

Written Testimony of Mark Zandi  
Chief Economist, Moody's Analytics

Before the Joint Economic Committee

*"The Road to Economic Recovery:  
Policies to Create Jobs and Continue Growth"*

February 9, 2010

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The Great Recession is over, and an economic recovery has begun. Real GDP grew at a strong 4% average annualized rate during the second half of 2009, powered by a massive inventory swing and the unprecedented monetary and fiscal stimulus. It is no accident the recession ended just when the fiscal stimulus passed by Congress a year ago was providing its maximum economic benefit.

While the government's monetary and fiscal stimulus worked as planned to end the recession, the recovery will not evolve into a self-sustaining economic expansion until businesses respond by hiring more workers. It is therefore particularly worrisome that employment continues to decline and the unemployment rate remains near double digits. The job market is arguably as bad as it has been since the Great Depression, with nearly every industry, occupation, and region of the country suffering from weak labor demand. Layoffs have abated since the worst of the financial panic and recession a year ago, but they remain uncomfortably high. Worse, hiring and job creation remain dormant.

The job market's struggle represents the most serious threat to the fledgling recovery. In a typical business cycle, recession occurs when consumer and business demand is undermined by a shock such as a surge in oil prices, a stock market crash, or—as in the current cycle—a bursting house price bubble. Businesses respond by slashing investment and payrolls to cut costs and stabilize profits. As profits improve, investors, who had driven stock prices down leading up to the recession, now bid prices up. With better profit margins and higher stock prices, businesses stop cutting, and recession gives way to recovery. A self-sustaining expansion takes hold when businesses feel comfortable enough to invest and hire. In the current business cycle, profits and stock prices have risen, firms have stopped cutting, and recovery has begun. But because employers have yet to resume hiring, expansion remains elusive.

Some firms have found they can produce more with fewer employees. Judging by the astonishing recent surge in productivity, businesses may only now be seeing the full benefits of the information technology revolution of a decade ago. Making the changes needed to fully realize these benefits might have been too difficult in the good times; but in tough times, managers feel unfettered and compelled to act even (or particularly) if that means slashing payrolls. With so many out of work, managers may also sense they can require their remaining employees to work harder. Corporate profits and stock prices have jumped with the productivity surge, but businesses have yet to respond by expanding or hiring. Unless they do so soon, job and income growth will not be sufficient to support the spending necessary for a self-sustaining expansion.

A lack of credit is also short-circuiting job growth, particularly for small and midsize firms that rely on credit cards and small banks for loans. Credit card companies and small banks remain under pressure and are pulling back. Lending standards have been tightened significantly, contributing to a sharp decline in the number of credit cards and commercial loans outstanding. Smaller businesses account for a surprisingly large share of the nation's job base, and if they are unable to obtain the credit necessary to expand, the job machine will not function.

A lack of confidence is another explanation for weak hiring. Many businesses suffered near-death experiences not too long ago, and their managers are not convinced that conditions are strong enough yet to justify expansion. It will take more time than in past business cycles for those animal spirits to return. While major changes to the health care industry, financial system, energy policy, and the tax code are essential, businesses may also be grappling with the policy uncertainty created by the debate over these issues.

Policymakers are rightly focused on addressing the troubled job market. The Obama administration and Congress have proposed legislation that provides more temporary tax cuts and spending increases in hopes of restarting the job market. Proposals being discussed would boost the flow of credit to small businesses, give firms that add workers a payroll tax break, increase public-service and summer youth jobs, and add spending on infrastructure. Many of these steps would help revive the job market this year.

These policy efforts would be expensive; the total estimated cost to the federal government would be close to \$100 billion over the next two years. This is on top of the as much as \$150 billion policymakers are also considering spending on more unemployment insurance benefits and relief to financially strapped state and local governments.

Yet the cost to taxpayers will be measurably greater if the economy does not quickly turn the corner into expansion and instead falls back into recession. With the unemployment rate already near double digits, a deflationary cycle of falling wages and prices could well take hold. If it does, policymakers will have no good response, given the 0% federal funds rate and the federal government's rapidly eroding balance sheet.

Failing to use fiscal policy aggressively now could also cost the economy significantly in the longer run. Even under the best of circumstances, and assuming policymakers take the steps recommended here, the 8.4 million payroll jobs lost in the recession will not be regained until 2013. The unemployment rate, which is expected to peak later this year, will also not fall back to a rate consistent with full employment until 2014-2015. The long road to recovery will be very uneven across industries and regions of the country.

The nation has made significant strides in the last year; 12 months ago, the financial system was in disarray and the economy was in free fall. Yet the proverbial coast is not clear. The Great Recession has given way to recovery, but with firms still unwilling to add to their payrolls, it will take more policy help to guarantee the expansion becomes self-sustaining and begin the long process of re-employing those who lost their jobs over the past two years.

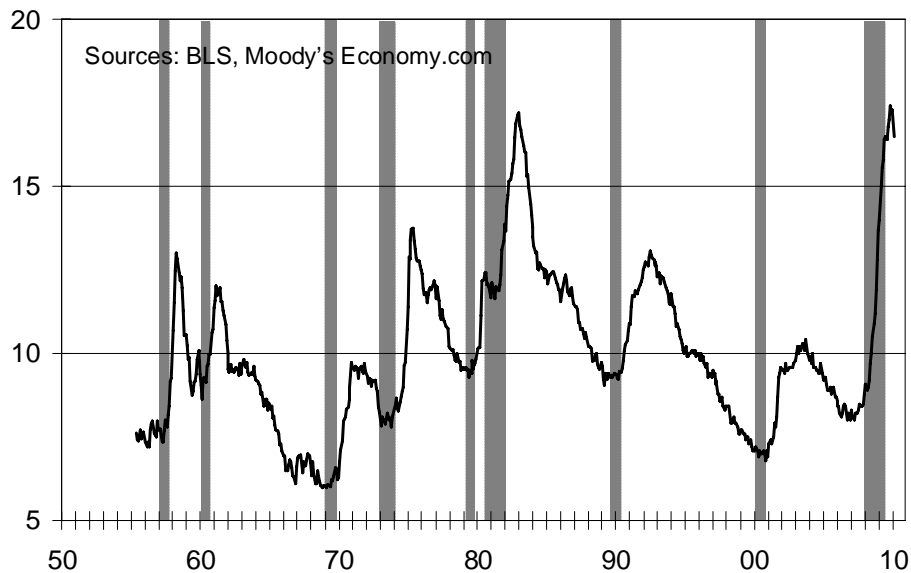
### **How bad is it?**

The severity and breadth of the job market's problems are clear. The unemployment rate has surged to nearly 10%, despite a very unusual decline in the labor force.<sup>i</sup> Unemployed workers are leaving the job market, feeling there are no jobs to be had. Indeed, there are now almost six unemployed workers for each available position. In normal economic times, there is at most one unemployed worker per open position. If the labor force were growing at closer to the 1% annual pace that prevailed just prior to the recession, the unemployment rate would near 11%.<sup>ii</sup>

For anyone who loses a job, moreover, it is extraordinarily difficult to find another. The average length of unemployment has risen above six months, and well over a third of the unemployed have been out of work longer than the 26 weeks that unemployment insurance normally covers. Even in the early-1980s downturn—the last time unemployment hit double digits—only a fourth of the unemployed were out of work that long. During the worst recession of the 1950s, closer to a tenth of workers were in this difficult position.

The unemployment statistics are bad, but they still understate the stress in the job market. Including those working part-time because they cannot find full-time work and those who want to work but are not counted as unemployed because they have not looked for jobs in the past month, the so-called underemployment rate jumps to almost 17% (see Chart 1). This is the highest level since the Great Depression and represents 25 million Americans.

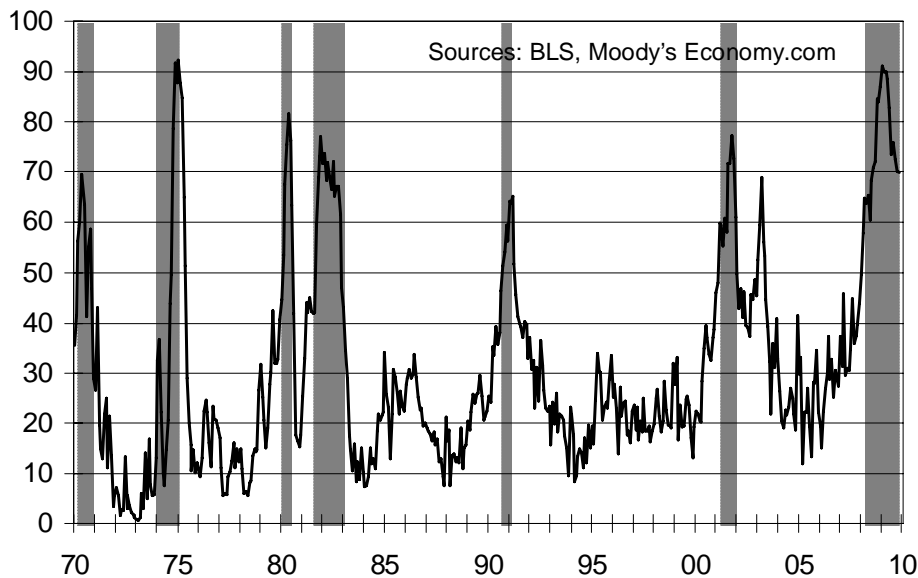
**Chart 1: Lost in Unemployment**  
*% of labor force that is unemployed and underemployed*



Jobs are hard to get, and unemployment is high in every corner of the market. While the worst job losses have occurred in manufacturing and construction, unemployment has risen measurably across every occupation and demographic group. The only industry adding to payrolls throughout the recession has been healthcare. The unemployment rate for males between 45 and 54 years old, historically the most stable group in the job market, has surged past 9%. At the worst of the early-1980s downturn, this group briefly suffered a 7% unemployment rate.

In every corner of the country, job markets are troubled. A year ago, meaningful job losses were occurring in over 90% of the nation's more than 380 metropolitan areas (see Chart 2). Even now, three-fourths of the nation's metro areas are experiencing losses. In most past recessions, a sizable region or two avoided the downturn; this time no area of the country has been spared. This has undermined one of the nation's historical strengths: workers' willingness and ability to move.<sup>iii</sup> In the past, a laid-off auto worker from Michigan might relocate to Florida; a displaced aerospace worker in Southern California could move to Las Vegas. Today, unemployment rates in Florida and Las Vegas are in the double digits.

**Chart 2: Every Corner of the Country Has Been Hit**  
*% of metro areas suffering employment declines over past 3 mo*



Some recent signs are encouraging. The rate of job loss is down significantly, from 735,000 per month in the first quarter of 2009 to 150,000 in the fourth quarter. Initial claims for unemployment insurance have fallen from above 650,000 per week to around 450,000. A rate of new unemployment claims closer to 400,000 per week would be consistent with stable payrolls. The number of temporary jobs has also risen recently, a positive leading indicator; businesses hire more temps before they add full-time workers. The Census Bureau will also soon begin hiring more than a million temporary workers to conduct the 2010 Census. All this is good news, suggesting job growth is set to resume soon. But it is not nearly good enough.

#### **What's the threat?**

Historically, changes in employment and unemployment closely follow changes in GDP. Output grows coming out of recessions; employment expands a few months later, and unemployment begins to decline some months after that. Unemployment took longer to fall because the expansion drew formerly discouraged workers back into the job market, temporarily raising the jobless rate while they sought and found new work.

This dynamic of stronger output leading to hiring leading to lower unemployment has been important in the transition from recession to recovery to expansion. Without the additional jobs and income, consumers do not have the confidence to spend more aggressively, which is precisely what is required for businesses to increase output.

The dynamic changed somewhat in more recent business cycles, including the 1990-1991 and 2001 downturns. GDP increased as the recessions ended, but hiring lagged, and the unemployment rate stayed elevated longer. Expansions ultimately took hold, but the jobless recoveries of these periods made the transition difficult. The process seems to have broken down even further in the current cycle. GDP swung from a sharp decline to an increase in the third quarter of 2009, and while job losses have become less severe, they continue.

Only because the federal government has supported household incomes has the current recovery been able to continue. Automatic stabilizers and the fiscal stimulus have sharply lowered tax burdens and

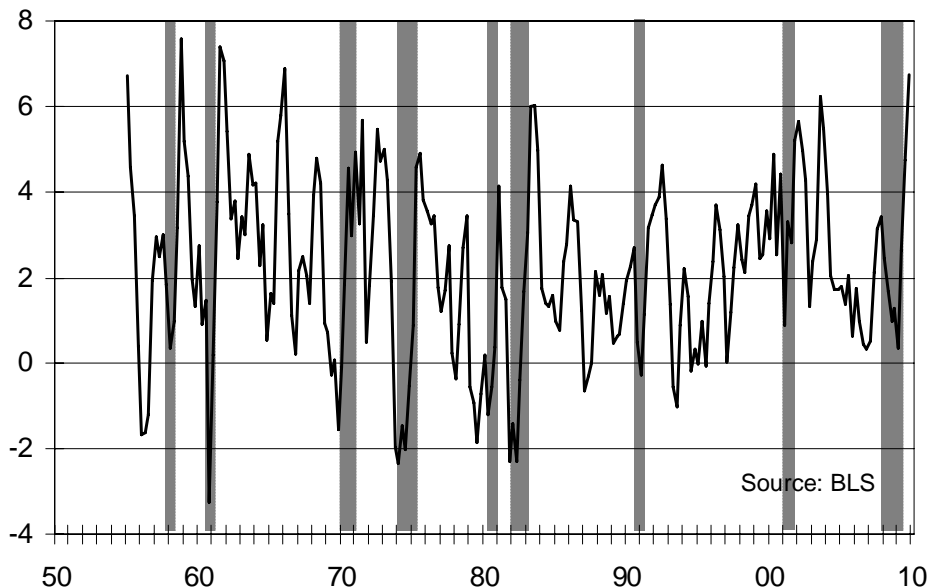
increased transfer payments. After-tax incomes have risen a bit over the past year, but only because federal help has more than offset moribund wage growth.

Concern about the job market would be less acute if unemployment were not already so high. With such a surfeit of labor, already-weak nominal compensation growth threatens to stall or even decline. It is not unusual for real, or inflation-adjusted, compensation growth to fall in recessions, but nominal compensation has not fallen since the Great Depression. Such a decline would be the catalyst for a pernicious deflationary cycle.

### What ails the job market?

Employment continues to decline despite rising GDP, mainly because productivity has increased—indeed, it has soared. Productivity expanded at close to a 7% annualized pace during the last three quarters of 2009, among the strongest gains seen since World War II (see Chart 3). Productivity growth weakened during the Great Recession, but it never fell.

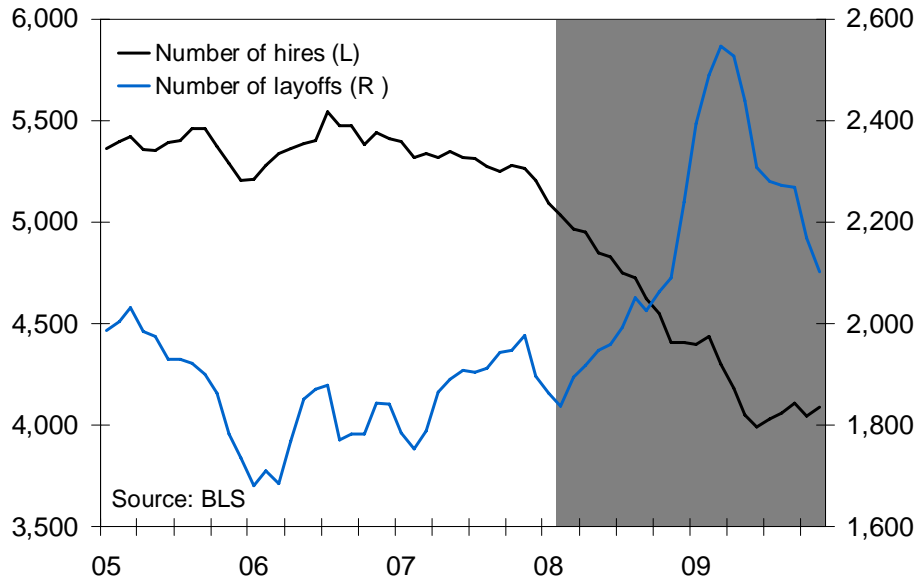
**Chart 3: Productivity Soars**  
*Annualized % change, 3 qtrs*



Businesses will not be able to ratchet up productivity at this pace indefinitely, but neither are they likely to give up the gains they have achieved, particularly if the surge is due to information technology investments made since the mid-1990s. Information technology has powered productivity growth for years, but firms may not have taken full advantage of all the new tools available, because of the costs associated with significantly cutting payrolls. There is less financial pressure to make such changes when times are good. But in tough times, such as those now, firms are more willing and able to change. The result is a measurable and permanent downward shift in the number of workers needed to produce a given level of GDP.

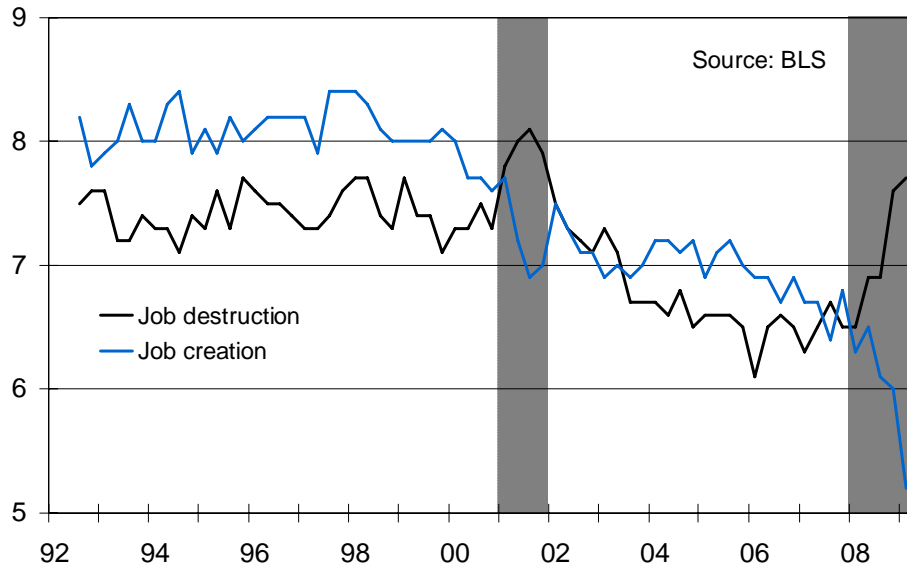
This does not need to be a bad thing for workers, assuming businesses use the profits generated by productivity gains to expand and eventually add to payrolls. Such a process is particularly important now, with demand already fragile. But it has yet to happen. Businesses are scaling back layoffs—although they remain uncomfortably high—but hiring remains dormant. The number of workers hired each month has slid from nearly 5.5 million prior to the recession to 4 million in recent months (see Chart 4).<sup>iv</sup>

**Chart 4: Layoffs Abate, but Hiring Remains Dormant**  
*Ths, 3-mo MA, SA*



What makes the recent downturn unusual is not the rise in layoffs but rather the plunge in hiring. The so-called job destruction rate is lower today than it was during the height of the 2001 recession, but the job creation rate is much lower (see Chart 5).<sup>v</sup> Judging by the job creation rate, businesses are much less willing to hire than at any time since the BLS began calculating these numbers in the early 1990s. The contrast with the job creation rate during the tech boom of the 1990s is particularly striking.

**Chart 5: Job Creation Evaporates**  
*Rate of job creation and destruction, %*



Job creation has fallen across all industries, although not surprisingly, it has been most pronounced in construction and manufacturing and related industries such as wholesaling and transportation. The decline is also evident across firms of all sizes but has been disproportionately large among very small businesses (zero to four employees) and very big ones (more than 1,000 employees). Given the large number of workers in small businesses, about half the decline in job creation has been among firms with fewer than 100 employees, about one-fourth has occurred among firms with between 100 and 1,000 employees, and the remaining fourth has happened at firms with more than 1,000 employees (see Table 1).

**Table 1: Very Small and Very Big Businesses Account for a Disproportionately Large Share of the Problems in the Job Market**

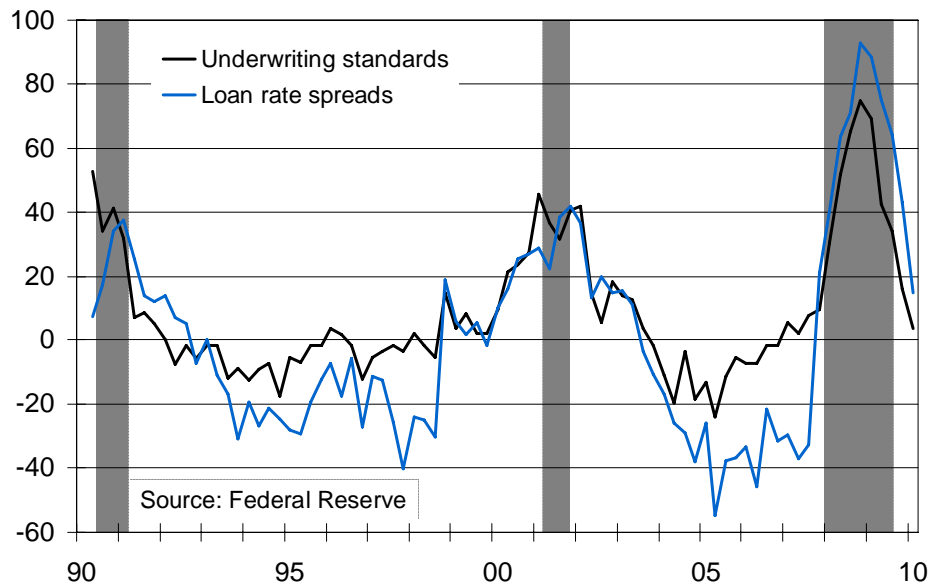
Change between 2009Q1 and 2007, ths

	Job Creation	Job Destruction	Job Creation Less Destruction	Share of Jobs 2007	Share of Job Creation	Share of Job Destruction	Share of Job Creation Less Destruction
Total	-1,648	1157	-2805				
0-49 employees	-649	340	-989	41.5	39.4	29.4	35.3
<b>0-4 employees</b>	<b>-146</b>	<b>92</b>	<b>-238</b>	<b>6.0</b>	<b>8.9</b>	<b>8.0</b>	<b>8.5</b>
5-9 employees	-134	39	-173	8.0	8.1	3.4	6.2
10-19 employees	-155	67	-222	10.9	9.4	5.8	7.9
20-49 employees	-214	142	-356	16.6	13.0	12.3	12.7
50-249 employees	-331	318	-649	29.0	20.1	27.5	23.1
50-99 employees	-151	143	-294	12.9	9.2	12.4	10.5
100-249 employees	-180	175	-355	16.0	10.9	15.1	12.7
Over 500 employees	-670	499	-1169	29.5	40.7	43.1	41.7
250-499 employees	-119	116	-235	9.2	7.2	10.0	8.4
500-999 employees	-104	94	-198	6.9	6.3	8.1	7.1
<b>Over 1,000 employees</b>	<b>-447</b>	<b>289</b>	<b>-736</b>	<b>13.4</b>	<b>27.1</b>	<b>24.9</b>	<b>26.2</b>
0-100 employees	-800	483	-1283	54.5	48.5	41.7	45.7
100-1,000 employees	-403	385	-788	32.1	24.5	33.3	28.1
Over 1,000 employees	-447	289	-736	13.4	27.1	24.9	26.2

Sources: BLS Business Employment Dynamics, Moody's Economy.com

The principal impediment to hiring at smaller businesses appears to be a lack of credit. The financial crisis has undermined the secondary market for small-business loans, and bank lenders remain very cautious in their underwriting. According to the Federal Reserve's senior loan officer survey, banks are not tightening as aggressively in their small-business lending as they were a year ago, but they remain exceptionally tight (see Chart 6).<sup>vi</sup> This is evident in the credit data, as commercial and industrial loans outstanding continue to fall rapidly and the number of bank credit cards has plummeted by nearly 90 million, or 25%, since peaking in mid-2008.<sup>vii</sup> Most C&I loans go to large businesses, while credit card debt is held by consumers, but small businesses rely heavily on loans and credit cards to finance their activities.

**Chart 6: Small Businesses Face Tough Underwriting**  
*Net % of lenders tightening C&I lending to small businesses*



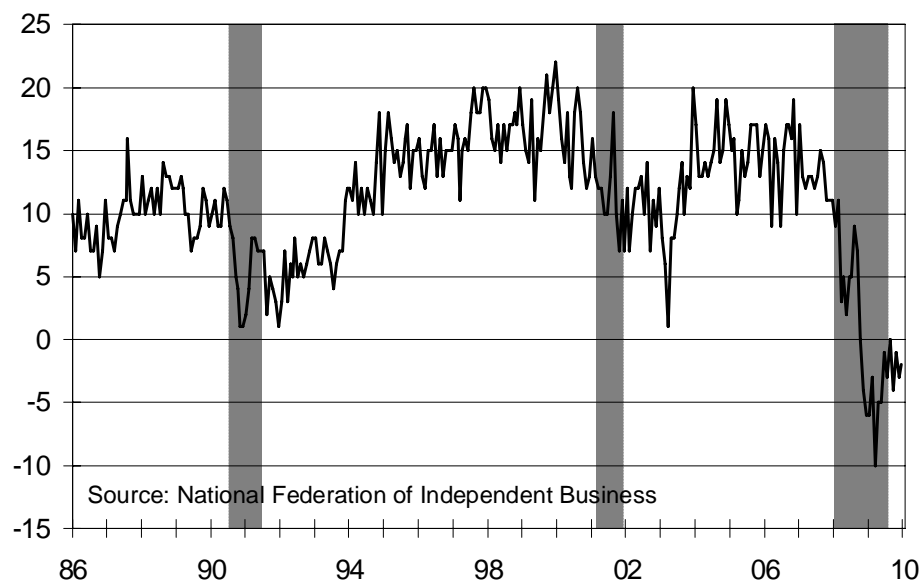
Credit conditions for small businesses will remain under pressure. Hundreds of small banks vital to small-business lending, particularly in smaller communities, have failed or will fail in the next couple of years. More than 550 banks are now on the FDIC's troubled list; in many cases, defaulting commercial mortgage loans are overwhelming banks' capital. Credit card lenders are also cautious in extending new credit as they adjust to new regulations. Small-business borrowers are also being hampered by the collapse in housing and commercial real estate prices. Real estate is often used by small-business owners as collateral; with its value less certain, lenders are less willing to make loans.

The likely impediment to job creation at large businesses is not credit—corporate bond and commercial paper markets are functioning well—but rather a lack of confidence. Many of these businesses have been through wrenching restructurings and downsizings and it will take before they feel comfortable expanding their operations again. Changes to the healthcare industry, financial system, energy policy, and the tax code are essential to the nation's long-term economic health, but the uncertainty created by the debate over these wide-reaching reforms may also be constraining expansion decisions.

Uncertainty and indecision among business executives cannot be discounted as a reason for the poor job market. Business surveys broadly show sentiment has improved since this time last year, but it remains extraordinarily fragile (see Chart 7).<sup>viii</sup> Many businesses suffered near-death experiences in the past year, and those memories remain fresh. Managers must also wonder whether recent pickups in demand will prove temporary. The massive monetary and fiscal stimulus and an inventory swing have clearly contributed to the turnaround, but these are not long-lasting sources of demand growth. Executives are plagued by the thought of what will happen if they build it and no one comes. Until that question fades, many will neither build nor hire.



**Chart 7: Near-Death Experiences Undermine Animal Spirits**  
***Net % of small businesses planning to increase total employment***



### **What can policymakers do?**

A reasonable baseline (most likely) near-term outlook calls for the job market to stabilize this spring and for meaningful job growth to resume, with sufficient strength to bring down unemployment, by late in the year. If history is a guide, strong recent gains in productivity and profits will prompt firms to first end layoffs and then resume hiring in coming months. This script should roughly hold with the monetary and fiscal stimulus already in place.

However, risks to this outlook remain decidedly to the downside. Given the impediments to hiring and other threats, the probability of the recovery unraveling instead of evolving into a self-sustaining economic expansion is uncomfortably high.<sup>ix</sup> Just as important, if the economy were to fall back into recession it would be very difficult to get out, given the likelihood of a deflationary spiral to which policymakers will not have the resources to respond.

Considering the downside risks and the prospects for a very serious downturn if the recovery were to falter, it is important for government to maintain a very aggressive policy stance. The Federal Reserve appears set to hold the fed funds rate target at zero until unemployment moves decidedly lower. While there is a strong and understandable desire at the Fed to end its credit easing efforts on schedule this March, the central bank will likely remain flexible and increase its commitment if the recovery remains fragile.

Fiscal policymakers should also consider expanding support of the economy in 2010. This could include additional steps to bolster final demand, provide credit to smaller businesses, and lower the cost of labor.

The following policy steps would be most effective in supporting final demand:

- **Extend unemployment insurance for workers who lose jobs through 2010.** Given prospects for a double-digit unemployment rate much of this year, reinforcing the financial safety net is vital to supporting consumer spending and confidence.<sup>x</sup> No other federal program provides a bigger bang for the buck in terms of economic activity per federal dollar spent (see Table 2). Without this extra help, laid-off workers and their families will slash their own spending, leading to the loss of even more jobs. The cost of extending UI benefits through the end of 2010 is estimated at \$100 billion.

**Table 2: The Fiscal Stimulus' Bang for the Buck**Source: *Moody's Economy.com*

	<b>Bang for the Buck</b>
<b>Tax Cuts</b>	
Nonrefundable Lump-Sum Tax Rebate	1.01
Refundable Lump-Sum Tax Rebate	1.22
Temporary Tax Cuts	
Payroll Tax Holiday	1.24
Job Tax Credit	1.30
Across-the-Board Tax Cut	1.02
Accelerated Depreciation	0.25
Loss Carryback	0.22
Housing Tax Credit	0.90
Permanent Tax Cuts	
Extend Alternative Minimum Tax Patch	0.51
Make Bush Income Tax Cuts Permanent	0.32
Make Dividend and Capital Gains Tax Cuts Permanent	0.37
Cut Corporate Tax Rate	0.32
<b>Spending Increases</b>	
Extending Unemployment Insurance Benefits	1.61
Temporary Federal Financing of Work-Share Programs	1.69
Temporary Increase in Food Stamps	1.74
General Aid to State Governments	1.41
Increased Infrastructure Spending	1.57

*Note: The bang for the buck is estimated by the one-year dollar change in GDP for a given dollar reduction in federal tax revenue or increase in spending.*

- **Provide additional financial help to state and local governments.** Fiscal 2011 budgets, which begin next July for most states, are likely to be more troubled than those for the current year. Tax revenues and new borrowing capacity are weakening. Unless municipalities receive more help from the federal government, they will be under intense pressure to cut jobs and programs and to raise taxes and fees. This will be a serious drag on the economy at just the wrong time. To avoid this, more federal aid to states for their FMAP and educational obligations may be necessary. The collective fiscal 2011 budget deficit for states is estimated at close to \$150 billion. The current fiscal stimulus provides only \$40 billion to states in fiscal 2011. To forestall more draconian spending cuts and tax increases, it seems appropriate to provide an additional \$50 billion to state and local governments for fiscal 2011.

To free up credit to smaller businesses, the following policy step would be effective:

- **Expand lending by the Small Business Administration.** The federal government could temporarily increase the guarantee on SBA loans from the current 90% to 95%, raise the maximum loan size to \$5 million, and raise the interest rate cap from its current level—the prime rate plus 275 basis points—to prime plus 500 basis points. Lenders are reluctant to extend small-business loans at the current top lending rate of below 6% because of significant credit risks. SBA oversight of lenders would have to be strengthened and penalties on poor lending increased to ensure the SBA does not take on too much credit risk. The cost of expanding SBA lending through 2010 is estimated at under \$5 billion.

To lower the cost of labor, the following policy steps would be effective:

- **Expand work-share programs.** Seventeen states offer some type of work-share program, which allows employers to cut workers' weekly hours and pay, typically between 20% and 40%, with states making up half the lost wages from their unemployment insurance funds. Like the temporary extension of

unemployment insurance benefits, work-share has a high bang for the buck; it provides financial help to distressed workers who are likely to quickly spend the aid. Work-share's bang for the buck is even larger than that of UI benefits, as the reduction in unemployment lowers both the financial and psychological costs of layoffs to workers and their employers. It is particularly helpful for firms that expect workforce reductions to be temporary; work-share allows these firms to avoid the cost of severance, rehiring and training. Providing seed money to establish work-share programs in other states and fund the program through 2010 would cost no more than \$1 billion.

- **Offer a job tax credit for businesses that hire this spring and summer.**<sup>xi</sup> The size of the credit could equal the payroll tax costs of new hires for at least one year and perhaps two. While firms are more focused on the demand for their output and the availability of credit when making hiring decisions, the cost of labor, which this credit targets, is also important. The credit could be made more effective by allocating a set amount—say \$30 billion—for businesses that hire first. This would encourage firms to act quickly and accelerate the benefit of the credit on hiring.

If policymakers adopt each of these measures, the total cost to taxpayers would be approximately \$200 billion over 2010 and 2011. Combined with the \$45 billion package of tax cuts and spending increases recently signed into law, the programs would raise payroll employment by 1.2 million jobs by the end of 2010 and reduce the unemployment rate by 0.7 percentage points. More importantly, it would significantly increase the odds that the recovery will quickly evolve into expansion.

### **Crowding out**

In addition to lowering the risk that a weak and fragile recovery will falter, there are a number of other reasons fiscal policymakers may want to take additional action to shore up the job market and broader economy. Key among these is the difficulty the Federal Reserve will have if the economy weakens. The federal funds rate is near zero, and the central bank is reluctant to further expand its credit-easing efforts. The Fed has committed to purchasing Fannie Mae- and Freddie Mac-insured mortgage securities through March but is reluctant to do more. The Fed has effectively become the nation's predominant residential mortgage lender, a situation it would like to end as soon as possible. If the Fed winds down its purchases as planned, mortgage rates will rise as much as a full percentage point next spring, just when foreclosure sales are expected to increase. The pressure on house prices and the broader economy could be significant.

Purchasing more Treasury securities also seems out of the question given the angst that previous Fed purchases created among investors, who fear policymakers might try to monetize the nation's debt. While this fear is unfounded, investors' concerns were strong enough that long-term interest rates began to rise despite the Fed's bond purchases.

Further supporting aggressive action by fiscal policymakers is evidence that the government's record borrowing has not crowded out private investment. Despite a \$1.4 trillion fiscal 2009 deficit and robust municipal borrowing, total U.S. borrowing—including that done by households, nonfinancial businesses and financial institutions—has fallen sharply. As a share of GDP, total borrowing is about as low as it has been since World War II. Households, businesses, and financial concerns are rapidly deleveraging, allowing more than enough room for increased government borrowing without driving up interest rates.

This will not continue long once the recovery gains traction and private credit demands rebound. If budget deficits and government borrowing are not receding at the same time, interest rates will rise sharply. Policymakers thus have the latitude to provide more near-term support to the soft economy through temporary increases in borrowing to finance more tax cuts and spending increases, but they need to also address the increasingly worrisome longer-term fiscal outlook. Healthcare reform and tax increases currently set to kick in in 2011 are important in this regard. Indeed, the more credible these policy efforts are in reducing future projected budget deficits, the more room policymakers will have to help the economy in 2010.

## **The long road back**

Failing to take aggressive action now may also cost the economy significantly in the longer run. Even under the best of circumstances, and assuming policymakers take the steps recommended here, the 8.4 million payroll jobs lost since the peak over two years ago will not be regained until 2013. The unemployment rate, which is expected to peak later this year, will also not fall back to a rate consistent with full employment until 2014-2015.

This long road to job market recovery will also be uneven across industries and regions of the country. Healthcare has been a stalwart creator of jobs even during the recession, thanks to a powerful demographic tailwind in the aging population and to steady funding from the government. Manufacturing employment, which was hit exceptionally hard during the recession, is picking up; vehicle, metal and machinery manufacturers in particular cut production and jobs well below levels consistent with even the currently depressed demand.<sup>xiii</sup>

Job growth in warehousing, distribution and logistics is expected to resume soon, driven by increased manufacturing activity and global trade. Export and import volumes have rebounded in recent months with improving global economic conditions. Global trade should continue to increase steadily.

During the second half of this year, job creation is expected to resume in a broad array of technology industries including computer software and data processing, electronics, and biotechnology and medical instrumentation. Exports of technology products are already growing, as is business investment as firms use new technology to support productivity and profitability. Various professional service industries will also begin adding to payrolls, including accounting and legal services, management consulting, and scientific and technical services. These are generally higher-paying jobs.

Job growth will broaden in early 2011, as the construction trades finally add to payrolls again. Housing construction will pick up from its recently depressed levels by then and will more than offset the loss of jobs in commercial construction. Public infrastructure spending will also support construction employment growth. Resource-related industries, including mining and agriculture, should respond to higher commodity prices and stronger global demand by hiring more as well. Financial services, particularly related to asset management and real estate, will also begin adding jobs more noticeably.

By the second half of 2011, job creation should be in full swing as retail and leisure and hospitality also add to payrolls. Weak consumer spending and business travel during the recession have been hard on these industries—very large employers whose reticence to hire is a significant reason why the job market will not move into high gear quickly.

State and local governments are expected to be the last to resume adding meaningfully to payrolls, most likely not until 2012. Even with more financial help from the federal government, budgetary pressures on state and local governments will remain intense for a number of years. Collectively, the country's largest employers, state and local governments, will have little choice but to continue cutting their payrolls.

Given how long it will take for job creation to revive fully, unemployment is expected to remain uncomfortably high for a number of years. Even under the best of circumstances, and assuming policymakers take the steps recommended here, the 8.4 million payroll jobs lost since the peak over two years ago will not be regained until 2013. The unemployment rate, which is expected to peak later this year, will not fall back to a rate consistent with full employment until 2014 or 2015.

Perhaps the most disconcerting implication is that what we consider full employment in the United States is changing for the worse. The embedded, structural long-term unemployment rate is rising as those losing their jobs stay jobless longer, undermining their skills and marketability. People in their late 40s and 50s will have a particularly difficult time getting back into the workforce. Structural unemployment is also rising because of the large number of homeowners underwater on their mortgages, a phenomenon that undercuts labor mobility. Historically, someone who lost a job in one part of the country could readily move for a new one. This is much more difficult if that worker must first put up more equity to sell a home.

The unemployment rate considered consistent with full employment has already probably risen from below 5% prior to the Great Recession to above 5% currently. Under the best of circumstances, it is expected to reach nearly 6% in the next several years. This provides another compelling argument why policymakers should act aggressively now to ensure job growth resumes in earnest.

### **Conclusions**

The Great Recession is over, but the recovery will be sluggish much of this year. The risks are also uncomfortably high that the economy will backtrack into recession. This would be an especially dark scenario, almost certainly involving a deflationary spiral of falling wages and prices. The Federal Reserve and fiscal policymakers would have fewer options and resources to respond.

A range of problems suggest that such a scenario cannot be easily dismissed. Most obvious are high unemployment and weak wage growth, the growing foreclosure crisis, rising commercial mortgage loan defaults and resulting small bank failures, budget problems in state and local governments, and dysfunctional structured-finance markets that restrict credit to consumers and businesses.

Policymakers should provide more help to the economy to ensure that the recovery becomes self-sustaining. The Federal Reserve must not raise interest rates too soon or end its credit-easing efforts too quickly. Congress must provide more resources—to unemployed workers whose benefits are running out, to state governments unable to balance their budgets, and to small businesses looking for credit and all firms that expand payrolls.

All this help comes at a significant cost. While the fiscal stimulus has been vital, it has helped produce a \$1.4 trillion budget deficit this past fiscal year and will lead to a similarly sized deficit in the current one. Yet the cost to taxpayers would have been measurably greater if policymakers had not acted aggressively. The recession would still be in full swing, undermining tax revenues and driving up government spending on Medicaid, welfare, and other income support for distressed families.

It is a tragedy that the nation has been forced to spend so much to tame the financial crisis and end the Great Recession. Yet it has been money well spent.

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<sup>i</sup> The last time the labor force declined was in the early 1950s during the Korean War. The statistics cited in this section are from the BLS.

<sup>ii</sup> The highest unemployment rate since the Great Depression was the 10.8% suffered in late 1982.

<sup>iii</sup> Also curtailing labor mobility is the situation of an estimated 15.6 million homeowners whose equity in their homes is negative. To move, someone whose mortgage debt exceeds a property's value must either raise cash, persuade the lender to accept a short sale, or default.

<sup>iv</sup> This is based on the BLS's job openings and turnover survey. Net job growth equals the number of workers hired less the number of layoffs, quits and other separations.

<sup>v</sup> Job destruction and creation rates, measured as the ratio of layoffs and hires to the labor force, respectively, are from the BLS's business employment dynamics survey.

<sup>vi</sup> The Fed asks respondents whether they have tightened their underwriting or increased their loan spreads in the last quarter. Recent responses indicate that fewer lenders are tightening further, but there is no indication they have eased after the extreme tightening that occurred this time last year.

<sup>vii</sup> It is difficult to disentangle the impact of credit standards and weaker credit demand on credit outstanding, but suffice it to say, standards have arguably never been as stringent.

<sup>viii</sup> The National Federation of Independent Survey of small businesses, the Conference Board survey and Business Roundtable surveys of large businesses, and the Moody's Economy.com weekly global business survey all roughly show this.

<sup>ix</sup> A discussion of these risks was presented by Mark Zandi in testimony before the Joint Economic Committee at the hearing "The Impact of the Recovery Act on Economic Growth," on October 29, 2009.

<sup>x</sup> Another argument for temporarily providing more UI benefits is the scaling back of welfare and disability benefits in the mid-1990s reform of the nation's welfare programs.

<sup>xi</sup> An assessment of the job tax credit proposals recently put forth by the Obama administration, Senators Casey and Gillibrand, and Senators Schumer and Hatch is provided in "An Assessment of Job Tax Credit Proposals," Mark Zandi, February 8, 2010.

<sup>xii</sup> Much of the recent increase in temporary help jobs is due to hiring in manufacturing and manufacturing-related industries.