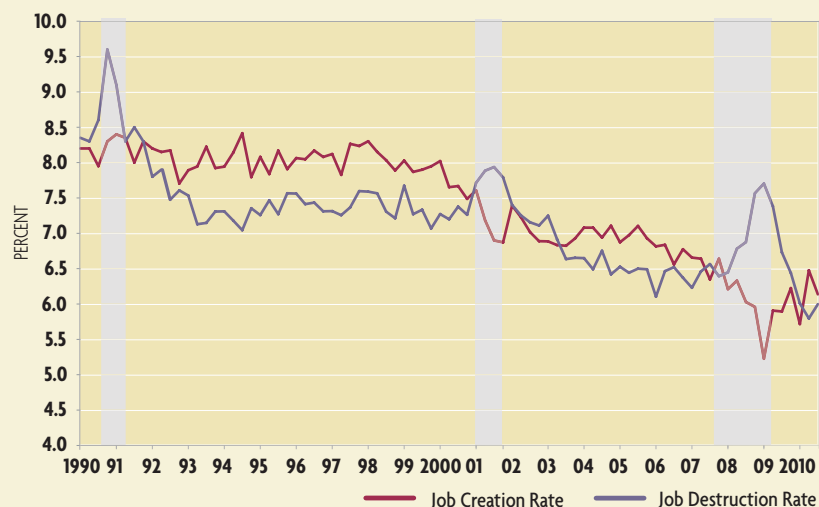
The most recent recession has followed the pattern of the 2001 recession: Initially, the job destruction rate spiked and the job creation rate fell to historical lows. Now, the job destruction rate has subsided, but the job creation rate remains very low — far below the level needed to recoup the recession's losses (see chart). The reasons for the decline in the job creation rate could be structural changes in how the labor market operates. Productivity increases and new technology have reduced the need for labor overall, and the availability of temporary workers enables companies to ramp up production without hiring new permanent workers. In addition, firms are more likely to use permanent rather than temporary layoffs, for reasons including changes in how unemployment insurance costs are charged to employers and the decrease in union contracts.

The Cost of Uncertainty

The effects of structural changes in the labor market are amplified by the considerable uncertainty facing business owners. While uncertainty is difficult to measure, a large body of theoretical and empirical research suggests that when businesses are uncertain — whether it's about taxes, regulation, interest rates, future demand, or other factors — they delay investment decisions, which could include hiring. A 2009 study by Nicholas Bloom of Stanford University found that “uncertainty shocks,” caused by economic or political events, can lead to a 1 percent drop in employment and output in the months immediately after the shock.

Bloom also found that output rebounds as uncertainty diminishes, but the sources of today's uncertainty remain persistent. The largest source is the future of the economy: GDP grew at an annual rate of only 1 percent in the second quarter of 2011, and 0.4 percent in the first quarter. According to the BEA's initial estimates, growth improved to 2.5 percent in third quarter, still well below the rate needed for a robust recovery. Its July release showing that the recession was deeper than previously thought also showed that growth had been slower than estimated since the recession ended — leading some to dub the period a “recoveryless recovery.” The Federal Reserve recently lowered its growth and unemployment forecasts for 2012, and measures of consumer and business confidence remain very weak. The University of Michigan's Index of Consumer Sentiment fell 10 percent between October 2010 and October 2011, and only 19 percent of CEOs surveyed by The Conference Board, a business research association, expected the economy to improve in the next six months.

Job Creation and Destruction Rates



NOTE: Data are for private non-farm employment. The job creation (destruction) rate in each quarter is gross job creation (destruction) divided by the average of total employment in that quarter and the preceding quarter. Shaded areas denote recessions.

SOURCES: Bureau of Labor Statistics, Haver Analytics, Faberman (2008); *Region Focus* calculations

Uncertainty about the country's regulatory and fiscal environment could also be contributing to companies' reticence. The pending implementation of new health care and environmental regulations, for example, has led many business owners to express concern about how their companies will be affected. In the Fifth District, respondents to Richmond Fed surveys report that potential regulatory changes make it difficult to plan new hires. A greater source of concern is the resolution of nation's debt and deficit problems. According to Dallas Fed surveys, for example, the lack of clarity from legislators about future economic policies contributes to business owners' pessimism about the future. Monetary policymakers on the Federal Open Market Committee recently indicated that they are likely to keep interest rates low through 2013, but the fear of higher taxes and interest rates in the future might be enough to discourage businesses in the present.

How to resolve this uncertainty is a matter of debate. No one can predict for certain the jobs impact of specific regulations or the effect of various tax and spending policies. But there is broader agreement about creating economic conditions that promote long-term growth. Numerous cross-country comparisons have shown that countries with less regulated, more competitive markets have higher levels of business investment and faster growth. The United States generally has had less regulated product and labor markets than European countries, which could account for the fact that average GDP growth during much of the 1990s was about 2 percentage points higher in the United States than in France, Germany, and Italy, according to a 2005 paper by Alberto Alesina and Silvia Ardagna of Harvard University, Giuseppe Nicoletti of the Organization for Economic Cooperation and Development, and Fabio Schiantarelli of Boston College.

New business formation is especially affected by regulation. Multiple studies have shown that high barriers to entry

for new firms limit the “creative destruction” that is an engine of economic growth. In the United States, new businesses account for almost 20 percent of gross job creation, according to a 2010 paper by John Haltiwanger of the University of Maryland and Ron Jarmin and Javier Miranda of the U.S. Census Bureau. While startups are also more likely to go out of business in a given year, those that survive grow much more quickly than their older counterparts. “The startups are a critical component of the experimentation process that contributes to restructuring and growth in the United States on an ongoing basis,” the authors concluded.

The United States also has one of the highest corporate tax rates, and one of the most complex tax systems, in the world. In addition, the United States is the only major developed country that taxes the foreign earnings of domestically based companies when the earnings are repatriated, which could encourage multinational companies to keep their earnings offshore instead of investing them in the United States. Many lawmakers and economists have suggested that simplifying the tax code and making it more transparent, among other reforms, would help lower costs for businesses and increase the incentives to invest in productive activities at home.

There is consensus that restoring fiscal balance is essential to the country’s long-term health. In a June speech, Fed Chairman Ben Bernanke noted that “a large and increasing level of government debt relative to national income risks serious economic consequences... [F]ailure to put our fiscal house in order will erode the vitality of our economy.” Large debts and deficits can hinder growth if they lead to higher interest rates or taxes, and thus crowd out private investment. The United States currently has a national debt of \$14.8 trillion and a deficit of \$1.3 trillion. Examining 200 years of data on 44 countries, Carmen Reinhart of the Peterson Institute for International Economics and Kenneth Rogoff of Harvard University have found that countries with a debt-to-GDP ratio of more than 90 percent have substantially slower growth. In the United States, growth has averaged negative 1.8 percent when the ratio was more than 90 percent and 4 percent when the ratio was

below 30 percent. Without substantial spending cuts and increased tax revenue, the CBO projects that the U.S. debt-to-GDP ratio could exceed the historical peak of 109 percent (reached at the end of World War II) by 2023, and approach 190 percent by 2035.

Whether lowering the deficit should be achieved via spending cuts, revenue increases, or a mix thereof is a question being debated by economists and policymakers. But all sides agree that committing to a credible, enforceable plan is essential to restoring business and consumer confidence, and thus to promoting the country’s short-term and long-term economic health.

The Path Forward

The U.S. economy is facing a number of significant challenges. Long-term changes in the labor market, an unsustainable fiscal situation, and the continued effects of the most severe recession since the Great Depression suggest that a near-term solution to the unemployment problem is not at hand.

The considerable uncertainty facing business owners makes these challenges more difficult to overcome. Work by economist Robert Pindyck of the Massachusetts Institute of Technology suggests that uncertainty not only decreases investment but also makes companies less responsive to stimulus. And Bloom’s results show that uncertainty makes firms less likely to respond to an increase in demand. Resolving the uncertainty surrounding so many political and economic decisions thus could help spur businesses to increase their payrolls once the economy picks up.

Policy tools such as tax incentives or stimulus spending can help on the margin of the labor market. But broad-based job creation, which so far has dragged more slowly than the recovery generally, will require sustained improvement in economic conditions — and that means policymakers must credibly address the hardest problems rather than working only on the edges. This does not help the millions of people who need to find work now, but in the long run, the best hope for growth in output and employment is to create the conditions that allow new and existing businesses to flourish.

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