

**THE EMPLOYMENT SITUATION: MARCH 2009**

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**HEARING**

BEFORE THE

**JOINT ECONOMIC COMMITTEE  
CONGRESS OF THE UNITED STATES**

ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

APRIL 3, 2009

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FRIDAY, APRIL 3, 2009

CONGRESS OF THE UNITED STATES,  
JOINT ECONOMIC COMMITTEE,  
*Washington, DC.*

The committee met at 9:30 a.m. in Room 106 of the Dirksen Senate Office Building, the Honorable Carolyn B. Maloney (Chair), presiding.

**Senators present:** Casey and Brownback.

**Representatives present:** Maloney and Brady.

**Staff present:** Gail Cohen, Nan Gibson, Colleen Healy, Anabelle Tamerjan, Andrew Wilson, Jeff Schlagenhauf, Chris Frenze, Bob Keleher, and Robert O'Quinn.

**Chair Maloney.** Thank you very much, Commissioner Hall, for testifying today, and also welcome your colleagues that are here. The Chair recognizes herself for an opening statement.

### OPENING STATEMENT OF HON. CAROLYN B. MALONEY, CHAIR, A U.S. REPRESENTATIVE FROM NEW YORK

A few glimmers of hope have surfaced in the economy in recent weeks as factory orders posted gains last month, a key manufacturing index rose, and credit markets have begun to thaw. But today's jobs report highlights the fact that there are virtually no bright spots yet in the labor market.

In each of the last five months employers have slashed about 600,000 or more jobs. Staggering job losses have totaled more than 5 million since the start of the recession. The unemployment rate now stands at 8.5, a jump of 3.6 percentage points since the downturn began 15 months ago. And the broadest measure of unemployment or under-employment that the BLS publishes is now at 15.6 percent.

For the first time in at least 30 years every state in the Nation is in recession. The state and local unemployment numbers for February, which were released recently, show that 7 states already have unemployment rates over 10 percent.

Although my home State of New York is not one of those states, the unemployment rate in New York State jumped .8 percentage points last month, the largest one-month jump in almost 20 years. And the 1.2 percentage point jump in unemployment in New York City represents the largest spike that New York City has seen since BLS started collecting this data.

I am particularly concerned by the long duration of unemployment faced by a great number of workers, and the disruptive im-

pact that this long-term unemployment has had and will have on these workers and their families.

Almost one in four unemployed workers is experiencing an unemployment spell of six months or longer, the highest level in over 25 years. And of those long-term unemployed workers more than half of them have been looking for work for over a year.

This type of long-term unemployment is straining families and forcing them to take on more debt as the financial pressure of making ends meet mounts.

Even before job losses began accelerating, many families were increasingly holding balances on their credit cards just to pay for basic household necessities. The most recent data available from the Survey of Consumer Finances shows that an increased proportion of families, especially middle class families, have been accumulating larger mountains of debt on their credit cards.

Because of this increased reliance on credit cards, especially by families of displaced workers, it is even more important that legislation concerning credit cards is put into place immediately.

The Credit Card Holders Bill of Rights was voted out of subcommittee yesterday and will be moving through the House later this month, and I remain very hopeful that the Credit Card Accountability, Responsibility, and Disclosure Act, which was voted out of the Senate Banking Committee this week, will also be on the Senate Floor without delay.

Both of these bills would prohibit certain current practices that are hurting financially strapped cardholders. The recovery measures that Congress passed and President Obama signed into law in the first 60 days in office are just beginning to work their way into the economy.

Speaker Pelosi announced this week that the middle class tax cuts have now gone into effect, so families will see an increase in their take-home pay.

One in ten Americans are now receiving food stamps, so a temporary increase in food stamp benefits will also go into effect this month. These benefits are set to rise as much as \$80 a month for a family of four. Both of these measures should provide a much-needed boost to consumer spending.

Last night, both the House and the Senate passed the Budget Resolutions. A budget is fundamentally about priorities, and our blueprint builds on our recovery efforts by making investments in health care, renewable energy, and education to put our people back to work and strengthen our economy in the future.

Today's grim unemployment numbers underscore the wisdom of the stimulus package that Congress worked so hard to pass quickly. We will continue to focus on making sure that the economy gets working again and examining ways to help struggling families.

I would like to note that at least the stock market is up.

[The prepared statement of Representative Maloney appears in the Submissions for the Record on page 24.]

With that, I will recognize the Ranking Member, Senator Brownback.

**OPENING STATEMENT OF HON. SAM BROWNBACK, RANKING  
MINORITY MEMBER, A U.S. SENATOR FROM KANSAS**

**Senator Brownback.** I want to thank the Chairlady for holding the hearing, and thank you very much, Commissioner Hall, for being here. I wish the news were better; I think we all wish the news were better, but it obviously is not.

We want to dissect today's report to see what's going on in various sectors. So I will appreciate the question and answer session.

Today's employment report on labor market conditions in March brings more bad news: employers shed 663,000 payroll jobs in March and the unemployment rate rose to 8.5 percent from 8.1 in February and 5.1 a year earlier.

In total we have lost 5.1 million payroll jobs since the beginning of the recession and 3.3 million jobs in the past 5 months alone. Behind these numbers is a great deal of dislocation, pain, and suffering in American families.

Given the severity of the economic downturn that we face and efforts already under way to try to offset the downturn, it is clear to me that we need to get the policy mix right from this point forward, and the last thing we need to do is to do things in the policy realm that will hurt the American people, American families, and American businesses and introduce uncertainty into the employers' marketplace and into the marketplace in total.

This is not the time to raise taxes. Yet that is precisely what the Congress and the Administration have been talking about doing. And make no mistake, the budget that we just currently are considering and passed last night, by initiating a move towards more government programs in health care and taxes on carbon emissions, will ensure that 100 percent of Americans can expect to pay higher taxes in the future.

The economy needs help. But rather than actually stimulating the economy by providing improved incentives to work and invest, we have been devoting trillions of dollars of taxpayer money to expanding and creating permanent, long-term government spending programs and income redistribution mechanisms.

We have budgets from the Administration and the Democrats that control Congress that seek to impose higher taxes on small businesses, higher taxes on income from capital, beginning implementation of a mechanism that will tax anyone who uses carbon, and beginning a process of nationalizing health care insurance, among other things.

This is precisely the wrong time and the wrong message. It is not the time to raise taxes. It is not the time to inject uncertainty about what taxes are going to be in the future.

In the face of a severe downturn in the economy and significant declines in stock values and homeowner wealth, it is almost inconceivable that there are those who wish to raise taxes in this environment.

What will higher taxes on small business owners do to job creation? What will higher taxes on dividends and other forms of capital income due to stock values and the portfolios of every American family?

What will new carbon taxes under the name of “cap and trade” do to our already struggling industrial base? Now is clearly not the time to increase taxes and chase more jobs and production offshore.

Judging from calls that I receive from my Kansas constituents where votes are placed with private investments in their work, the verdict on how we are handling our Nation’s financial and economic crisis is not positive.

Some of my constituents have expressed unwillingness to commit to new investments and expansions of their businesses because of growing uncertainty since the beginning of the year:

Uncertainty about how high their taxes will be raised; uncertainty about how much a cap and trade carbon policy will translate into higher energy taxes;

Uncertainty about the extent to which health care policies will translate into new government mandates and price controls;

Uncertainty about whether mortgage contracts may be in the future be subject to judicial rewrites in bankruptcy courts; and

Uncertainty about rules of the workplace, including how workers and businesses decide on their representation.

There are many people in the heartland who are genuinely and rightly upset that they are now being asked to support a permanent expansion of government and to support the highly leveraged speculative bets placed by the big financial institutions that are “too big to fail.”

Many of my constituents are also experiencing a great deal of uncertainty about how far the Administration will try to reach in its attempts to restructure the economy and vastly expand the scope of government intervention into their lives.

We need to halt the mad dash to big government as the solution to all of our problems and put incentives in place that help Americans grow their businesses, invest, create jobs, and prosper. Higher taxes and ever-expanding government and creation of uncertainty are not the way to provide those incentives.

I look forward to the testimony of Commissioner Hall to dissect what’s in this report. I do hope we get the policy message right and not harmful to the economy.

Thank you, Chairwoman.

**Chair Maloney.** Thank you.

[The prepared statement of Senator Brownback appears in the Submissions for the Record on page 24.]

Congressman Brady is recognized for five minutes.

**OPENING STATEMENT OF HON. KEVIN BRADY, A U.S.  
REPRESENTATIVE FROM TEXAS**

**Representative Brady.** Thank you, Chairwoman Maloney. It is a pleasure to join with Ranking Member Senator Brownback for today’s hearing.

I would like to join in welcoming Commissioner Hall before the Committee, as well. Those looking for good news in these numbers will not likely find them.

The employment data released this morning show the impact of the deepening recession. Payroll employment declined by 663,000 in March, with losses broadly shared among major industry groups. The unemployment rate increased to 8.5 percent, the highest since



November 1983. And current trends suggest that further increases are likely in coming months.

The job figures reported today add to the growing body of evidence indicating that the Administration's economic forecast is much too optimistic.

The unemployment rate is already significantly above the Administration's forecast for all of 2009. The White House projects that real GDP will fall 1.2 percent this year, and rise to over 3 percent next year, compared with the Blue Chip Consensus forecast of a decline of almost twice that much, 2.6 percent this year and an increase of 1.9 percent next year. The CBO figures also show how far the Administration is likely off in their numbers for this year.

As we go forward, what the Administration's unduly optimistic economic assumptions create are a major problem. These optimistic assumptions are a key foundation of the President's budget proposals and lead to artificially low deficit and debt projections.

No wonder *The Economist* called the assumptions in the budget "deeply flawed" in an article entitled "Wishful, and Dangerous Thinking." Their effect is to make the Administration's expansive new spending proposals look less threatening than they actually are.

The reason the Democrats' Congressional Budget Resolution got so far off track is that it is based on the President's budget. This is why a variety of accounting gimmicks are needed to hide the true costs of the Administration's dangerous spending sprees in the Democrats' House Budget Resolution, which passed last night.

As *The Washington Post* said last week: In this resolution "Congress deals a blow to 'honest budgeting.'" The Democrats are now attempting to shoehorn expensive Administration proposals based on unrealistic economic assumptions into a House budget that uses more realistic economic assumptions from the CBO.

A realistic economic forecast would indicate that the fiscal situation is already very grim, with exploding deficits and debt for the foreseeable future.

According to a recent study of many financial crises by Professors Kenneth Rogoff and Carmen Reinhart that has become an instant classic, the U.S. National Debt can be expected to increase by \$8 trillion to \$9 trillion just over the next three years.

According to Rogoff, inflation of 8 to 10 percent is one likely way the government will end up financing the huge run-up in federal debt. He compares the coming economic environment to the 1970s which was a time of rising inflation, weak economic growth, and rising unemployment.

The Democrats' budget will add yet more deficit spending and debt to the huge amounts of each already in the pipeline. The result will be much higher taxes and inflation in the future, and lower economic growth.

Higher inflation in coming years will further reduce the American standard of living as incomes and retirement funds are further eroded.

The last time Democrats controlled both ends of Pennsylvania Avenue for a significant length of time was in the 1970s and stagflation was the result. So nobody should be surprised if history repeats itself.

I yield back.

[The prepared statement of Representative Brady appears in the Submissions for the Record on page 25.]

**Chair Maloney.** Thank you. And I now would like to recognize Commissioner Hall and introduce him for as much time as he may consume. Dr. Keith Hall is the Commissioner of the Bureau of Labor Statistics at the U.S. Department of Labor. Before becoming BLS Commissioner, Dr. Hall served as Chief Economist for the White House Council of Economic Advisors during the George W. Bush Administration. Prior to that, he was Chief Economist for the U.S. Department of Commerce. Dr. Hall received his B.A. Degree from the University of Virginia and his M.S. and Ph.D. Degrees in Economics from Purdue University.

Thank you very much for coming, and we are delighted to have you here and we look forward to your testimony.

**STATEMENT OF DR. KEITH HALL, COMMISSIONER, BUREAU OF LABOR STATISTICS, U.S. DEPARTMENT OF LABOR; ACCOMPANIED BY: MR. PHILIP I. RONES, DEPUTY COMMISSIONER, BUREAU OF LABOR STATISTICS; AND DR. MICHAEL W. HARRIGAN, ASSOCIATE COMMISSIONER FOR PRICES AND LIVING CONDITIONS, BUREAU OF LABOR STATISTICS, UNITED STATES DEPARTMENT OF LABOR, WASHINGTON, DC.**

**Commissioner Hall.** Thank you.

Madam Chair and Members of the Committee:

Labor market conditions continued to deteriorate in March. Total nonfarm payroll employment decreased by 663,000, and the unemployment rate increased from 8.1 to 8.5 percent.

Since the beginning of the recession in December of 2007, job losses have now totaled 5.1 million, almost two-thirds of which occurred in just the past 5 months.

These declines have been widespread across industry sectors, but particularly sharp in manufacturing, construction, and temporary help services. Together, these three industries have accounted for nearly two-thirds of the job loss during the recession.

In March, manufacturing employment fell by 161,000, with job losses spread through the sector. Since the start of the recession, manufacturing has shed 1.5 million jobs, with about 60 percent of the loss occurring in the past 5 months. In March, the average workweek in manufacturing decreased by two-tenths of an hour.

Construction employment declined by 126,000 over the month. Since the beginning of the recession, employment has dropped by about 1.1 million, with more than half of that total occurring in the past 5 months.

In March, employment continued to contract throughout most of the service-providing sector. Temporary help services shrank by 72,000 over the month once the recession began. Employment in the industry is down by about three-quarters of a million, which is about 30 percent of the payroll jobs in that industry, and over half of that coming in the past 5 months.

In March, other large job losses occurred in retail trade, financial activities, transportation and warehousing, accommodation and food services, and wholesale trade.

Health care employment continued to trend up in March, although the pace of job growth appears to have slowed in the past 3 months.

In the first quarter of 2009, the industry added an average of 17,000 jobs per month, compared with a monthly average of 30,000 in 2008.

Average hourly earnings for production and nonsupervisory workers in the private sector rose by 3 cents in March. Over the past 12 months, average hourly earnings have increased by 3.4 percent.

From February 2008 to February 2009, the seasonally adjusted Consumer Price Index for Urban Wage Earners and Clerical Workers fell by a half a percent.

The major indicators from our Household Survey also reflect weaker labor market conditions. In March, the unemployment rate rose by four-tenths of one percentage point to 8.5 percent, and the number of unemployed persons reached 13.2 million.

Since the recession began in December 2007, unemployment has surged by 5.6 million. Job losers have accounted for about 80 percent of the increase, with returning workers and new entrants to the labor market making up smaller portions.

In March, the number of individuals experiencing long spells of joblessness rose by 265,000 to 3.2 million. Nearly one in four of the unemployed had been jobless for over 6 months, the highest ratio since mid-1983.

Over the month, the employment-to-population ratio slipped to 59.9 percent, 2.8 percentage points lower than at the beginning of the recession and the lowest level since July of 1985.

Among the employed, the number of persons working part time who would have preferred to work full time increased by 423,000 over the month to 9 million. Since December 2007, this measure has risen by 4.4 million.

Summarizing the labor market developments for March, payroll employment fell by 663,000 and the unemployment rate climbed to 8.5 percent. Since the beginning of the recession in December 2007, job losses have totaled 5.1 million.

My colleagues and I would now be glad to answer your questions.

[The prepared statement of Commissioner Hall appears in the Submissions for the Record on page 26.]

**Chair Maloney.** First of all, welcome to you and your colleagues.

Do you have any good news? Are there any positive economic indicators? Are there any bright spots in this month's jobs report?

**Commissioner Hall.** There are very few bright spots in this month's jobs report.

**Chair Maloney.** Are there any anywhere?

**Commissioner Hall.** To be honest, no. In fact, the decline has been remarkably consistent. This month we lost 663,000 jobs. Over the past five months we have averaged losing 667,000 jobs.

**Chair Maloney.** Last month you told us that this recession had 4 out of the 10 worst months on record. Is this up to 5 out of 10 now?

**Commissioner Hall.** Yes, it is. Of the months with over a half a million jobs lost, 11 months with half a million jobs lost, we have now got 5 of those in a row.

**Chair Maloney.** Are there any indicators that job losses are not accelerating, or that they will slow any time soon?

**Commissioner Hall.** I would say the job losses have been remarkably consistent. The labor market continues to deteriorate at about the same pace.

**Chair Maloney.** And what is the typical amount of time after a contraction ends before the labor market starts showing any signs of recovery?

**Commissioner Hall.** Actually, the job loss should probably start to slow about the same time that the economy starts to recover, but it would probably be quite a while before the unemployment rate—we would get strong enough growth for the unemployment rate to stop rising. That often lags behind quite a bit.

**Chair Maloney.** We hear a lot in the media and others saying that this recession is comparable to the Great Depression. I would like to hear more about how this recession compares to past economic slumps. How does this compare to past downturns in terms of its impact on the labor market?

**Commissioner Hall.** The job loss is very large. In percentage terms, we have now lost over the past five months about 2.4 percent of our jobs. That is the most since March of 1975. Probably more concerning is that this job loss appears to not be slowing, so we could surpass the 1975 if this continues, in which case we're going back all the way to say 1958 before we've had this degree of job loss.

**Chair Maloney.** The current downturn is already longer than the last two recessions. Based on historical data, how long is it likely to take for employment to recover to its prerecession peak?

**Commissioner Hall.** That actually varies quite a lot. The two most recent recessions it took quite a long time. In the 2001 recession it took over three years for the job level to get back to its prerecession level. In the 1990 recession it took about two years.

**Chair Maloney.** Following six straight months of losses, durable goods orders increased by 3.5 percent last month, contrary to most economists' expectations. This marks the first increase in monthly durable goods orders in six months.

What do you think this uptick means for the labor market, if anything? You've got to admit that is at least one positive indicator.

**Commissioner Hall.** It is. And I agree with your earlier statement that it is a glimmer of hope. Because it is only one month, we don't have a trend. To the degree that this may be signaling rising business confidence, and if it is rising business confidence it would be confidence that consumer spending is going to pick up, that would be a good sign. But again it is only one month.

**Chair Maloney.** I am concerned about the number of reports of major newspapers slashing jobs. The third largest newspaper in the country, the McClatchy Chain, announced earlier this month that it was slashing 1600 jobs, and many others are making similar reports.

Based on the data, can you tell us how many jobs have been lost in the publishing industry since the recession began in December of 2007?

**Commissioner Hall.** The publishing industry has lost 70,000 jobs since the start of the recession.

**Chair Maloney.** And how many were lost last month?

**Commissioner Hall.** Last month it was about 8000. What this seems to indicate, there is an acceleration in the job loss in that industry. The first 10 months of the recession we were losing about two point—about 2500 jobs a month. The last 5 months we are losing about 9000 jobs a month in that industry.

**Chair Maloney.** Can you give us any information about whether alternative news providers—for example, online and news-only companies—have they seen the same type of job losses as traditional newspapers?

**Commissioner Hall.** We have other information services, which includes Internet publishing. They have actually gained 2900 jobs since December 2007.

**Chair Maloney.** Okay. Well my time has expired and I recognize the Ranking Member.

**Senator Brownback.** Thank you very much, Madam Chairwoman.

What percent of our jobs are based on exports, Commissioner?

**Commissioner Hall.** That is hard to say. I think it is likely—it is likely pretty consistent with the export share of GDP, which I don't have the numbers in front of me but I would guess it is somewhere around 8 or 9 percent of GDP, so I would guess it supports about 8 or 9 percent of the jobs.

**Senator Brownback.** Do you break your data out by that type of category—exports that is?

**Commissioner Hall.** No, it's really hard for us to do that because we really don't keep track of whether jobs are supporting goods that wind up being exported or not. That is a very hard thing to track.

**Senator Brownback.** Do you break this down by region? I know you do state-by-state unemployment numbers. Do you have regions of the country that are being harder hit than other regions?

**Commissioner Hall.** Yes. I would say that almost every—

**Senator Brownback.** Every state is experiencing the downturn, but do you have more regionalized impacts?

**Commissioner Hall.** Yes, I do have a little data on that. I can tell you which states have had the biggest impact.

The states with the largest employment decline over the past 12 months are California, which has lost about 600,000 jobs; Florida, 400,000 jobs; Michigan; Ohio; Illinois; Georgia; North Carolina; Arizona; and New York. So it is kind of a wide variety of states in a number of regions.

**Senator Brownback.** So you do not have any sort of regional breakout of that. It seems like you cited some of the larger states, or the larger industrial based states.

**Commissioner Hall.** Right. Yes, if you look at a percentage change you wind up getting states like Arizona, Michigan, and Nevada having the largest percentage drop in employment.

**Senator Brownback.** And a lot of that would seem to be built around housing, or manufacturing?

**Commissioner Hall.** I would say that is fair. This downturn is very broad, but the greatest job loss is in manufacturing, construction, and in temporary services.

**Senator Brownback.** Do you do any projections on what the job loss would be if you see bankruptcy at one or two of the major auto manufacturers in the country?

**Commissioner Hall.** We have not done an analysis like that. I think I have seen some numbers that seem relatively in the ballpark, but to be honest I do not recall what those numbers are at the moment.

**Senator Brownback.** So the BLS doesn't do that sort of projection?

**Commissioner Hall.** No, we don't.

**Senator Brownback.** Because I have seen ones that look very significant as far as an increase in unemployment rates, if you were to see a liquidation bankruptcy, but a reorganization bankruptcy I guess would be a lot less predictable in what it's going to do.

You were saying that two-thirds of the job loss happened in the last five months?

**Commissioner Hall.** Yes.

**Senator Brownback.** If you compare that to prior recessions, do you see a similar sort of trend mark where you have a fairly long period of decline, and then a precipitous falloff?

It looked like to me what happened five months ago is that the housing market, the construction market recession expanded into the rest of the economy. It was like you had a stream here that was going, and it was quite a way down, and it just spread into the rest of the economy about five months ago.

Do you see that in prior recessions? And can we learn anything from those prior trend lines?

**Commissioner Hall.** Actually I don't think you see that in prior recessions. I think that is one of the unique things about this recession. It really was—it really was a relatively mild downturn for quite a few months which—I'm agreeing with you—which I would say is sort of consistent with the downturn in housing-related industries and construction.

What has happened over the last five months is just, has just been credit market lockup. And that has just been a real—a much more severe downturn.

**Senator Brownback.** And this is unusual from prior recessions? Typically it is much broader going in?

**Commissioner Hall.** Yes. Typically it does not take quite so long for a recession to get severe, and it is almost never this severe, as well. You know, I would have to say one of the things about recessions is they are all sort of unique. They all happen for different reasons.

I do not see a lot of similarities between the recession and other recessions except that we are having a very severe downturn now, and that has happened before, but not so much with this mild recession leading off a severe decline.

**Senator Brownback.** And you do not have a good thought as to what caused it to expand into the rest of the economy five months ago?

**Commissioner Hall.** Well it did really coincide with the financial market—

**Senator Brownback.** The big credit lockups?

**Commissioner Hall.** Yes.

**Senator Brownback.** Thank you.

**Chair Maloney.** There has been some easing in the credit markets, which has been good news.

I am concerned that families of unemployed or underemployed workers are going to be hit hard, especially hard during this recession. The fact that almost one in four unemployed workers have been unemployed at least six months, and that more than one in eight have been unemployed more than a year, does not bode well for these households.

Is the duration of unemployment longer in this recession than in previous recessions?

**Commissioner Hall.** Yes, it is. The main problem is that, typically during economic expansions—prior to the recession, the number of long-term unemployed typically starts at a much lower level.

I think what we had was between the 2001 recession and the start of this recession the labor market did not have as strong a recovery as it has in the past. So we started from a much higher level of long-term unemployed.

So now when we increase the number of long-term unemployed, that number has gotten to be quite high.

**Chair Maloney.** And in previous long recessions like this one, what percentage of the unemployed leave the work force? Do you have any sense?

**Commissioner Hall.** Yeah, I think I—it's significant. When you have a big increase in the number of unemployed, you also do have a lot of people, a big increase in the number of people who actually leave the labor force.

One of the indications is we have folks who are marginally attached to the labor market. These are folks who have stopped looking for a job, but they want a job and they have looked within the past year, and that number has gone up quite a bit. We are at something of about 2.1 million marginally attached right now.

**Chair Maloney.** Thank you. I yield back to Congressman Brady for five minutes.

**Representative Brady.** Thank you, Chairwoman, very much.

Commissioner, is there anything—any unusual statistical issues, regarding seasonal adjustments, or the survey week, that may have affected the data we see today?

**Commissioner Hall.** No. Some of the earlier data was difficult for us to adjust to over the last five months because it was such a severe drop, but we have now had five months of this and we have adjusted.

**Representative Brady.** Did any industry show employment increases in March?

**Commissioner Hall.** Only actually the health care industry had some slight growth, although it was essentially unchanged.

**Representative Brady.** Government?

**Commissioner Hall.** Government was essentially unchanged. There was actually a slight decline of something like 5,000, but that was really essentially unchanged.

**Representative Brady.** We are at 8.5 percent unemployment right now. Do you expect this recession to approach or top the 10.8 percent figure we had in the 1980s?

**Commissioner Hall.** Sure. I wouldn't want to try to project that since we produce the numbers. All I can tell you is that, at least in this report there is no sign of the decline slowing down.

**Representative Brady.** America is so amazingly resilient as a country but it seems to me there is such a lack of confidence underpinning this recession, a lack of confidence in Wall Street, a lack of confidence in the bailouts, a lack of confidence unfortunately in Congress itself.

This new budget that Congress is considering unfortunately feeds I think into that lack of confidence mainly because it has such rosy economic assumptions that underpin the President's budget and the Democrat budget as well. Dealing with the budget in five-year projections is sort of like a moon shot. The trajectory is long and if you are off at the beginning you are way off as you go forward.

The big worry that is growing among economists and I think the public is we are going to be way off on debt and deficit in next year, which will only get worse as we go forward.

Is there in the recent labor market trends any evidence that supports the Administration's economic forecast that we would only have an 8.1 percent unemployment rate this year, since we are already much higher than that?

**Commissioner Hall.** You know, I don't know what to make of the forecast. I don't really want to comment on the forecasting very much. I will say it is very difficult to forecast at any time. Right now it is especially difficult to forecast.

**Representative Brady.** But may I ask this, Commissioner, I agree with you on that. You know, if you had to guess between, or choose between the Administration's forecasts of only 1.2 percent contraction this year versus the Blue Chip forecast which is twice that, 2.6 percent? You know, if you were staking your reputation on it, which do you think will prove more accurate?

**Commissioner Hall.** Again, I don't want to say. But I can tell you that the difference—that difference in growth would imply a rather different level of job loss or job gain. It would have a pretty significantly different result in the labor market going forward.

**Representative Brady.** The economy would have to increase dramatically to only contract by 1.2 percent this year, correct? Since we've had five straight losses of 600,000 jobs or more each month, how do you possibly get to that rosy scenario?

**Commissioner Hall.** It would require a significant improvement. The current labor market is consistent with pretty significant decline in GDP right now.

**Representative Brady.** I can find few economists who believe that we can meet the rosy economic assumptions that are in the President's budget. The result is, I think we'll prove that we are closer to a \$2 trillion deficit this year, and that the rosy scenarios underpinning the budget will end up costing us much higher debt,



much higher deficit, again all of which feed into I think the lack of confidence in this government and how it is working.

So that is my main concern as we look at these labor numbers. They just do not prove out to be rosy, as the new Administration is predicting.

With that, I would yield back, Madam Chairman.

**Chair Maloney.** I just want to note that after eight years of George Bush's leadership, this country inherited a series of records. Only they were the wrong kinds of records: record deficits, record trade deficit, largest deficit in history.

And President Obama has been working very hard to turn that around and move forward in a positive way. But this hearing is not about politics. It is about understanding the economy more. But if you are going to attack the Democrats, I am going to attack the Republicans back, and the President—

**Representative Brady.** Well, Madam Chairman, Madam Chairman, I actually was not. I was really questioning the economic forecasts under the budget—

**Chair Maloney.** Okay.

**Representative Brady** [continuing]. Which again are just so rosy that they are going to hide some major deficits—

**Chair Maloney.** Well they inherited—

**Representative Brady** [continuing]. And I would point out for every record of the President—

**Chair Maloney.** They inherited major deficits.

**Representative Brady.** They did, but they inherited it from a Democratic Congress, and that's I think what fails to be said. And I think you're right to criticize President Bush for the deficits, but it looks like this new President will double that in only about three years. That is the worry I think we have.

**Chair Maloney.** I will point out that when the former President took office he inherited a \$5.6 trillion ten-year projected surplus. And now we have these raging debts and deficits that we are trying to address, plus a dire economic downturn.

Let's turn to the underemployment numbers. Last month the number of Americans working part-time because they could not find full-time jobs hit 8.9 million, the highest level since the Bureau of Labor Statistics began collecting information on involuntary part-time work.

Is the number of involuntarily part-time workers still increasing?

**Commissioner Hall.** Yes, it is. An additional 423,000 became involuntary part-time workers in March.

**Chair Maloney.** And does this show any signs of slowing down?

**Commissioner Hall.** No, it doesn't.

**Chair Maloney.** And the broadest measure of unemployment published by the BLS shows that 15.6 percent of workers were under-employed. Is it fair to say that this recession is characterized by remarkably high levels of underemployment?

**Commissioner Hall.** I would have to say, yes. The trend in the unemployment rate and in the job loss, and then in the rise in some of the other measures of underemployment, are all consistent with a fairly deep recession.

**Chair Maloney.** How have women fared as the economy has shed jobs this year? Are they losing jobs at a faster pace than men, or a slower pace? How have they fared?

**Commissioner Hall.** 23 percent of the job loss in this recession so far is borne by women. In say the last five months through February 2009, almost 30 percent of the job loss was from women. That is actually higher than most recessions. Last recession at the peak of the job loss women lost 25 percent of the jobs. In the 1990 recession, women lost less than 4 percent of the jobs.

**Chair Maloney.** Wow. And what about women heads of households? Is there a difference, a striking difference, or any difference at all in terms of job loss?

**Commissioner Hall.** The unemployment rate for women heads of household started higher and it has risen more. It started about 10.8 percent—up to about 10.8 percent right now, and it's risen about 3.7 percentage points over the last 12 months. You compare that to women who are married, their unemployment rate is about 5.4 percent right now.

**Chair Maloney.** In what industries have women lost the most jobs and in what industries have they been more successful in not losing jobs?

**Commissioner Hall.** Since December, the industries with the largest job loss by women is professional business services. They lost about 424,000. Manufacturing lost about 416,000. Retail trade lost 223,000. And financial activities lost 205,000.

**Chair Maloney.** Have the job losses in the retail sales sector expanded to other segments of the sector?

**Commissioner Hall.** Yes. A lot of the downturn started in automobiles, and now it has expanded throughout the retail trade sector.

**Chair Maloney.** And is it fair to say that job losses in the service sector are accelerating?

**Commissioner Hall.** Yes. In fact, that is one of the things that makes this recession different from the past two recessions. Over the past five months the service sector has borne over half the job loss. And in the past two recessions, services only bore less than a quarter of the job loss.

**Chair Maloney.** Do you think that this erosion will impact women's employment particularly in the service sector?

**Commissioner Hall.** I think that's fair to say. In some of the sectors where you have traditionally more impact from a recession, like manufacturing for example, women aren't represented quite as highly as in services. So I think that is part of why the women job loss is a bit higher this recession so far.

**Chair Maloney.** Do you have any data to tell us something about African American female headed households? How are they doing compared to white female headed households?

**Commissioner Hall.** In 2008, African American head of households, the unemployment rate was about 10.9 percent. And for white female heads of households the unemployment rate was about 6.8 percent.

**Chair Maloney.** My time has expired and I recognize Senator Brownback for five minutes.

**Senator Brownback.** Thank you very much.

Getting back to this credit lockup that you were identifying Commissioner, as being one of the things that really accelerated this trend line down, there has been some indication that credit markets are loosening up. Are you tracking that? Do you see any positive impact—apparently not—in any of the numbers you are seeing yet on impacts in the credit market getting somewhat looser?

**Commissioner Hall.** Yes, I have to say I'm not sure I see anything in the labor market. My expectation would be that if the credit market eases up we would see some improvement in some of the other numbers, the consumer confidence going up, and maybe consumer spending increasing, and that would have to happen probably before we would start to see an improvement in the labor market.

**Senator Brownback.** If I could suggest to the Chairwoman, that this is such a key part of what has accelerated and made this recession so much more difficult, in the last week I have had builders from my State and region and financial institutions both pointing their finger at each other saying that, well, we would be building right now but we can't get any credit.

And the financial institution is saying, well, the regulators are not letting us lend. They are being much more strict on this.

It seems like to me it would be a great time for us to hold a hearing with the regulators, and maybe some of the builders or financial institutions, and quiz them at length. Because they are all pointing at each other saying this is the reason credit is not flowing.

And the Congress has pumped billions, hundreds of billions of dollars into trying to get this credit market going again. And as much as we have put into it, it does not seem to really be moving much again, and that this might really be something that this committee would be uniquely situated to try to bring those factions together to get at the heart of what this issue is.

**Chair Maloney.** Would the gentleman yield?

**Senator Brownback.** Yes.

**Chair Maloney.** I truly believe that is a very positive suggestion. I likewise serve on the Financial Services Committee and we did hold a similar hearing because of the conflicting statements that are out there. You hear from everyone in real estate: you go to the bank and it is impossible to get a loan on real estate. And we hear from some bankers that the Fed is telling them not to loan to real estate.

Yet we know that real estate really employs a great number of people. I think it is an excellent idea, and I look forward to working with the Ranking Member in putting that together as quickly as possible.

**Senator Brownback.** Thank you. Because I just—

**Chair Maloney.** I yield back.

**Senator Brownback** [continuing]. I keep getting from all my institutions this pointing past each other on it, and yet you are saying this is at the heart of what has really accelerated this problem.

One of the things, Commissioner, do you look at—are you watching any trip wires out there that you look at and you say: Now if this happens, we could really see this accelerate, or even get worse than the situation is right now?

I have asked you about bankruptcy in the auto sector. Are you looking at anything that might happen overseas? Anything that might happen here that you would consider a trip wire to accelerate this into even a worse situation?

**Commissioner Hall.** To be honest, I'm not sure there are too many trip wires that haven't already been tripped. This is a very quickly declining labor market.

**Senator Brownback.** So nothing in that—but obviously if you have bankruptcy in the auto industry, I mean because people are pointing to that saying this would be a big one, particularly in some of these states that are already hard hit. Are there any others out there that you would—

**Commissioner Hall.** No, not really. I think in large part because we are so focused on the labor market and dealing with the data that I try not to look too far forward and try to guess what the data is going to look like.

I guess one of the biggest concerns is that things just do not improve. I mean, this is falling very quickly right now and I'm not sure the labor market could fall any quicker than it is right now. So I think maybe the biggest concern is that this continues.

**Senator Brownback.** I was noting—one of the staff members was saying to me that the historical experience has been that the faster and deeper the job losses, the quicker the recovery, has generally been in history. Is that correct?

**Commissioner Hall.** That is correct. It is hard to think of that as a hard-and-fast rule simply because we have not had all that many recessions. So it is really hard to predict that. But in the past, deeper recessions have had quicker recoveries.

**Senator Brownback.** Now this one is unusual where it has been long, and initially shallow and then going deep, from what you have described.

**Commissioner Hall.** Yes.

**Senator Brownback.** And you don't know of an historical recession that has really tracked along that same line?

**Commissioner Hall.** I don't think so. To be honest with you, I probably ought to look more closely at some of the past recessions to see if there's been a similar pattern, but I don't think there has been.

In fact, to be honest with you I think for the first eight months of the recession I am not sure that it was clearly a recession. I think we had job loss and it was a downturn, but things were mild enough that it was probably a tough call for the NBERs as to whether there was a recession or not until we had the credit market lockup.

**Senator Brownback.** Well again I think this is the issue really to track for us, is this credit market lockup where the Chairwoman who, her District is a lot of the financial center of the country, I think would be quite uniquely positioned to be able to dig into some of that. And it is obviously one of the keys to be able to get this going.

My concern is, I am just not seeing it unlock at our level. It may be starting to loosen up some at the international level, I don't know. Really it hasn't loosened that much. But we're certainly not seeing the sort of credit activity in the Midwest, in my estimation,

that is going to bode for any sort of recovery in any near-term fashion.

Thanks for the time.

**Chair Maloney.** Congressman Brady.

**Representative Brady.** Thank you, Chairman.

I think obviously the major proponent of the new Administration's recovery plan is the stimulus package. A lot of money is being pushed out the doors these days.

The centerpiece of that Stimulus Proposal was a tax cut called "Making Work Pay Tax Credit," aimed at consumers and working Americans. It kicked in this week, although I don't think most people noticed the extra \$1.10 a day in their paycheck.

To be fair, it is too early, I think, to be expecting the stimulus to be showing up in these unemployment numbers, but when do you expect the impact from this extra \$1.10 a day in paychecks to show up in either lowering the unemployment number, spurring consumption? When will we see that impact?

**Commissioner Hall.** It is not clear that we will ever be able to see it in the labor market because it is such a—especially when we are in such a decline, sort of parsing out the impact of something like a tax cut is very difficult to do. That is probably the sort of thing that, on a research basis a few years from now we may be able to make some estimates of that, but it would be hard to guess. And I am not sure that we will see it in the data for sure as the data comes out.

**Representative Brady.** I may not have understood. In the Stimulus package there was a projection of millions of new jobs, the centerpiece of which was this Making Work Pay Tax Credit. You are saying you won't be able to measure the job creation from that component?

**Commissioner Hall.** I think it would be difficult to do, and it is not something that we are likely to be able to do as the data comes out. It doesn't mean the impact is not in there, but that is something that would be rather difficult for us to measure, and probably not our role to measure.

**Representative Brady.** Would you see any consumption impact?

**Commissioner Hall.** That would be the hope. In theory that is how that would work. It would be encouraging consumer spending. And certainly a decline in consumer confidence and the resulting decline in consumer spending is a big part of this economic downturn.

**Representative Brady.** Well will this new tax credit, do you think it will show up in stronger consumer confidence here? Most people that I have talked to this week do not even know they are getting any type of tax change, certainly are not running off to the mall with their new-found \$1.10. I think that is part of what was hoped by the Administration, was that this would spur some type of consumer confidence.

I have been looking at a number of economic forecasts that show that will not likely happen. I would like to submit for the record, Madam Chairman, a study by four economists—John Cogan, Tobias Cwik, John Taylor, and Volker Wieland—that deals with an estimate of some of the impact of the stimulus, and some of the

concerns that it may not create the jobs that we had hoped. I would submit that for the record.

[The report entitled "New Keynesian versus Old Keynesian Government Spending Multipliers" on p. 58.]

**Representative Brady.** With that, I would yield back.

**Chair Maloney.** Thank you so much.

I would like to follow up on the line of questioning of our Ranking Minority Member, Senator Brownback. Could you give us some indication of the numbers in the housing market?

There was one report that said housing starts were up 5 percent. Could you give us a sense for single family, for commercial, for whatever, a sense of what is happening in the housing market? I guess you can't comment on whether or not it is tied to the credit freeze, but could you give us an idea where we stand?

**Commissioner Hall.** Sure. I don't know—that is not data that we produce, but that was a one-month uptick, and it is certainly a good sign, but it also is again only one month.

Housing starts have gotten to a fairly low level, below half a million a year is a fairly low level, but to be honest that's a pretty volatile series. So I am not sure yet we have a clear change in trend in the housing market.

**Chair Maloney.** Well who collects that data?

**Commissioner Hall.** The Census Bureau does.

**Chair Maloney.** Pardon me?

**Commissioner Hall.** The Census Bureau.

**Chair Maloney.** The Census Bureau. And also I am hearing that there is no commercial activity, that there are no loans in any shape or form for commercial investment. Do you have any indication for new starts for shopping centers, or businesses, or small businesses?

**Commissioner Hall.** I will say our downturn in construction employment is in both residential and nonresidential. In fact, nonresidential right now is probably shedding slightly more jobs than residential. So that is consistent with that.

**Chair Maloney.** I would like to ask a few questions about my home State of New York, and I welcome my other colleagues to ask specific questions on their states.

I notice that employment in state governments declined in December, January, and February. The Governor of New York has already told me that New York State employees were going to face furloughs, or layoffs because of state budget problems.

With states now in recession, is that a problem that all governors are facing?

**Commissioner Hall.** I would say the job growth in state government, and even local government, both things have really flattened out right now. So I would say nationwide it is pretty broad that there's not that much growth, certainly not in state or local government noneducation.

**Chair Maloney.** In my home state of New York, the unemployment rate was 7.8 percent in February, a jump of .8 of a percentage point from January. In New York City unemployment jumped from 6.9 to 8.1 percent.

Are these changes similar to the changes in the national unemployment rate?

**Commissioner Hall.** Over that period, they're a bit higher. Nationally the unemployment rate over that period rose by half a percentage point, which is a little bit less than the .8 for the State and 1.3 percentage point for the City. But it's in the same ballpark with respect to the statistical change.

**Chair Maloney.** On the national level, as you reported, there is a sharp increase in the pace of job losses in recent months. How does that compare to the payrolls in New York State and New York City, and in other states and cities in general? Is that the same trend?

**Commissioner Hall.** The trend is similar. In New York, job loss between January and September averaged about 2000 a month. And since then it has averaged about 29,000 jobs lost per month. So that is similar to the national number, at least in the trend.

**Chair Maloney.** How does New York and other states compare to the Nation as a whole during recessions? Have past recessions typically lasted longer at the state level or do they trend at the same pace? What is the difference, if any?

**Commissioner Hall.** It actually has varied by recession. Although recently the pattern of job loss in New York State has been similar to the national numbers, the job loss has actually been a bit milder than the national number.

New York City has lost about 1.2 percent of their jobs since the recession started. Nationally we have lost about 3.2 percent of the jobs through February. So that has been milder this recession.

The last recession, in terms of length New York and the national both lost jobs about the same time period, but the job loss for New York was more severe than the U.S. number. So we have had sort of a different experience.

**Chair Maloney.** Thank you. I yield back and recognize my colleague, Congressman Brady, for five minutes.

**Representative Brady.** Well thank you, Madam Chairman.

Commissioner, obviously in these financial times having good numbers in the government is really critical, so making sure that the Bureau of Labor Statistics if fully funded is something that has bipartisan support.

Are you concerned about the funding levels you have for your statistical programs?

**Commissioner Hall.** Actually our 2009 budget came in at a significant increase. That was very much needed. So I would say that we are now at a good level. We have actually had some troubles, and I think we are in a position where we can now sort of rebuild our capability. I think we were getting a little stretched.

But our budget right now at the 2009 level is a good, solid budget for us.

**Representative Brady.** Are there any new models, new measurements, new approaches you are taking that could help us as we sort of gauge the economy going forward?

**Commissioner Hall.** We always have a program of research where we are looking for ways to improve our measurement, and ways to increase the efficiency of our measurement.

In terms of actually implementing them, to be honest the last few years we have been somewhat in retreat. We have been trying very hard to maintain the quality of our programs. So we have not

really been able to implement much in terms of improving our measurement in recent years, but we hope that will change in the future.

**Representative Brady.** Are there any changes you anticipate? Again, exports and trade have been up to this point one of the shining spots in our economy, our ability to sell American-made products around the world. At one point it accounted for almost 60 percent of our economic growth.

Obviously that has cooled. The WTO estimates that we will see a 9 percent decrease in world trade flows this year. OECD estimates that we will see a 4 percent or so contraction among those member countries.

Do you have state-of-the-art modeling, or statistical programs that can help measure what the impacts or the predictive future is of some of our exports, some of our ability to sell outside the country?

**Commissioner Hall.** We really don't very much because we are so focused on the labor market. I do know some of the other statistical agencies have some what I would call input/output models where they can try to track the jobs, either directly or indirectly supported by exports.

The Bureau of Economic Analysis, for example, has something like that, but we typically do not do that.

**Representative Brady.** Can I ask why? It seems to me you do a good job, whether it's construction, housing, real estate. You delve pretty deeply into business investment, the financial sector, a number of those sectors. Could you develop for this committee and for Congress some of those impacts from experts so we can track again what is becoming a fairly good sized driver of our economy?

**Commissioner Hall.** Certainly on a research basis people can make some estimates of this. Part of the big challenge is that products are made in so many different places, both—the content can be made throughout the country. Export contents sometimes has import content. Export sometimes has import content. So it is very hard to track all these pieces that go into a product.

So it is somewhat a challenge that has been created by the changing nature of production in modern economies.

**Representative Brady.** But you do surveys, don't you, to identify trends in housing, financial, areas—

**Commissioner Hall.** Sure.

**Representative Brady** [continuing]. That can be extremely complicated, as well.

**Commissioner Hall.** Sure, but—

**Representative Brady.** Why don't we do that?

**Commissioner Hall.** We do do that, but if you think about it, when we collect employment at a particular establishment it is quite—that establishment, they don't even know how much of their output winds up in exports. You know, they know they produce it. They know they sell it. But as to whether it winds up being export-driven, or domestically driven, they often don't know that. So it is very difficult for us to get that information.



**Representative Brady.** But, you can measure more accurately those who are actually exporting those U.S. products, and goods and services. Correct?

**Commissioner Hall.** Yes. Correct.

**Representative Brady.** Well could you try to identify for us some means where we can develop better numbers, better views, better analysis of that economic sector? It is an important one. I fear we ignore it. I think it is important overall to our recovery and we ought to be taking a closer look at it.

**Commissioner Hall.** I agree. We will.

**Representative Brady.** Thanks.

**Chair Maloney.** Senator Casey, welcome.

**Senator Casey.** Madam Chair, thank you very much. And Commissioner, thank you for your testimony.

I want to try to cover two or three subject areas. One area in particular that I want to start with is with regard to minority unemployment.

In terms of the numbers, the African American unemployment rate is 13.4 percent? Is that right?

**Commissioner Hall.** Let me catch up here one second, I'm sorry.

**Senator Casey.** Sure.

**Commissioner Hall.** That sounds correct.

**Senator Casey.** I may be looking at a February number.

**Commissioner Hall.** I'm sorry, I've got to get my—yes, it is 13.3 percent. Thank you.

**Senator Casey.** Okay, 13.3. Now from what I understand, if you look at the rate from February 2008 to February 2009, the African American number has gone from about 8.4 to 13.3?

**Commissioner Hall.** Yes.

**Senator Casey.** So it is up five full percentage points, which is—

**Commissioner Hall.** Yes.

**Senator Casey** [continuing]. Hard to comprehend. And the same is true of the Latino rate. According to what I have, it went from February 2008 to February 2009, from 6.3 to 10.9. Does that sound right?

**Commissioner Hall.** Actually, I think we are up to 11.4 percent.

**Senator Casey.** 11.4.

**Commissioner Hall.** That's about right.

**Senator Casey.** So they are both up—for African Americans and for Latinos—basically five full percentage points. Is that—

**Commissioner Hall.** Close to five percent.

**Senator Casey.** Close to five. Which is stunning and disturbing. No need to say more. These figures are the source of significant worry for so many people. I can't even comprehend or imagine what they are going through. It is an awful increase for one year.

College. I wanted to ask you about that. There is a report by the National Center for Public Policy and Higher Ed about the rising cost of college. The report found that published college tuition and fees increased by 439 percent from 1982 to 2007, while median family income rose 147 percent over the same period.

So college costs have gone up by 439 percent in 25 years; and median income has only gone up by 147 percent. I am not asking you to verify that, but using this report as a basis for my next question.

Tell us from what you can surmise from your data and reports—not just this month but every time you appear—about the difference between having a college degree versus having only a high school degree on of the impact of the recession on individuals?

**Commissioner Hall.** College-educated workers have huge advantages in the labor market. It is not just during recessions, but even during normal times. The wages are higher. Labor force participation is higher. And their unemployment rate is lower.

When you go into a recession, college educated workers, they have a rise in the unemployment rate, and we've seen a rise in the unemployment rate, but it rises higher for lower-educated groups.

**Senator Casey.** Is there a number you have on those workers?

**Commissioner Hall.** Sure. The unemployment rate for those with a bachelor's degree right now is about 4.3 percent. And the unemployment rate for just high school grads is about 9 percent. So it is twice as high.

**Senator Casey.** Thank you for that information.

And finally a question on manufacturing jobs. In our State of Pennsylvania we have lost, by one estimate, 200,000 manufacturing jobs since 2001. And I know the Nation has experienced a similar sharp decline, as well.

Are there subparts, or subsectors, of manufacturing job losses that are particularly severe or pronounced in the national economy? Do you have any data on those segments, or any sense of it?

**Commissioner Hall.** Actually, automobile-related industries have been particularly well hit, but I would have to say that virtually all portions of manufacturing have now seen job loss. So it is very widespread, but it is particularly heavy in automobiles.

**Senator Casey.** Thank you, very much.

**Chair Maloney.** I would like to thank you for your testimony, and all the panelists, and I thank my colleagues, and this meeting is adjourned.

[Whereupon, at 10:30 a.m., Friday, April 3, 2009, the hearing before the Joint Economic Committee was adjourned.]

## **SUBMISSIONS FOR THE RECORD**

## PREPARED STATEMENT OF REPRESENTATIVE CAROLYN B. MALONEY, CHAIR

A few glimmers of hope have surfaced in the economy in recent weeks as factory orders posted gains last month, a key manufacturing index rose and credit markets have begun to thaw. But today's jobs report highlights the fact that there are virtually no bright spots yet in the labor market.

In each of the last five months, employers have slashed about 600,000 or more jobs—staggering job losses totaling more than 5 million since the start of the recession. The unemployment rate now stands at 8.5, a jump of 3.6 percentage points since the downturn began over 15 months ago. And, the broadest measure of unemployment or underemployment that the BLS publishes is now at 15.6 percent.

For the first time in at least 30 years, every state in the Nation is in recession. The state and local unemployment numbers for February, which were released recently, show that seven states already have unemployment rates over 10 percent. Although my home state, New York is not one of those states, the unemployment rate in New York state jumped 0.8 percentage points last month—the largest one month jump in almost 20 years. And the 1.2 percentage point jump in unemployment in New York City represents the largest spike that New York City has seen since BLS started collecting this data.

I am particularly concerned by the long duration of unemployment faced by a great number of workers and the disruptive impact that this long term unemployment has had and will have on those workers and their families. Almost 1 in 4 unemployed workers is experiencing an unemployment spell of 6 months or longer—the highest level in over 25 years. And of those long term unemployed workers, more than half of them have been looking for work for over a year. This type of long term unemployment is straining families and forcing them to take on more debt as the financial pressure of making ends meet mounts.

Even before job losses began accelerating, many families were increasingly holding balances on their credit cards just to pay for basic household necessities. The most recent data available from the Survey of Consumer Finances shows that a increased proportion of families—especially middle class families—have been accumulating larger mountains of debt on their credit cards.

Because of this increased reliance on credit cards—especially by families of displaced workers, it is even more important that legislation concerning credit cards is put into place immediately. The Credit Cardholders' Bill of Rights was voted out of subcommittee yesterday and will be moving through the House later this month. I remain hopeful that the Credit Card Accountability, Responsibility and Disclosure Act, which was voted out of the Senate Banking Committee this week, will be on the Senate floor without delay. Both of these bills would prohibit certain current practices that are hurting financially strapped cardholders.

The recovery measures that Congress passed and President Obama signed into law in his first 60 days in office are just beginning to work their way into the economy. Speaker Pelosi announced this week that the middle class tax cuts have now gone into effect, so families will see an increase in their take home pay. A temporary increase in food stamp benefits also goes into effect this month, with benefits set to rise as much as \$80 a month for a family of four. Both of these measures should provide a much-needed boost to consumer spending.

Last night, both the House and the Senate passed their budget resolutions. A budget is fundamentally about priorities and our blueprint builds on our recovery efforts by making investments in health care, renewable energy, and education to put people back to work and strengthen our economy for the future.

Today's grim unemployment numbers underscore the wisdom of the stimulus package that Congress worked so hard to pass quickly. We will continue our focus on making sure that the economy gets working again and examining ways to help struggling families.

## PREPARED STATEMENT OF SENATOR SAM BROWNBACK, RANKING REPUBLICAN

Thank you Chairwoman Maloney for arranging today's hearing and thank you Commissioner Hall for testifying today.

Unfortunately, today's employment report on labor market conditions in March brings more bad news: employers shed 663,000 payroll jobs in March and the unemployment rate rose to 8.5% from 8.1% in February and 5.1% a year earlier. In total, we have lost 5.1 million payroll jobs since the beginning of the recession and 3.3 million jobs in the past five months alone. Behind these numbers is a great deal of dislocation, pain, and suffering in American families.

Given the severity of the economic downturn that we face, and efforts already under way to try to offset the downturn, it is clear to me that the very last thing

that we want to do is raise taxes on American businesses and introduce uncertainty into employers' plans. Yet that is precisely what Congress and the Administration have been contemplating. And, that is precisely what the Administration's proposed budget will do. And make no mistake, the budget that we are currently considering, by initiating a move toward socialized health care and taxes on carbon emissions, will ensure that 100% of Americans can expect to pay higher taxes in the future. The claim of the Administration that 95% of Americans will not see their taxes raised by even a dime is about as solid a AAA rating on a mortgage-backed security turned out to be.

The economy needs help. But, rather than actually stimulate the economy by providing improved incentives to work and invest, we have been devoting trillions of dollars of taxpayer money to expanding and creating permanent, long-term government spending programs and income redistribution mechanisms. We have budget proposals from the Administration and Democrats in Congress that seek to impose higher taxes on small businesses, higher taxes on income from capital, begin implementation of a mechanism that will tax anyone who uses carbon, and begin a process of nationalizing health care, among other things. This is precisely the wrong time to raise taxes and inject uncertainty about what taxes are going to be in the future.

In the face of a severe downturn in the economy and significant declines in stock values and homeowner wealth, it is almost inconceivable that there are those who wish to raise taxes. What will higher taxes on small business owners do to job creation? What will higher taxes on dividends and other forms of capital income do to stock values and the portfolios of every American family? What will new carbon taxes, under the name "cap and trade," do to our already struggling industrial base? Now is clearly not the time to increase taxes and chase more jobs and production offshore.

Judging from calls that I receive from my Kansas constituents and judging from stock markets, where votes are placed with private investments, the verdict on how we are handling our Nation's financial and economic crises is not positive. Some of my constituents have expressed unwillingness to commit to new investments and expansions of their businesses because of growing uncertainty since the beginning of the year—uncertainty about how high their taxes will be raised; uncertainty about how much a cap-and-trade carbon policy will translate into higher energy taxes; uncertainty about the extent to which health-care policies will translate into new government mandates and price controls; uncertainty about whether mortgage contracts may in the future be subject to judicial rewrites in bankruptcy courts; and uncertainty about rules of the workplace, including how workers and businesses decide on union representation.

There are many people in the heartland who are genuinely and rightly upset that they are now being asked to support a permanent expansion of government and to support the highly leveraged speculative bets placed by the big financial institutions that are "too big to fail." Many of my constituents are also experiencing a great deal of uncertainty about how far the Administration will try to reach in its attempts to restructure the economy and vastly expand the scope of government intervention into their lives. We need to halt the mad dash to big government as the solution to all of our problems and put incentives in place that help Americans grow their businesses, invest, create jobs, and prosper. Higher taxes, and ever-expanding government, and creation of uncertainty are not the way to provide those incentives.

I look forward to the testimony of Commissioner Hall.

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PREPARED STATEMENT OF KEVIN BRADY, RANKING REPUBLICAN

I would like to join in welcoming Commissioner Hall before the Committee this morning.

The employment data released this morning show the impact of the deepening recession. Payroll employment declined by 663,000 in March, with losses broadly shared among major industry groups. The unemployment rate increased to 8.5 percent, and current trends suggest that further increases are likely in coming months.

The job figures reported today add to the growing body of evidence indicating that the Administration's economic forecast is much too optimistic. The unemployment rate is already significantly above the Administration's forecast for all of 2009. The Administration projects that real GDP will fall 1.2 percent in 2009 and rise 3.2 percent in 2010, compared with a Blue Chip Consensus forecast of a decline of 2.6 percent in 2009 and an increase of 1.9 percent in 2010. The CBO forecast of a 3.0 percent decline in 2009 GDP also shows how far off the Administration is likely to be for 2009.

The Administration's unduly optimistic economic assumptions are a major problem. These optimistic assumptions are a key foundation of the President's budget proposals, and lead to artificially low deficit and debt projections. No wonder The Economist called the assumptions in the Administration's budget "deeply flawed" in an article entitled, "Wishful, and dangerous, thinking." Their effect is to make the Administration's expansive new spending proposals look less threatening than they actually are.

The reason the Democrats' Congressional budget resolution got so far off track is that it is based on the President's budget proposals. This is why a variety of accounting gimmicks are needed to hide the true costs of the Administration's dangerous spending spree in the Democrats' House budget resolution. As the Washington Post said last week, in this resolution "Congress deals a blow to 'honest budgeting.'" The Democrats now are attempting to shoehorn expensive Administration proposals based on unrealistic economic assumptions into a House budget resolution that uses more realistic economic assumptions from the CBO.

A realistic economic forecast would indicate that the fiscal situation is already very grim, with exploding deficits and debt for the foreseeable future. According to a recent study of many financial crises by Professors Kenneth Rogoff and Carmen Reinhart that has become an instant classic, the U.S. national debt can be expected to increase by \$8 trillion to \$9 trillion over the next three years. According to Rogoff, inflation of 8 to 10 percent is one likely way the government will end up financing the huge run-up in federal debt. He compares the coming economic environment to the 1970s, which was a time of rising inflation, weak economic growth, and rising unemployment.

The Democrats' budget will add yet more deficit spending and debt to the huge amounts of each already in the pipeline. The result will be much higher taxes and inflation in the future, and lower economic growth. Higher inflation in coming years will further reduce the American standard of living as incomes and retirement funds are further eroded. The last time Democrats controlled both ends of Pennsylvania Avenue for a significant length of time was in the 1970s and stagflation was the result, so nobody should be surprised if history repeats itself.

I'm pleased to welcome the panel of witnesses before us today. TARP certainly raises a number of very troubling issues, but the central one is why we still do not have a credible, effective, and transparent financial rescue plan in place.

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PREPARED STATEMENT OF KEITH HALL, BUREAU OF LABOR STATISTICS

Madam Chair and Members of the Committee:

Thank you for the opportunity to discuss the employment and unemployment data we released this morning.

Labor market conditions continued to deteriorate in March. Total nonfarm payroll employment decreased by 663,000, and the unemployment rate increased from 8.1 to 8.5 percent. Since the beginning of the recession in December 2007, job losses have totaled 5.1 million, 3.3 million of which occurred in just the past 5 months. These declines have been widespread across industry sectors, but particularly sharp in manufacturing, construction, and temporary help services. Together, these industries have accounted for nearly two-thirds of the job loss during the recession.

In March, manufacturing employment fell by 161,000, with job losses spread throughout the sector. Since the start of the recession, manufacturing has shed 1.5 million jobs, with about 60 percent of the loss occurring in the past 5 months. In March, the average workweek in manufacturing decreased by two-tenths of an hour.

Construction employment declined by 126,000 over the month. Since the beginning of the recession, employment has dropped by about 1.1 million, with more than half of that total occurring in the past 5 months.

In March, employment continued to contract throughout most of the service-providing sector. Temporary help services employment shrank by 72,000 over the month. Employment in the industry is down by about three-quarters of a million since the recession began, with over half of that coming in the past 5 months. In March, other large job losses occurred in retail trade (-48,000), financial activities (-43,000), transportation and warehousing (-34,000), accommodation and food services (-32,000), and wholesale trade (-31,000).

Health care employment continued to trend up in March, although the pace of job growth appears to have slowed in the past 3 months. In the first quarter of 2009, the industry added an average of 17,000 jobs per month, compared with a monthly average of 30,000 in 2008.

Average hourly earnings for production and nonsupervisory workers in the private sector rose by 3 cents in March, or 0.2 percent. Over the past 12 months, average

hourly earnings have increased by 3.4 percent. From February 2008 to February 2009, the seasonally adjusted Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) fell by 0.5 percent.

The major indicators from our household survey also reflect weaker labor market conditions. In March, the unemployment rate rose by four-tenths of one percentage point to 8.5 percent, and the number of unemployed persons reached 13.2 million. Since the recession began in December 2007, unemployment has surged by 5.6 million; job losers have accounted for about 80 percent of the increase, with returning workers and new entrants to the labor market making up smaller portions.

In March, the number of individuals experiencing long spells of joblessness rose by 265,000 to 3.2 million. Nearly one in four of the unemployed had been jobless for 27 weeks or more, the highest ratio since mid-1983.

Over the month, the employment-population ratio slipped to 59.9 percent, 2.8 percentage points lower than at the beginning of the recession and the lowest level since July 1985. Among the employed, the number of persons working part time who would prefer to be working full time increased by 423,000 over the month to 9.0 million. Since December 2007, this measure has risen by 4.4 million.

Summarizing the labor market developments for March, payroll employment fell by 663,000, and the unemployment rate climbed to 8.5 percent. Since the beginning of the recession in December 2007, job losses have totaled 5.1 million.

My colleagues and I now would be glad to answer your questions.

# News

United States  
Department  
of Labor



Bureau of Labor Statistics

Washington, D.C. 20212

Technical information:

Household data: (202) 691-6378  
<http://www.bls.gov/cps/>

USDL 09-0328

Establishment data: (202) 691-6555  
<http://www.bls.gov/ces/>

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Media contact: (202) 691-5902

## THE EMPLOYMENT SITUATION: MARCH 2009

Nonfarm payroll employment continued to decline sharply in March (-663,000), and the unemployment rate rose from 8.1 to 8.5 percent, the Bureau of Labor Statistics of the U.S. Department of Labor reported today. Since the recession began in December 2007, 5.1 million jobs have been lost, with almost two-thirds (3.3 million) of the decrease occurring in the last 5 months. In March, job losses were large and widespread across the major industry sectors.

Chart 1. Unemployment rate, seasonally adjusted,  
April 2006 – March 2009

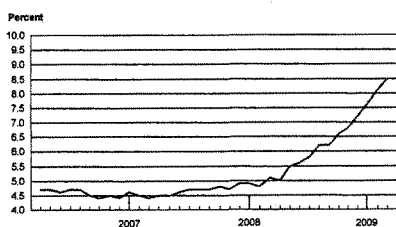
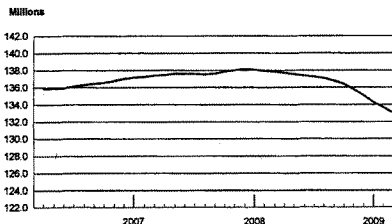


Chart 2. Nonfarm payroll employment, seasonally adjusted,  
April 2006 – March 2009



### Unemployment (Household Survey Data)

In March, the number of unemployed persons increased by 694,000 to 13.2 million, and the unemployment rate rose to 8.5 percent. Over the past 12 months, the number of unemployed persons has grown by about 5.3 million, and the unemployment rate has risen by 3.4 percentage points. Half of the increase in both the number of unemployed and the unemployment rate occurred in the last 4 months. (See table A-1.)

The unemployment rates continued to trend upward in March for adult men (8.8 percent), adult women (7.0 percent), whites (7.9 percent), and Hispanics (11.4 percent). The jobless rates for blacks (13.3 percent) and teenagers (21.7 percent) were little changed over the month. The unemployment rate for Asians was 6.4 percent in March, not seasonally adjusted, up from 3.6 percent a year earlier. (See tables A-1, A-2, and A-3.)



**Table A. Major indicators of labor market activity, seasonally adjusted**  
(Numbers in thousands)

Category	Quarterly averages		Monthly data			Feb.-Mar. change
	IV 2008	I 2009	Jan. 2009	Feb. 2009	Mar. 2009	
<b>HOUSEHOLD DATA</b>						
Labor force status						
Civilian labor force .....	154,648	153,993	153,716	154,214	154,048	-166
Employment .....	144,046	141,578	142,099	141,748	140,887	-861
Unemployment .....	10,602	12,415	11,616	12,467	13,161	694
Not in labor force .....	80,177	80,920	81,023	80,699	81,038	339
Unemployment rates						
All workers .....	6.9	8.1	7.6	8.1	8.5	0.4
Adult men .....	6.8	8.2	7.6	8.1	8.8	.7
Adult women .....	5.6	6.7	6.2	6.7	7.0	.3
Teenagers .....	20.7	21.3	20.8	21.6	21.7	.1
White .....	6.3	7.4	6.9	7.3	7.9	.6
Black or African American .....	11.5	13.1	12.6	13.4	13.3	-.1
Hispanic or Latino ethnicity .....	8.9	10.7	9.7	10.9	11.4	.5
<b>ESTABLISHMENT DATA</b>						
Employment						
Nonfarm employment .....	135,727	p 133,678	134,333	p 133,682	p 133,019	p -663
Goods-producing <sup>1</sup> .....	20,803	p 19,835	20,127	p 19,842	p 19,537	p -305
Construction .....	6,949	p 6,593	6,706	p 6,599	p 6,473	p -126
Manufacturing .....	13,062	p 12,474	12,640	p 12,471	p 12,310	p -161
Service-providing <sup>1</sup> .....	114,924	p 113,843	114,206	p 113,840	p 113,482	p -358
Retail trade <sup>2</sup> .....	15,127	p 14,942	14,992	p 14,941	p 14,893	p -48
Professional and business service .....	17,485	p 17,042	17,205	p 17,027	p 16,894	p -133
Education and health services .....	19,035	p 19,136	19,119	p 19,141	p 19,149	p 8
Leisure and hospitality .....	13,348	p 13,236	13,268	p 13,240	p 13,200	p -40
Government .....	22,538	p 22,540	22,540	p 22,543	p 22,538	p -5
Hours of work <sup>3</sup>						
Total private .....	33.4	p 33.3	33.3	p 33.3	p 33.2	p -0.1
Manufacturing .....	40.2	p 39.5	39.8	p 39.5	p 39.3	p -2
Overtime .....	3.2	p 2.8	2.9	p 2.7	p 2.7	p 0
Indexes of aggregate weekly hours (2002=100) <sup>3</sup>						
Total private .....	104.1	p 101.8	102.5	p 101.9	p 100.9	p -1.0
Earnings <sup>3</sup>						
Average hourly earnings, total private .....	\$18.34	p \$18.47	\$18.43	p \$18.47	p \$18.50	p \$0.03
Average weekly earnings, total private .....	612.55	p 614.32	613.72	p 615.05	p 614.20	p -.85

<sup>1</sup> Includes other industries, not shown separately.

<sup>2</sup> Quarterly averages and the over-the-month change are calculated using unrounded data.

<sup>3</sup> Data relate to private production and nonsupervisory workers.

p = preliminary.

Among the unemployed, the number of job losers and persons who completed temporary jobs increased by 547,000 to 8.2 million in March. This group has nearly doubled in size over the past 12 months. (See table A-8.)

The number of long-term unemployed (those jobless for 27 weeks or more) rose to 3.2 million over the month and has increased by about 1.9 million since the start of the recession in December 2007. (See table A-9.)

#### Total Employment and the Labor Force (Household Survey Data)

The civilian labor force participation rate (65.5 percent) was little changed in March. The employment-population ratio fell by 0.4 percentage point to 59.9 percent. The employment-population ratio for adult men was 68.2 percent in March, down 4.3 percentage points since December 2007. The employment-population ratio for adult women was 56.8 percent, down 1.3 percentage points since the beginning of the recession. (See table A-1.)

In March, the number of persons working part time for economic reasons (sometimes referred to as involuntary part-time workers) climbed by 423,000 to 9.0 million. (See table A-5.)

#### Persons Not in the Labor Force (Household Survey Data)

About 2.1 million persons (not seasonally adjusted) were marginally attached to the labor force in March, 754,000 more than a year earlier. These individuals wanted and were available for work and had looked for a job sometime in the prior 12 months. They were not counted as unemployed because they had not searched for work in the 4 weeks preceding the survey. Among the marginally attached, there were 685,000 discouraged workers in March, up by 284,000 from a year earlier. Discouraged workers are persons not currently looking for work because they believe no jobs are available for them. The other 1.4 million persons marginally attached to the labor force in March had not searched for work in the 4 weeks preceding the survey for reasons such as school attendance or family responsibilities. (See table A-13.)

#### Industry Payroll Employment (Establishment Survey Data)

Total nonfarm payroll employment continued to fall sharply (-663,000) in March. Payroll employment has declined by 3.3 million in the past 5 months. In March, job losses were large and extended across nearly all major industry sectors. (See table B-1.)

Manufacturing employment fell by 161,000 in March, with widespread job losses occurring among the component industries. Factory employment has declined by 1.0 million over the past 6 months. In March, the largest decreases occurred in fabricated metal products (-28,000), machinery (-27,000), and transportation equipment (-26,000).

The construction industry lost 126,000 jobs in March, with declines occurring throughout the industry. Employment in construction has fallen by 1.3 million since peaking in January 2007; nearly half of that decline occurred over the last 5 months. In March, employment fell in specialty trade contractors (-83,000) and construction of buildings (-33,000). These declines were split about evenly between the residential and nonresidential portions of these industries. Heavy and civil engineering construction also lost 10,000 jobs. Employment in mining and logging declined by 18,000 in March.

Employment in professional and business services fell by 133,000 in March, with declines throughout most of the sector. More than half of the loss occurred in temporary help services, which cut 72,000 jobs in March and 767,000 since December 2007. In March, architectural and engineering services lost 16,000 jobs.

Retail trade employment fell by 48,000 over the month. Since peaking in November 2007, employment in the industry has declined by an average of 44,000 per month. In March, employment decreased in building material and garden supply stores (-13,000), automobile dealerships (-12,000), and electronics and appliance stores (-10,000). Employment in wholesale trade fell by 31,000 in March, with nearly all of the decline occurring in durable goods.

Employment in financial activities continued to decline in March (-43,000). The number of jobs in this industry has dropped by 495,000 since an employment peak in December 2006. More than half of this loss occurred in the past 7 months. In March, job losses occurred in credit intermediation (-15,000); real estate (-12,000); and securities, commodity contracts, and investments (-7,000).

Leisure and hospitality shed 40,000 jobs in March, with most of the decrease in the accommodation industry (-23,000). The leisure and hospitality industry has lost 351,000 jobs since an employment peak in December 2007.

Transportation and warehousing lost 34,000 jobs in March, raising total job losses to 265,000 since employment peaked in December 2007. In March, employment declined in truck transportation (-15,000), support activities for transportation (-7,000), and couriers and messengers (-5,000). Health care employment continued to trend up in March (14,000); however, monthly job growth in the first quarter averaged 17,000 compared with 30,000 per month in 2008.

The change in total nonfarm employment for January was revised from -655,000 to -741,000, while the change for February remained -651,000. Monthly revisions result from additional sample reports and the monthly recalculation of seasonal factors.

#### Weekly Hours (Establishment Survey Data)

In March, the average workweek for production and nonsupervisory workers on private nonfarm payrolls fell by 0.1 hour to 33.2 hours, seasonally adjusted—the lowest level on record for the series, which began in 1964. The manufacturing workweek decreased by 0.2 hour to 39.3 hours, and factory overtime was unchanged at 2.7 hours. (See table B-2.)

The index of aggregate weekly hours of production and nonsupervisory workers on private nonfarm payrolls fell by 1.0 percent in March. The manufacturing index declined by 2.1 percent over the month. (See table B-5.)

#### Hourly and Weekly Earnings (Establishment Survey Data)

In March, average hourly earnings of production and nonsupervisory workers on private nonfarm payrolls rose by 3 cents, or 0.2 percent, seasonally adjusted. This followed a gain of 4 cents in February.

Over the past 12 months, average hourly earnings increased by 3.4 percent, and average weekly earnings rose by 1.5 percent. (See table B-3.)

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The Employment Situation for April 2009 is scheduled to be released on Friday, May 8, at 8:30 A.M. (EDT).

### **Frequently Asked Questions about Employment and Unemployment Estimates**

#### **Why are there two monthly measures of employment?**

The household survey and establishment survey both produce sample-based estimates of employment and both have strengths and limitations. The establishment survey employment series has a smaller margin of error on the measurement of month-to-month change than the household survey because of its much larger sample size. An over-the-month employment change of 107,000 is statistically significant in the establishment survey, while the threshold for a statistically significant change in the household survey is about 400,000. However, the household survey has a more expansive scope than the establishment survey because it includes the self-employed, unpaid family workers, agricultural workers, and private household workers, who are excluded by the establishment survey. The household survey also provides estimates of employment for demographic groups.

#### **Are undocumented immigrants counted in the surveys?**

Neither the establishment nor household survey is designed to identify the legal status of workers. Thus, while it is likely that both surveys include at least some undocumented immigrants, it is not possible to determine how many are counted in either survey. The household survey does include questions about whether respondents were born outside the United States. Data from these questions show that foreign-born workers accounted for 15.6 percent of the labor force in 2008.

#### **Why does the establishment survey have revisions?**

The establishment survey revises published estimates to improve its data series by incorporating additional information that was not available at the time of the initial publication of the estimates. The establishment survey revises its initial monthly estimates twice, in the immediately succeeding 2 months, to incorporate additional sample receipts from respondents in the survey and recalculated seasonal adjustment factors. For more information on the monthly revisions, please visit <http://www.bls.gov/ces/cesrevinfo.htm>.

On an annual basis, the establishment survey incorporates a benchmark revision that re-anchors estimates to nearly complete employment counts available from unemployment insurance tax records. The benchmark helps to control for sampling and modeling errors in the estimates. For more information on the annual benchmark revision, please visit <http://www.bls.gov/web/cesbmart.htm>.

#### **Does the establishment survey sample include small firms?**

Yes; about 40 percent of the establishment survey sample is comprised of business establishments with fewer than 20 employees. The establishment survey sample is designed to maximize the reliability of the total nonfarm employment estimate; firms from all size classes and industries are appropriately sampled to achieve that goal.

#### **Does the establishment survey account for employment from new businesses?**

Yes; monthly establishment survey estimates include an adjustment to account for the net employment change generated by business births and deaths. The adjustment comes from an econometric model that forecasts the monthly net jobs impact of business births and deaths based on the actual past

values of the net impact that can be observed with a lag from the Quarterly Census of Employment and Wages. The establishment survey uses modeling rather than sampling for this purpose because the survey is not immediately able to bring new businesses into the sample. There is an unavoidable lag between the birth of a new firm and its appearance on the sampling frame and availability for selection. BLS adds new businesses to the survey twice a year.

**Is the count of unemployed persons limited to just those people receiving unemployment insurance benefits?**

No; the estimate of unemployment is based on a monthly sample survey of households. All persons who are without jobs and are actively seeking and available to work are included among the unemployed. (People on temporary layoff are included even if they do not actively seek work.) There is no requirement or question relating to unemployment insurance benefits in the monthly survey.

**Does the official unemployment rate exclude people who have stopped looking for work?**

Yes; however, there are separate estimates of persons outside the labor force who want a job, including those who have stopped looking because they believe no jobs are available (discouraged workers). In addition, alternative measures of labor underutilization (discouraged workers and other groups not officially counted as unemployed) are published each month in the Employment Situation news release.

## Technical Note

This news release presents statistics from two major surveys, the Current Population Survey (household survey) and the Current Employment Statistics survey (establishment survey). The household survey provides the information on the labor force, employment, and unemployment that appears in the A tables, marked HOUSEHOLD DATA. It is a sample survey of about 60,000 households conducted by the U.S. Census Bureau for the Bureau of Labor Statistics (BLS).

The establishment survey provides the information on the employment, hours, and earnings of workers on nonfarm payrolls that appears in the B tables, marked ESTABLISHMENT DATA. This information is collected from payroll records by BLS in cooperation with state agencies. The sample includes about 160,000 businesses and government agencies covering approximately 400,000 individual work-sites. The active sample includes about one-third of all non-farm payroll workers. The sample is drawn from a sampling frame of unemployment insurance tax accounts.

For both surveys, the data for a given month relate to a particular week or pay period. In the household survey, the reference week is generally the calendar week that contains the 12th day of the month. In the establishment survey, the reference period is the pay period including the 12th, which may or may not correspond directly to the calendar week.

### Coverage, definitions, and differences between surveys

**Household survey.** The sample is selected to reflect the entire civilian noninstitutional population. Based on responses to a series of questions on work and job search activities, each person 16 years and over in a sample household is classified as employed, unemployed, or not in the labor force.

People are classified as employed if they did any work at all as paid employees during the reference week; worked in their own business, profession, or on their own farm; or worked without pay at least 15 hours in a family business or farm. People are also counted as employed if they were temporarily absent from their jobs because of illness, bad weather, vacation, labor-management disputes, or personal reasons.

People are classified as unemployed if they meet all of the following criteria: They had no employment during the reference week; they were available for work at that time; and they made specific efforts to find employment sometime during the 4-week period ending with the reference week. Persons laid off from a job and expecting recall need not be looking for work to be counted as unemployed. The unemployment data derived from the household survey in no way depend upon the eligibility for or receipt of unemployment insurance benefits.

*The civilian labor force* is the sum of employed and unemployed persons. Those not classified as employed or unemployed are *not in the labor force*. The *unemployment rate* is the number unemployed as a percent of the labor

force. The *labor force participation rate* is the labor force as a percent of the population, and the *employment-population ratio* is the employed as a percent of the population.

**Establishment survey.** The sample establishments are drawn from private nonfarm businesses such as factories, offices, and stores, as well as federal, state, and local government entities. *Employees on nonfarm payrolls* are those who received pay for any part of the reference pay period, including persons on paid leave. Persons are counted in each job they hold. *Hours and earnings* data are for private businesses and relate only to production workers in the goods-producing sector and nonsupervisory workers in the service-providing sector. Industries are classified on the basis of their principal activity in accordance with the 2007 version of the North American Industry Classification System.

**Differences in employment estimates.** The numerous conceptual and methodological differences between the household and establishment surveys result in important distinctions in the employment estimates derived from the surveys. Among these are:

- The household survey includes agricultural workers, the self-employed, unpaid family workers, and private household workers among the employed. These groups are excluded from the establishment survey.
- The household survey includes people on unpaid leave among the employed. The establishment survey does not.
- The household survey is limited to workers 16 years of age and older. The establishment survey is not limited by age.
- The household survey has no duplication of individuals, because individuals are counted only once, even if they hold more than one job. In the establishment survey, employees working at more than one job and thus appearing on more than one payroll would be counted separately for each appearance.

### Seasonal adjustment

Over the course of a year, the size of the nation's labor force and the levels of employment and unemployment undergo sharp fluctuations due to such seasonal events as changes in weather, reduced or expanded production, harvests, major holidays, and the opening and closing of schools. The effect of such seasonal variation can be very large; seasonal fluctuations may account for as much as 95 percent of the month-to-month changes in unemployment.

Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make nonseasonal developments, such as declines in economic activity or increases in the participation of women in the labor force, easier to spot. For example, the large number of youth entering the labor force each June is likely to obscure any other changes that have taken place relative to May, making it difficult to determine if the level of economic activity has risen or declined. However, because the effect of students finishing school in previous years is known, the statistics for the current year can be adjusted to allow for a comparable change. Insofar as the seasonal adjustment is made correctly, the adjusted figure provides a more useful tool with which to analyze changes in economic activity.

Most seasonally adjusted series are independently adjusted in both the household and establishment surveys. However, the adjusted series for many major estimates, such as total payroll employment, employment in most supersectors, total employment, and unemployment are computed by aggregating independently adjusted component series. For example, total unemployment is derived by summing the adjusted series for four major age-sex components; this differs from the unemployment estimate that would be obtained by directly adjusting the total or by combining the duration, reasons, or more detailed age categories.

For both the household and establishment surveys, a concurrent seasonal adjustment methodology is used in which new seasonal factors are calculated each month, using all relevant data, up to and including the data for the current month. In the household survey, new seasonal factors are used to adjust only the current month's data. In the establishment survey, however, new seasonal factors are used each month to adjust the three most recent monthly estimates. In both surveys, revisions to historical data are made once a year.

#### Reliability of the estimates

Statistics based on the household and establishment surveys are subject to both sampling and nonsampling error. When a sample rather than the entire population is surveyed, there is a chance that the sample estimates may differ from the "true" population values they represent. The exact difference, or *sampling error*, varies depending on the particular sample selected, and this variability is measured by the standard error of the estimate. There is about a 90-percent chance, or level of confidence, that an estimate based on a sample will differ by no more than 1.6 standard errors from the "true" population value because of sampling error. BLS analyses are generally conducted at the 90-percent level of confidence.

For example, the confidence interval for the monthly change in total employment from the household survey is on the order of plus or minus 430,000. Suppose the estimate of total employment increases by 100,000 from one month to the next. The 90-percent confidence interval on the monthly change would range from -330,000 to 530,000 (100,000 +/-

430,000). These figures do not mean that the sample results are off by these magnitudes, but rather that there is about a 90-percent chance that the "true" over-the-month change lies within this interval. Since this range includes values of less than zero, we could not say with confidence that employment had, in fact, increased. If, however, the reported employment rise was half a million, then all of the values within the 90-percent confidence interval would be greater than zero. In this case, it is likely (at least a 90-percent chance) that an employment rise had, in fact, occurred. At an unemployment rate of around 5.5 percent, the 90-percent confidence interval for the monthly change in unemployment is about +/-280,000, and for the monthly change in the unemployment rate it is about +/-0.19 percentage point.

In general, estimates involving many individuals or establishments have lower standard errors (relative to the size of the estimate) than estimates which are based on a small number of observations. The precision of estimates is also improved when the data are cumulated over time such as for quarterly and annual averages. The seasonal adjustment process can also improve the stability of the monthly estimates.

The household and establishment surveys are also affected by *nonsampling error*. Nonsampling errors can occur for many reasons, including the failure to sample a segment of the population, inability to obtain information for all respondents in the sample, inability or unwillingness of respondents to provide correct information on a timely basis, mistakes made by respondents, and errors made in the collection or processing of the data.

For example, in the establishment survey, estimates for the most recent 2 months are based on incomplete returns; for this reason, these estimates are labeled preliminary in the tables. It is only after two successive revisions to a monthly estimate, when nearly all sample reports have been received, that the estimate is considered final.

Another major source of nonsampling error in the establishment survey is the inability to capture, on a timely basis, employment generated by new firms. To correct for this systematic underestimation of employment growth, an estimation procedure with two components is used to account for business births. The first component uses business deaths to impute employment for business births. This is incorporated into the sample-based link relative estimate procedure by simply not reflecting sample units going out of business, but imputing to them the same trend as the other firms in the sample. The second component is an ARIMA time series model designed to estimate the residual net birth/death employment not accounted for by the imputation. The historical time series used to create and test the ARIMA model was derived from the unemployment insurance universe micro-level database, and reflects the actual residual net of births and deaths over the past 5 years.

The sample-based estimates from the establishment survey are adjusted once a year (on a lagged basis) to universe counts of payroll employment obtained from administrative records of the unemployment insurance program. The difference between the March sample-based employment estimates and the March universe counts is



known as a benchmark revision, and serves as a rough proxy for total survey error. The new benchmarks also incorporate changes in the classification of industries. Over the past decade, absolute benchmark revisions for total nonfarm employment have averaged 0.2 percent, with a range from 0.1 percent to 0.6 percent.

**Other information**

Information in this release will be made available to sensory impaired individuals upon request. Voice phone: (202) 691-5200; TDD message referral phone: 1-800-877-8339.

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Table A-1. Employment status of the civilian population by sex and age

(Numbers in thousands)

Employment status, sex, and age	Not seasonally adjusted			Seasonally adjusted <sup>1</sup>					
	Mar. 2008	Feb. 2009	Mar. 2009	Mar. 2008	Nov. 2008	Dec. 2008	Jan. 2009	Feb. 2009	Mar. 2009
<b>TOTAL</b>									
Civilian noninstitutional population .....	232,995	234,913	235,086	232,995	234,828	235,035	234,739	234,913	235,086
Civilian labor force .....	153,135	153,804	153,728	153,843	154,620	154,447	153,716	154,214	154,048
Participation rate .....	65.7	65.5	65.4	66.0	65.8	65.7	65.5	65.6	65.5
Employed .....	145,108	140,105	139,833	146,023	144,144	143,338	142,099	141,748	140,887
Employment-population ratio .....	62.3	59.6	59.5	62.7	61.4	61.0	59.5	60.3	59.9
Unemployed .....	8,027	13,699	13,895	7,820	10,476	11,108	11,616	12,467	13,161
Unemployment rate .....	5.2	8.9	9.0	5.1	6.8	7.2	7.6	8.1	8.5
Not in labor force .....	79,860	81,109	81,358	79,152	80,208	80,588	81,023	80,699	81,038
Persons who currently want a job .....	4,492	5,588	5,535	4,747	5,393	5,488	5,643	5,645	5,814
<b>Men, 16 years and over</b>									
Civilian noninstitutional population .....	112,695	113,666	113,758	112,695	113,660	113,769	113,573	113,666	113,758
Civilian labor force .....	81,849	81,959	81,839	82,235	82,696	82,338	81,963	81,994	81,804
Participation rate .....	72.6	72.1	71.9	73.0	72.7	72.4	72.1	72.1	71.9
Employed .....	77,199	73,441	73,195	77,985	76,577	75,847	75,092	74,777	74,053
Employment-population ratio .....	68.5	64.6	64.3	69.2	67.4	66.7	66.1	65.8	65.1
Unemployed .....	4,651	8,517	8,644	4,250	6,089	6,491	6,771	7,217	7,751
Unemployment rate .....	5.7	10.4	10.6	5.2	7.4	7.9	8.3	8.8	9.5
Not in labor force .....	30,846	31,707	31,919	30,460	30,994	31,431	31,710	31,672	31,854
<b>Men, 20 years and over</b>									
Civilian noninstitutional population .....	104,052	104,999	105,095	104,052	104,878	105,083	104,902	104,999	105,095
Civilian labor force .....	78,691	78,879	78,828	78,866	79,335	78,998	78,585	78,687	78,578
Participation rate .....	75.6	75.1	75.0	75.8	76.6	75.2	74.9	74.9	74.8
Employed .....	74,620	71,217	70,984	75,216	74,045	73,285	72,613	72,293	71,655
Employment-population ratio .....	71.7	67.8	67.5	72.3	70.5	69.7	69.2	68.9	68.2
Unemployed .....	4,071	7,662	7,842	3,650	5,290	5,714	5,972	6,394	6,923
Unemployment rate .....	5.2	9.7	9.9	4.6	6.7	7.2	7.6	8.1	8.8
Not in labor force .....	25,362	26,120	26,269	25,186	25,643	26,085	26,318	26,312	26,516
<b>Women, 16 years and over</b>									
Civilian noninstitutional population .....	120,300	121,247	121,328	120,300	121,168	121,266	121,166	121,247	121,328
Civilian labor force .....	71,286	71,846	71,899	71,608	71,954	72,109	71,853	72,220	72,244
Participation rate .....	59.3	59.3	59.3	59.5	59.4	59.5	59.3	59.6	59.5
Employed .....	67,911	66,664	66,638	68,038	67,567	67,491	67,007	66,970	66,834
Employment-population ratio .....	56.5	55.0	54.9	56.6	55.8	55.7	55.3	55.2	55.1
Unemployed .....	3,376	5,182	5,261	3,570	4,387	4,618	4,845	5,250	5,410
Unemployment rate .....	4.7	7.2	7.3	5.0	6.1	6.4	6.7	7.3	7.5
Not in labor force .....	49,014	49,401	49,438	48,692	49,214	49,157	49,313	49,027	49,084
<b>Women, 20 years and over</b>									
Civilian noninstitutional population .....	111,902	112,824	112,908	111,902	112,731	112,825	112,738	112,824	112,908
Civilian labor force .....	68,115	68,738	68,883	68,174	68,753	68,891	68,584	68,917	68,977
Participation rate .....	60.9	60.9	61.0	60.9	61.0	61.1	60.8	61.1	61.1
Employed .....	65,142	64,106	64,123	65,079	64,902	64,860	64,298	64,271	64,148
Employment-population ratio .....	58.2	56.8	56.8	58.2	57.6	57.5	57.0	57.0	56.8
Unemployed .....	2,974	4,632	4,760	3,095	3,851	4,031	4,286	4,546	4,829
Unemployment rate .....	4.4	6.7	6.9	4.5	5.6	5.9	6.2	6.7	7.0
Not in labor force .....	43,786	44,086	44,025	43,728	43,978	43,935	44,154	43,907	43,931
<b>Both sexes, 16 to 19 years</b>									
Civilian noninstitutional population .....	17,041	17,090	17,083	17,041	17,118	17,126	17,098	17,090	17,083
Civilian labor force .....	6,329	6,187	6,019	6,603	6,531	6,557	6,547	6,610	6,493
Participation rate .....	37.1	36.2	35.2	38.2	38.2	38.3	38.3	38.7	38.0
Employed .....	5,347	4,783	4,726	5,729	5,196	5,194	5,188	5,184	5,083
Employment-population ratio .....	31.4	28.0	27.7	33.6	30.4	30.3	30.3	30.3	29.8
Unemployed .....	982	1,405	1,293	1,075	1,335	1,363	1,359	1,427	1,410
Unemployment rate .....	15.5	22.7	21.5	15.8	20.4	20.8	20.8	21.6	21.7
Not in labor force .....	10,712	10,903	11,064	10,237	10,587	10,568	10,551	10,480	10,590

<sup>1</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns. NOTE: Updated population controls are introduced annually with the release of January data.

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Table A-2. Employment status of the civilian population by race, sex, and age

(Numbers in thousands)

Employment status, race, sex, and age	Not seasonally adjusted			Seasonally adjusted <sup>1</sup>					
	Mar. 2008	Feb. 2009	Mar. 2009	Mar. 2008	Nov. 2008	Dec. 2008	Jan. 2009	Feb. 2009	Mar. 2009
<b>WHITE</b>									
Civilian noninstitutional population	189,019	190,331	190,436	189,019	190,221	190,351	190,225	190,331	190,436
Civilian labor force	124,679	125,528	125,433	125,208	126,029	125,634	125,312	125,703	125,599
Participation rate	66.0	66.0	65.9	66.2	66.3	66.0	65.9	66.0	66.0
Employed	116,827	115,182	114,831	119,580	118,228	117,357	116,692	116,481	115,693
Employment-population ratio	62.9	60.5	60.3	63.3	62.2	61.7	61.3	61.2	60.8
Unemployed	5,853	10,346	10,602	5,628	7,803	8,277	8,621	9,222	9,906
Unemployment rate	4.7	8.2	8.5	4.5	6.2	6.6	6.9	7.3	7.9
Not in labor force	64,339	64,803	65,003	63,811	64,193	64,718	64,913	64,628	64,837
<b>Men, 20 years and over</b>									
Civilian labor force	65,292	65,342	65,363	65,326	65,762	65,331	65,126	65,180	65,032
Participation rate	76.1	75.6	75.5	76.2	76.1	75.5	75.4	75.4	75.2
Employed	62,214	59,471	59,307	62,635	61,761	61,101	60,683	60,361	59,811
Employment-population ratio	72.5	68.8	68.5	73.0	71.5	70.7	70.2	69.8	69.1
Unemployed	3,078	5,872	6,056	2,691	4,001	4,230	4,443	4,819	5,221
Unemployment rate	4.7	9.0	9.3	4.1	6.1	6.5	6.8	7.4	8.0
<b>Women, 20 years and over</b>									
Civilian labor force	54,201	54,995	54,997	54,303	54,810	54,878	54,786	54,967	55,115
Participation rate	60.1	60.6	60.5	60.2	60.4	60.5	60.4	60.5	60.7
Employed	52,093	51,585	51,462	52,101	52,014	51,846	51,601	51,624	51,519
Employment-population ratio	57.8	56.8	56.6	57.8	57.3	57.1	56.9	56.9	56.7
Unemployed	2,108	3,411	3,535	2,202	2,796	3,031	3,185	3,344	3,596
Unemployment rate	3.9	6.2	6.4	4.1	5.1	5.5	5.8	6.1	6.5
<b>Both sexes, 16 to 19 years</b>									
Civilian labor force	5,187	5,190	5,073	5,579	5,457	5,425	5,400	5,556	5,452
Participation rate	39.7	39.7	38.8	42.7	41.6	41.4	41.3	42.5	41.7
Employed	4,519	4,126	4,062	4,845	4,451	4,409	4,408	4,497	4,363
Employment-population ratio	34.6	31.5	31.1	37.1	34.0	33.6	33.7	34.4	33.4
Unemployed	667	1,064	1,010	734	1,006	1,016	993	1,059	1,089
Unemployment rate	12.9	20.5	19.9	13.2	18.4	18.7	18.4	19.1	20.0
<b>BLACK OR AFRICAN AMERICAN</b>									
Civilian noninstitutional population	27,709	28,085	28,118	27,709	28,021	28,059	28,052	28,085	28,118
Civilian labor force	17,601	17,534	17,428	17,686	17,708	17,796	17,791	17,703	17,542
Participation rate	63.5	62.4	62.0	63.8	63.2	63.4	63.4	63.0	62.4
Employed	16,010	15,108	15,074	16,090	15,703	15,674	15,546	15,336	15,212
Employment-population ratio	57.8	53.8	53.6	58.1	56.0	55.9	55.4	54.6	54.1
Unemployed	1,591	2,426	2,355	1,598	2,005	2,122	2,245	2,368	2,330
Unemployment rate	9.0	13.8	13.5	9.0	11.3	11.9	12.6	13.4	13.3
Not in labor force	10,109	10,551	10,689	10,022	10,313	10,263	10,261	10,382	10,576
<b>Men, 20 years and over</b>									
Civilian labor force	7,839	7,904	7,850	7,913	7,954	7,999	7,979	7,949	7,917
Participation rate	70.4	70.0	69.4	71.1	70.5	70.8	70.7	70.4	70.0
Employed	7,140	6,832	6,968	7,237	6,989	6,930	6,850	6,762	6,700
Employment-population ratio	64.1	59.7	59.0	65.0	62.0	61.4	60.7	59.9	59.2
Unemployed	698	1,273	1,284	676	965	1,069	1,129	1,187	1,218
Unemployment rate	8.9	16.1	16.4	8.5	12.1	13.4	14.1	14.9	15.4
<b>Women, 20 years and over</b>									
Civilian labor force	9,032	8,944	8,935	9,012	9,069	9,060	9,022	9,006	8,932
Participation rate	64.9	63.4	63.3	64.8	64.5	64.4	64.1	63.9	63.3
Employed	8,368	8,052	8,071	8,326	8,249	8,256	8,194	8,115	8,045
Employment-population ratio	60.2	57.1	57.2	59.8	58.7	58.7	58.2	57.6	57.0
Unemployed	664	891	864	686	820	804	828	890	887
Unemployment rate	7.3	10.0	9.7	7.6	9.0	8.9	9.2	9.9	9.9
<b>Both sexes, 16 to 19 years</b>									
Civilian labor force	730	696	644	762	685	736	790	749	692
Participation rate	27.4	25.5	23.9	28.6	25.5	27.4	29.4	27.8	25.7
Employed	501	424	437	527	464	488	502	459	467
Employment-population ratio	18.8	15.8	16.2	19.8	17.3	18.1	18.6	17.0	17.4
Unemployed	229	262	207	235	221	248	288	290	225
Unemployment rate	31.3	38.2	32.2	30.8	32.2	33.7	36.5	38.8	32.5

See footnotes at end of table.

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Table A-2. Employment status of the civilian population by race, sex, and age — Continued

(Numbers in thousands)

Employment status, race, sex, and age	Not seasonally adjusted			Seasonally adjusted <sup>1</sup>					
	Mar. 2008	Feb. 2009	Mar. 2009	Mar. 2008	Nov. 2008	Dec. 2008	Jan. 2009	Feb. 2009	Mar. 2009
<b>ASIAN</b>									
Civilian noninstitutional population .....	10,645	10,753	10,778	(2)	(2)	(2)	(2)	(2)	(2)
Civilian labor force .....	7,184	7,086	7,111	(2)	(2)	(2)	(2)	(2)	(2)
Participation rate .....	67.5	65.9	66.0	(2)	(2)	(2)	(2)	(2)	(2)
Employed .....	6,928	6,597	6,656	(2)	(2)	(2)	(2)	(2)	(2)
Employment-population ratio .....	65.1	61.4	61.8	(2)	(2)	(2)	(2)	(2)	(2)
Unemployed .....	256	489	455	(2)	(2)	(2)	(2)	(2)	(2)
Unemployment rate .....	3.6	6.9	6.4	(2)	(2)	(2)	(2)	(2)	(2)
Not in labor force .....	3,462	3,667	3,667	(2)	(2)	(2)	(2)	(2)	(2)

<sup>1</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.  
<sup>2</sup> Data not available.

NOTE: Estimates for the above race groups will not sum to totals shown in table A-1 because data are not presented for all races. Updated population controls are introduced annually with the release of January data.

Table A-3. Employment status of the Hispanic or Latino population by sex and age

(Numbers in thousands)

Employment status, sex, and age	Not seasonally adjusted			Seasonally adjusted <sup>1</sup>					
	Mar. 2008	Feb. 2009	Mar. 2009	Mar. 2008	Nov. 2008	Dec. 2008	Jan. 2009	Feb. 2009	Mar. 2009
<b>HISPANIC OR LATINO ETHNICITY</b>									
Civilian noninstitutional population .....	31,820	32,501	32,585	31,820	32,558	32,649	32,417	32,501	32,585
Civilian labor force .....	21,760	22,044	22,186	21,778	22,074	22,134	21,931	22,100	22,175
Participation rate .....	68.4	67.8	68.1	68.4	67.8	67.8	67.7	68.0	68.1
Employed .....	20,162	19,388	19,485	20,251	20,168	20,096	19,890	19,694	19,640
Employment-population ratio .....	63.4	59.7	59.8	63.6	61.9	61.6	61.1	60.6	60.3
Unemployed .....	1,588	2,657	2,703	1,527	1,906	2,038	2,132	2,416	2,536
Unemployment rate .....	7.3	12.1	12.2	7.0	8.6	9.2	9.7	10.9	11.4
Not in labor force .....	10,071	10,457	10,397	10,042	10,484	10,515	10,486	10,401	10,410
<b>Men, 20 years and over</b>									
Civilian labor force .....	12,554	12,557	12,648	(2)	(2)	(2)	(2)	(2)	(2)
Participation rate .....	84.7	83.1	83.4	(2)	(2)	(2)	(2)	(2)	(2)
Employed .....	11,655	11,027	11,110	(2)	(2)	(2)	(2)	(2)	(2)
Employment-population ratio .....	78.6	72.9	73.3	(2)	(2)	(2)	(2)	(2)	(2)
Unemployed .....	899	1,530	1,538	(2)	(2)	(2)	(2)	(2)	(2)
Unemployment rate .....	7.2	12.2	12.2	(2)	(2)	(2)	(2)	(2)	(2)
<b>Women, 20 years and over</b>									
Civilian labor force .....	8,100	8,438	8,567	(2)	(2)	(2)	(2)	(2)	(2)
Participation rate .....	57.9	59.0	59.8	(2)	(2)	(2)	(2)	(2)	(2)
Employed .....	7,606	7,578	7,645	(2)	(2)	(2)	(2)	(2)	(2)
Employment-population ratio .....	54.4	53.0	53.3	(2)	(2)	(2)	(2)	(2)	(2)
Unemployed .....	494	860	922	(2)	(2)	(2)	(2)	(2)	(2)
Unemployment rate .....	6.1	10.2	10.8	(2)	(2)	(2)	(2)	(2)	(2)
<b>Both sexes, 16 to 19 years</b>									
Civilian labor force .....	1,096	1,050	974	(2)	(2)	(2)	(2)	(2)	(2)
Participation rate .....	36.5	34.0	31.4	(2)	(2)	(2)	(2)	(2)	(2)
Employed .....	900	782	731	(2)	(2)	(2)	(2)	(2)	(2)
Employment-population ratio .....	30.0	25.3	23.6	(2)	(2)	(2)	(2)	(2)	(2)
Unemployed .....	195	267	243	(2)	(2)	(2)	(2)	(2)	(2)
Unemployment rate .....	17.8	25.5	24.9	(2)	(2)	(2)	(2)	(2)	(2)

<sup>1</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.  
<sup>2</sup> Data not available.

NOTE: Persons whose ethnicity is identified as Hispanic or Latino may be of any race. Updated population controls are introduced annually with the release of January data.

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Table A-4. Employment status of the civilian population 25 years and over by educational attainment

(Numbers in thousands)

Educational attainment	Not seasonally adjusted			Seasonally adjusted					
	Mar. 2008	Feb. 2009	Mar. 2009	Mar. 2008	Nov. 2008	Dec. 2008	Jan. 2009	Feb. 2009	Mar. 2009
<b>Less than a high school diploma</b>									
Civilian labor force .....	12,032	11,898	12,102	12,043	12,185	12,108	12,024	11,955	11,997
Participation rate .....	45.9	45.1	45.1	45.0	47.2	46.4	45.9	46.4	45.7
Employed .....	10,894	10,097	10,220	11,050	10,899	10,793	10,577	10,445	10,399
Employment-population ratio .....	41.6	39.2	38.9	42.2	42.2	41.4	40.4	40.5	39.6
Unemployed .....	1,138	1,801	1,882	993	1,286	1,315	1,446	1,510	1,598
Unemployment rate .....	9.5	15.1	15.5	8.2	10.6	10.9	12.0	12.6	13.3
<b>High school graduates, no college <sup>1</sup></b>									
Civilian labor force .....	38,148	38,497	38,516	38,021	38,271	38,656	38,675	38,463	38,434
Participation rate .....	62.7	62.3	62.4	62.4	62.3	62.5	62.4	62.2	62.3
Employed .....	36,027	34,791	34,661	36,099	35,643	35,683	35,599	35,270	34,981
Employment-population ratio .....	59.2	56.3	56.2	59.3	58.1	57.6	57.4	57.1	56.7
Unemployed .....	2,121	3,706	3,854	1,922	2,628	2,972	3,075	3,193	3,454
Unemployment rate .....	5.6	9.6	10.0	5.1	6.9	7.7	8.0	8.3	9.0
<b>Some college or associate degree</b>									
Civilian labor force .....	36,489	37,267	36,872	36,528	37,120	37,049	36,693	37,362	36,921
Participation rate .....	72.0	71.9	71.7	72.0	71.6	72.0	72.0	72.1	71.8
Employed .....	34,990	34,421	34,011	35,099	35,077	34,969	34,433	34,738	34,267
Employment-population ratio .....	69.0	66.4	66.1	69.2	67.7	68.0	67.6	67.1	66.6
Unemployed .....	1,498	2,846	2,861	1,428	2,043	2,080	2,260	2,624	2,653
Unemployment rate .....	4.1	7.6	7.8	3.9	5.5	5.6	6.2	7.0	7.2
<b>Bachelor's degree and higher <sup>2</sup></b>									
Civilian labor force .....	45,375	45,078	45,304	45,377	45,232	45,182	45,208	45,027	45,401
Participation rate .....	78.5	77.7	77.9	78.5	77.7	77.9	77.8	77.6	78.1
Employed .....	44,451	43,190	43,377	44,410	43,794	43,517	43,474	43,177	43,431
Employment-population ratio .....	76.9	74.5	74.6	76.8	75.3	75.0	74.8	74.4	74.7
Unemployed .....	923	1,888	1,927	967	1,438	1,665	1,735	1,850	1,970
Unemployment rate .....	2.0	4.2	4.3	2.1	3.2	3.7	3.8	4.1	4.3

<sup>1</sup> Includes persons with a high school diploma or equivalent.<sup>2</sup> Includes persons with bachelor's, master's, professional, and doctoral degrees.

NOTE: Updated population controls are introduced annually with the release of January data.

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Table A-5. Employed persons by class of worker and part-time status

(In thousands)

Category	Not seasonally adjusted			Seasonally adjusted					
	Mar. 2008	Feb. 2009	Mar. 2009	Mar. 2008	Nov. 2008	Dec. 2008	Jan. 2009	Feb. 2009	Mar. 2009
<b>CLASS OF WORKER</b>									
Agriculture and related industries .....	2,057	1,961	1,930	2,191	2,206	2,191	2,149	2,148	2,050
Wage and salary workers .....	1,218	1,126	1,061	1,326	1,267	1,264	1,233	1,244	1,167
Self-employed workers .....	816	817	847	848	915	925	903	875	875
Unpaid family workers .....	23	18	22	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Nonagricultural industries .....	143,051	138,144	137,903	143,821	141,901	141,047	139,952	139,579	138,842
Wage and salary workers .....	133,849	129,232	128,782	134,449	132,983	132,082	131,110	130,465	129,478
Government .....	21,484	21,158	21,072	21,245	21,431	21,395	21,237	21,192	20,904
Private industries .....	112,365	108,075	107,711	113,192	111,542	110,684	109,997	109,311	108,674
Private households .....	744	719	738	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Other industries .....	111,621	107,356	106,972	112,422	110,677	109,863	109,217	108,574	107,898
Self-employed workers .....	9,103	8,859	9,063	9,242	8,816	8,940	8,816	8,962	9,184
Unpaid family workers .....	99	53	57	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
<b>PERSONS AT WORK PART TIME <sup>2</sup></b>									
All industries:									
Part time for economic reasons .....	5,038	9,170	9,305	4,937	7,323	8,038	7,839	8,626	9,049
Slack work or business conditions .....	3,404	7,067	7,103	3,349	5,399	6,020	5,766	6,443	6,857
Could only find part-time work .....	1,382	1,827	1,958	1,364	1,585	1,617	1,667	1,764	1,839
Part time for noneconomic reasons .....	19,853	19,296	19,228	19,402	18,886	18,922	18,864	18,855	18,833
Nonagricultural industries:									
Part time for economic reasons .....	4,911	9,053	9,168	4,826	7,209	7,932	7,705	8,543	8,942
Slack work or business conditions .....	3,313	6,989	7,005	3,276	5,304	5,938	5,660	6,390	6,773
Could only find part-time work .....	1,370	1,822	1,957	1,354	1,579	1,619	1,658	1,760	1,850
Part time for noneconomic reasons .....	19,553	18,977	18,892	19,078	18,636	18,642	18,567	18,562	18,493

<sup>1</sup> Data not available.<sup>2</sup> Persons at work excludes employed persons who were absent from their jobs during the entire reference week for reasons such as vacation, illness, or industrial dispute. Part time for noneconomic reasons excludes persons who usually work full time but worked only 1 to 34 hours during the reference week for

reasons such as holidays, illness, and bad weather.

NOTE: Detail for the seasonally adjusted data shown in this table will not necessarily add to totals because of the independent seasonal adjustment of the various series. Updated population controls are introduced annually with the release of January data.

HOUSEHOLD DATA

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Table A-6. Selected employment indicators

(In thousands)

Characteristic	Not seasonally adjusted			Seasonally adjusted					
	Mar. 2008	Feb. 2009	Mar. 2009	Mar. 2008	Nov. 2008	Dec. 2008	Jan. 2009	Feb. 2009	Mar. 2009
<b>AGE AND SEX</b>									
Total, 16 years and over .....	145,108	140,105	139,833	145,023	144,144	143,338	142,099	141,748	140,887
16 to 19 years .....	5,347	4,783	4,728	5,729	5,196	5,194	5,188	5,184	5,083
16 to 17 years .....	1,904	1,667	1,569	2,118	1,791	1,779	1,741	1,854	1,755
18 to 19 years .....	3,443	3,116	3,157	3,585	3,408	3,413	3,441	3,348	3,300
20 years and over .....	139,762	135,323	135,107	140,294	138,948	138,144	136,911	136,564	135,804
20 to 24 years .....	13,399	12,823	12,838	13,665	13,443	13,374	13,050	13,157	13,090
25 years and over .....	126,363	122,500	122,269	126,503	125,422	124,748	123,911	123,302	122,662
25 to 54 years .....	99,686	95,530	95,268	99,894	98,373	97,651	96,653	96,255	95,720
25 to 34 years .....	31,388	30,003	29,842	31,523	31,070	30,864	30,449	30,369	30,211
35 to 44 years .....	33,731	31,844	31,654	33,776	32,883	32,691	32,308	31,999	31,746
45 to 54 years .....	34,567	33,683	33,672	34,595	34,420	34,097	33,936	33,888	33,763
55 years and over .....	26,677	26,970	27,000	26,610	27,049	27,096	27,218	27,047	26,942
Men, 16 years and over .....	77,198	73,441	73,195	77,985	76,577	75,847	75,092	74,777	74,053
16 to 19 years .....	2,578	2,224	2,211	2,769	2,531	2,562	2,479	2,484	2,398
16 to 17 years .....	854	716	709	970	800	847	818	837	803
18 to 19 years .....	1,714	1,508	1,502	1,794	1,728	1,712	1,654	1,640	1,579
20 years and over .....	74,620	71,217	70,984	75,216	74,045	73,285	72,613	72,293	71,655
20 to 24 years .....	7,099	6,565	6,478	7,265	6,965	6,863	6,723	6,784	6,656
25 years and over .....	67,521	64,652	64,506	67,956	67,039	66,456	65,879	65,479	65,031
25 to 54 years .....	53,455	50,461	50,369	53,802	52,740	52,128	51,480	51,125	50,885
25 to 34 years .....	17,051	16,111	16,010	17,211	16,979	16,789	16,461	16,449	16,286
35 to 44 years .....	19,245	16,989	16,909	18,352	17,816	17,663	17,452	17,144	17,027
45 to 54 years .....	18,159	17,360	17,450	18,239	17,944	17,676	17,567	17,532	17,550
55 years and over .....	14,066	14,191	14,137	14,094	14,299	14,328	14,399	14,354	14,166
Women, 16 years and over .....	67,911	66,664	66,638	68,038	67,567	67,491	67,007	66,870	66,834
16 to 19 years .....	2,769	2,559	2,515	2,959	2,665	2,632	2,709	2,699	2,685
16 to 17 years .....	1,039	951	860	1,146	990	932	923	1,017	952
18 to 19 years .....	1,729	1,607	1,655	1,801	1,680	1,701	1,787	1,708	1,721
20 years and over .....	65,142	64,106	64,123	65,079	64,902	64,860	64,298	64,271	64,148
20 to 24 years .....	6,300	6,259	6,360	6,400	6,478	6,510	6,327	6,372	6,434
25 years and over .....	58,842	57,848	57,763	58,679	58,383	58,292	58,032	57,823	57,631
25 to 34 years .....	16,331	15,069	14,899	16,091	15,634	15,523	15,213	15,131	14,855
35 to 44 years .....	14,337	13,892	13,932	14,312	14,091	14,075	13,988	13,920	13,922
45 to 54 years .....	15,486	14,854	14,745	15,423	15,067	15,027	14,856	14,855	14,719
55 years and over .....	16,409	16,322	16,223	16,356	16,476	16,421	16,369	16,356	16,214
MARITAL STATUS									
Married men, spouse present .....	45,916	44,248	44,356	45,975	45,610	45,182	44,712	44,502	44,470
Married women, spouse present .....	35,864	35,550	35,507	35,825	35,649	35,532	35,375	35,563	35,481
Women who maintain families .....	8,053	8,705	8,749	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
FULL- OR PART-TIME STATUS									
Full-time workers <sup>2</sup> .....	119,875	112,947	112,215	121,241	118,413	118,965	115,794	114,653	113,665
Part-time workers <sup>3</sup> .....	25,233	27,158	27,617	24,755	25,777	26,250	26,200	26,590	28,663
MULTIPLE JOBHOLDERS									
Total multiple jobholders .....	7,499	7,678	7,723	7,478	7,410	7,352	7,441	7,626	7,656
Percent of total employed .....	5.2	5.5	5.5	5.1	5.1	5.1	5.2	5.4	5.4

<sup>1</sup> Data not available.

<sup>2</sup> Employed full-time workers are persons who usually work 35 hours or more per week.

<sup>3</sup> Employed part-time workers are persons who usually work less than 35 hours per week.

NOTE: Detail for the seasonally adjusted data shown in this table will not necessarily add to totals because of the independent seasonal adjustment of the various series. Updated population controls are introduced annually with the release of January data.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-7. Selected unemployment indicators, seasonally adjusted

Characteristic	Number of unemployed persons (in thousands)			Unemployment rates <sup>1</sup>					
	Mar. 2008	Feb. 2009	Mar. 2009	Mar. 2008	Nov. 2008	Dec. 2008	Jan. 2009	Feb. 2009	Mar. 2009
<b>AGE AND SEX</b>									
Total, 16 years and over .....	7,820	12,467	13,161	5.1	6.8	7.2	7.6	8.1	8.5
16 to 19 years .....	1,075	1,427	1,410	15.8	20.4	20.8	20.8	21.6	21.7
16 to 17 years .....	487	552	544	18.7	24.1	24.1	21.4	22.9	23.7
18 to 19 years .....	592	868	870	14.2	18.3	19.1	20.2	21.0	20.9
20 years and over .....	6,745	11,040	11,751	4.6	6.2	6.6	7.0	7.5	8.0
20 to 24 years .....	1,416	1,943	2,128	9.4	11.1	12.1	12.1	12.9	14.0
25 years and over .....	5,314	9,076	9,572	4.0	5.6	6.0	6.4	6.9	7.2
25 to 54 years .....	4,359	7,486	7,832	4.2	5.8	6.3	6.7	7.2	7.6
25 to 34 years .....	1,770	2,883	2,984	5.3	7.0	7.5	7.9	8.7	9.0
35 to 44 years .....	1,337	2,346	2,447	3.8	5.4	5.8	6.5	6.8	7.2
45 to 54 years .....	1,252	2,237	2,401	3.5	5.1	5.5	5.9	6.2	6.6
55 years and over .....	943	1,603	1,784	3.4	4.8	4.9	5.2	5.6	6.2
Men, 16 years and over .....	4,250	7,217	7,751	5.2	7.4	7.9	8.3	8.8	9.5
16 to 19 years .....	600	823	828	17.8	24.0	23.3	24.4	24.9	25.7
16 to 17 years .....	280	301	315	22.4	28.8	27.0	26.5	26.5	28.2
18 to 19 years .....	321	537	514	15.2	21.2	21.5	22.8	24.7	24.6
20 years and over .....	3,650	6,394	6,923	4.6	6.7	7.2	7.6	8.1	8.8
20 to 24 years .....	834	1,160	1,335	10.3	12.9	14.2	14.1	14.5	16.7
25 years and over .....	2,822	5,275	5,586	4.0	5.9	6.4	6.9	7.5	7.9
25 to 54 years .....	2,338	4,356	4,607	4.2	6.1	6.7	7.3	7.9	8.3
25 to 34 years .....	976	1,720	1,833	5.4	7.5	8.3	8.8	9.5	10.1
35 to 44 years .....	702	1,323	1,426	3.7	5.4	5.9	6.6	7.2	7.7
45 to 54 years .....	660	1,313	1,348	3.5	5.6	6.1	6.7	7.0	7.4
55 years and over .....	484	919	959	3.3	5.1	5.1	5.3	6.0	6.3
Women, 16 years and over .....	3,570	5,250	5,410	5.0	6.1	6.4	6.7	7.3	7.5
16 to 19 years .....	475	604	582	13.8	18.7	18.2	17.1	18.3	17.8
16 to 17 years .....	207	250	229	15.3	19.7	21.2	19.2	19.8	19.4
18 to 19 years .....	271	351	357	13.1	15.1	16.6	17.5	17.0	17.2
20 years and over .....	3,095	4,646	4,828	4.5	5.6	5.9	6.2	6.7	7.0
20 to 24 years .....	582	783	793	8.3	9.2	9.8	10.0	10.9	11.0
25 years and over .....	2,492	3,801	4,006	4.1	5.2	5.4	5.8	6.2	6.5
25 to 54 years .....	2,020	3,110	3,225	4.2	5.4	5.7	6.0	6.4	6.7
25 to 34 years .....	794	1,163	1,151	5.3	6.4	6.6	6.8	7.7	7.6
35 to 44 years .....	635	1,023	1,021	4.0	5.4	5.8	6.4	6.4	6.5
45 to 54 years .....	592	924	1,054	3.5	4.6	4.9	5.0	5.3	6.1
55 years and over .....	438	717	789	3.4	4.3	4.3	5.4	5.3	5.8
<b>MARITAL STATUS</b>									
Married men, spouse present .....	1,338	2,574	2,718	2.8	4.2	4.4	5.0	5.5	5.8
Married women, spouse present .....	1,247	1,918	2,022	3.4	4.3	4.5	4.7	5.1	5.4
Women who maintain families <sup>2</sup> .....	894	1,003	1,058	7.1	9.3	9.5	10.3	10.3	10.8
<b>FULL- OR PART-TIME STATUS</b>									
Full-time workers <sup>3</sup> .....	6,417	10,839	11,535	5.0	7.0	7.5	8.0	8.6	9.2
Part-time workers <sup>4</sup> .....	1,380	1,635	1,676	5.3	5.8	5.9	5.9	5.8	5.9

<sup>1</sup> Unemployment as a percent of the civilian labor force.

<sup>2</sup> Not seasonally adjusted.

<sup>3</sup> Full-time workers are unemployed persons who have expressed a desire to work full time (35 hours or more per week) or are on layoff from full-time jobs.

<sup>4</sup> Part-time workers are unemployed persons who have expressed a desire to work part time (less than 35 hours per week) or are on layoff from part-time jobs.

NOTE: Detail for the seasonally adjusted data shown in this table will not necessarily add to totals because of the independent seasonal adjustment of the various series. Updated population controls are introduced annually with the release of January data.



## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-8. Unemployed persons by reason for unemployment

(Numbers in thousands)

Reason	Not seasonally adjusted			Seasonally adjusted					
	Mar. 2008	Feb. 2009	Mar. 2009	Mar. 2008	Nov. 2008	Dec. 2008	Jan. 2009	Feb. 2009	Mar. 2009
<b>NUMBER OF UNEMPLOYED</b>									
Job losers and persons who completed temporary jobs	4,555	9,098	9,315	4,161	6,156	6,471	6,980	7,696	8,243
On temporary layoff	1,341	2,052	1,990	1,084	1,413	1,524	1,441	1,488	1,557
Not on temporary layoff	3,214	7,047	7,325	3,077	4,744	4,946	5,539	6,208	6,686
Permanent job losers	2,276	5,466	5,880	(1)	(1)	(1)	(1)	(1)	(1)
Persons who completed temporary jobs	938	1,581	1,445	(1)	(1)	(1)	(1)	(1)	(1)
Job leavers	768	841	850	792	940	1,007	917	820	887
Reentrants	2,103	2,929	2,984	2,128	2,855	2,777	2,751	2,834	2,974
New entrants	601	830	747	695	760	828	780	1,005	968
<b>PERCENT DISTRIBUTION</b>									
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers and persons who completed temporary jobs	58.7	66.4	67.0	53.5	58.6	58.4	61.1	62.3	63.5
On temporary layoff	16.7	15.0	14.3	13.7	13.4	13.8	12.6	12.0	12.0
Not on temporary layoff	40.0	51.4	52.7	39.8	45.1	44.6	48.5	50.2	51.5
Job leavers	9.6	6.1	6.1	10.2	8.9	9.1	8.0	6.6	6.8
Reentrants	26.2	21.4	21.5	27.3	25.3	25.1	24.1	22.9	22.9
New entrants	7.5	6.1	5.4	8.9	7.2	7.5	6.8	8.1	6.7
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>									
Job losers and persons who completed temporary jobs	3.0	5.9	6.1	2.7	4.0	4.2	4.5	5.0	5.4
Job leavers	.5	.5	.6	.5	.6	.7	.6	.5	.6
Reentrants	1.4	1.9	1.9	1.4	1.7	1.8	1.8	1.8	1.9
New entrants	.4	.5	.5	.5	.5	.5	.5	.7	.8

<sup>1</sup> Data not available.

NOTE: Updated population controls are introduced annually with the release of January data.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-9. Unemployed persons by duration of unemployment

(Numbers in thousands)

Duration	Not seasonally adjusted			Seasonally adjusted					
	Mar. 2008	Feb. 2009	Mar. 2009	Mar. 2008	Nov. 2008	Dec. 2008	Jan. 2009	Feb. 2009	Mar. 2009
<b>NUMBER OF UNEMPLOYED</b>									
Less than 5 weeks .....	2,550	3,247	3,067	2,797	3,255	3,287	3,858	3,404	3,371
5 to 14 weeks .....	2,782	4,778	4,523	2,549	3,141	3,398	3,819	3,969	4,041
15 weeks and over .....	2,696	5,673	6,305	2,444	3,964	4,517	4,634	5,264	5,715
15 to 26 weeks .....	1,339	2,611	2,971	1,143	1,757	1,927	1,987	2,347	2,534
27 weeks and over .....	1,357	3,063	3,334	1,300	2,207	2,591	2,647	2,917	3,182
Average (mean) duration, in weeks .....	16.9	19.9	21.2	16.1	18.9	19.7	19.8	19.8	20.1
Median duration, in weeks .....	9.4	11.7	13.1	8.2	10.0	10.6	10.3	11.0	11.2
<b>PERCENT DISTRIBUTION</b>									
Total unemployed .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks .....	31.8	23.7	22.1	35.9	31.4	29.2	31.0	26.9	25.7
5 to 14 weeks .....	34.7	34.9	32.5	32.7	30.3	30.4	29.8	31.4	30.8
15 weeks and over .....	33.6	41.4	45.4	31.4	38.3	40.4	39.2	41.7	43.5
15 to 26 weeks .....	16.7	19.1	21.4	14.7	17.0	17.2	16.8	18.6	19.3
27 weeks and over .....	16.9	22.4	24.0	16.7	21.3	23.2	22.4	23.1	24.2

NOTE: Updated population controls are introduced annually with the release of January data.

Table A-10. Employed and unemployed persons by occupation, not seasonally adjusted

(Numbers in thousands)

Occupation	Employed		Unemployed		Unemployment rates	
	Mar. 2008	Mar. 2009	Mar. 2008	Mar. 2009	Mar. 2008	Mar. 2009
Total, 16 years and over <sup>1</sup> .....	145,108	139,833	8,027	13,895	5.2	9.0
Management, professional, and related occupations .....	52,681	52,345	1,121	2,292	2.1	4.2
Management, business, and financial operations occupations .....	21,810	21,813	485	1,038	2.2	4.5
Professional and related occupations .....	30,871	30,533	636	1,254	2.0	3.9
Service occupations .....	23,672	24,074	1,803	2,495	6.3	9.4
Sales and office occupations .....	36,014	33,967	1,759	3,020	4.7	8.2
Sales and related occupations .....	16,352	15,531	825	1,511	4.8	8.9
Office and administrative support occupations .....	19,662	18,436	935	1,509	4.5	7.6
Natural resources, construction, and maintenance occupations .....	14,473	13,223	1,581	2,727	9.8	17.1
Farming, fishing, and forestry occupations .....	965	803	160	216	14.2	21.2
Construction and extraction occupations .....	8,473	7,196	1,232	2,067	12.7	22.3
Installation, maintenance, and repair occupations .....	5,035	5,224	190	445	3.6	7.8
Production, transportation, and material moving occupations .....	18,268	16,223	1,337	2,585	6.8	13.7
Production occupations .....	9,327	7,647	659	1,343	6.6	14.9
Transportation and material moving occupations .....	8,940	8,575	678	1,242	7.1	12.7

<sup>1</sup> Persons with no previous work experience and persons whose last job was in the Armed Forces are included in the unemployed total.

NOTE: Updated population controls are introduced annually with the release of January data.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-11. Unemployed persons by industry and class of worker, not seasonally adjusted

Industry and class of worker	Number of unemployed persons (in thousands)		Unemployment rates	
	Mar. 2008	Mar. 2009	Mar. 2008	Mar. 2009
	Total, 16 years and over <sup>1</sup>	8,027	13,895	5.2
Nonagricultural private wage and salary workers	6,480	11,685	5.5	9.8
Mining, quarrying, and oil and gas extraction	28	105	3.7	12.6
Construction	1,170	1,979	12.0	21.1
Manufacturing	931	1,912	5.0	12.2
Durable goods	507	1,307	4.8	13.1
Nondurable goods	324	605	5.4	10.6
Wholesale and retail trade	992	1,852	4.9	9.0
Transportation and utilities	267	558	4.3	9.0
Information	155	252	4.8	7.8
Financial activities	323	639	3.4	6.8
Professional and business services	876	1,597	6.2	11.4
Education and health services	609	931	3.1	4.5
Leisure and hospitality	944	1,484	7.6	11.6
Other services	283	377	4.6	6.0
Agriculture and related private wage and salary workers	175	241	13.2	19.0
Government workers	425	598	1.9	2.8
Self employed and unpaid family workers	346	625	3.3	5.9

<sup>1</sup> Persons with no previous work experience are included in the unemployed total.  
 NOTE: Updated population controls are introduced annually with the release of January data. Effective with January 2009 data, industries reflect the introduction of the 2007 Census industry classification system into the Current Population Survey. This industry classification system is derived from the 2007 North American Industry Classification System. No historical data have been revised.

Table A-12. Alternative measures of labor underutilization

(Percent)

Measure	Not seasonally adjusted			Seasonally adjusted					
	Mar. 2008	Feb. 2009	Mar. 2009	Mar. 2008	Nov. 2008	Dec. 2008	Jan. 2009	Feb. 2009	Mar. 2009
	U-1 Persons unemployed 15 weeks or longer, as a percent of the civilian labor force	1.8	3.7	4.1	1.6	2.6	2.9	3.0	3.4
U-2 Job losers and persons who completed temporary jobs, as a percent of the civilian labor force	3.0	5.9	6.1	2.7	4.0	4.2	4.5	5.0	5.4
U-3 Total unemployed, as a percent of the civilian labor force (official unemployment rate)	5.2	8.9	9.0	5.1	6.8	7.2	7.6	8.1	8.5
U-4 Total unemployed plus discouraged workers, as a percent of the civilian labor force plus discouraged workers	5.5	9.3	9.4	5.3	7.1	7.6	8.0	8.5	8.9
U-5 Total unemployed, plus discouraged workers, plus all other marginally attached workers, as a percent of the civilian labor force plus all marginally attached workers	6.1	10.1	10.3	5.9	7.9	8.3	8.8	9.3	9.8
U-6 Total unemployed, plus all marginally attached workers, plus total employed part time for economic reasons, as a percent of the civilian labor force plus all marginally attached workers	9.3	16.0	16.2	9.1	12.6	13.5	13.9	14.8	15.6

NOTE: Marginally attached workers are persons who currently are neither working nor looking for work but indicate that they want and are available for a job and have looked for work sometime in the recent past. Discouraged workers, a subset of the marginally attached, have given a job-market related reason for not looking currently for a job. Persons employed part time for economic reasons are those who want and are available for full-time work but have had to settle for a part-time schedule. For more information, see "BLS introduces new range of alternative unemployment measures," in the October 1995 issue of the Monthly Labor Review. Updated population controls are introduced annually with the release of January data.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-13. Persons not in the labor force and multiple jobholders by sex, not seasonally adjusted

(Numbers in thousands)

Category	Total		Men		Women	
	Mar. 2008	Mar. 2009	Mar. 2008	Mar. 2009	Mar. 2008	Mar. 2009
<b>NOT IN THE LABOR FORCE</b>						
Total not in the labor force .....	79,860	81,358	30,846	31,919	49,014	49,438
Persons who currently want a job .....	4,492	5,535	2,051	2,674	2,442	2,861
Marginally attached to the labor force <sup>1</sup> .....	1,352	2,106	722	1,136	631	970
Reason not currently looking:						
Discouragement over job prospects <sup>2</sup> .....	401	685	245	433	156	252
Reasons other than discouragement <sup>3</sup> .....	951	1,421	477	703	474	717
<b>MULTIPLE JOBHOLDERS</b>						
Total multiple jobholders <sup>4</sup> .....	7,499	7,723	3,691	3,732	3,808	3,991
Percent of total employed .....	5.2	5.5	4.8	5.1	5.6	6.0
Primary job full time, secondary job part time .....	4,198	4,204	2,276	2,234	1,922	1,970
Primary and secondary jobs both part time .....	1,693	1,949	481	604	1,212	1,345
Primary and secondary jobs both full time .....	281	242	197	158	83	84
Hours vary on primary or secondary job .....	1,288	1,277	724	698	564	579

<sup>1</sup> Data refer to persons who have searched for work during the prior 12 months and were available to take a job during the reference week.

<sup>2</sup> Includes those who think no work available, could not find work, lacks schooling or training, employer thinks too young or old, and other types of discrimination.

<sup>3</sup> Includes those who did not actively look for work in the prior 4 weeks for such reasons as school or family responsibilities, ill health, and transportation problems, as

well as a small number for which reason for nonparticipation was not determined.

<sup>4</sup> Includes persons who work part time on their primary job and full time on their secondary job(s), not shown separately.

NOTE: Updated population controls are introduced annually with the release of January data.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-1. Employees on nonfarm payrolls by industry sector and selected industry detail

(In thousands)

Industry	Not seasonally adjusted				Seasonally adjusted							Change from Feb. 2009-Mar. 2009 <sup>P</sup>
	Mar. 2008	Jan. 2009	Feb. 2009 <sup>P</sup>	Mar. 2009 <sup>P</sup>	Mar. 2008	Nov. 2008	Dec. 2008	Jan. 2009	Feb. 2009 <sup>P</sup>	Mar. 2009 <sup>P</sup>		
Total nonfarm .....	136,944	132,302	132,130	132,072	137,814	135,755	135,074	134,333	133,682	133,019	-663	
Total private .....	114,104	109,855	109,286	109,147	115,373	113,212	112,542	111,793	111,139	110,481	-658	
Goods-producing .....	21,347	19,580	19,250	19,059	21,800	20,614	20,532	20,127	19,842	19,537	-305	
Mining and logging .....	741	766	754	736	756	793	789	781	772	754	-18	
Logging .....	55.0	54.5	54.3	49.0	57.8	56.6	55.7	55.2	54.7	51.7	-3.0	
Mining .....	685.9	711.4	699.5	686.6	697.7	736.6	733.3	725.3	717.3	702.2	-15.1	
Oil and gas extraction .....	155.1	168.3	166.6	165.7	166.2	167.4	169.4	167.7	167.9	167.6	-0.3	
Mining, except oil and gas <sup>1</sup> .....	215.1	216.4	212.9	215.1	223.6	230.7	229.2	227.9	226.1	224.8	-1.3	
Coal mining .....	77.6	84.5	83.8	84.1	77.9	84.3	84.5	84.9	84.6	84.6	0	
Support activities for mining .....	315.7	326.7	320.0	305.8	317.9	338.7	334.7	329.7	323.3	308.8	-13.5	
Construction .....	7,047	6,295	6,152	6,113	7,401	6,939	6,841	6,706	6,599	6,473	-126	
Construction of buildings .....	1,650.7	1,475.9	1,439.1	1,412.2	1,712.6	1,588.4	1,572.9	1,536.9	1,509.7	1,476.3	-33.4	
Residential building .....	832.9	718.8	698.7	685.5	868.2	781.7	769.4	755.2	740.6	722.6	-18.0	
Nonresidential building .....	817.8	757.1	740.4	726.7	844.4	806.7	803.5	781.7	769.1	753.7	-15.4	
Heavy and civil engineering construction .....	909.3	822.6	816.2	827.2	893.8	942.5	933.2	926.6	920.5	910.1	-10.4	
Specialty trade contractors .....	4,486.9	3,996.7	3,996.4	3,873.1	4,694.5	4,408.5	4,335.2	4,242.2	4,168.8	4,086.2	-82.6	
Residential specialty trade contractors .....	1,995.3	1,725.2	1,683.1	1,671.2	2,096.9	1,921.6	1,893.6	1,836.3	1,800.2	1,759.5	-40.7	
Nonresidential specialty trade contractors .....	2,491.6	2,271.5	2,213.3	2,201.9	2,597.6	2,486.9	2,451.6	2,403.9	2,368.6	2,326.7	-41.9	
Manufacturing .....	13,559	12,519	12,344	12,210	13,643	13,082	12,902	12,640	12,471	12,310	-161	
Production workers .....	9,782	8,849	8,701	8,571	9,853	9,322	9,174	8,946	8,800	8,654	-146	
Durable goods .....	8,599	7,812	7,686	7,583	8,637	8,216	8,085	7,881	7,753	7,628	-125	
Production workers .....	6,114	5,407	5,301	5,198	6,146	5,741	5,633	5,458	5,348	5,233	-115	
Wood products .....	470.6	393.4	373.5	379.5	479.8	429.8	416.2	403.9	389.4	389.2	-2	
Nonmetallic mineral products .....	487.8	416.2	406.6	402.7	479.4	450.1	441.2	434.3	424.5	415.2	-9.3	
Primary metals .....	450.7	410.2	393.7	386.2	450.9	429.8	419.6	409.3	395.5	387.0	-6.5	
Fabricated metal products .....	1,550.7	1,418.5	1,391.0	1,364.2	1,557.5	1,486.3	1,461.5	1,425.3	1,398.5	1,370.6	-27.7	
Machinery .....	1,192.8	1,123.8	1,097.1	1,071.3	1,193.8	1,162.7	1,150.2	1,126.0	1,100.6	1,073.6	-27.0	
Computer and electronic products <sup>1</sup> .....	1,253.5	1,211.8	1,193.7	1,168.0	1,257.9	1,233.3	1,223.7	1,212.9	1,198.6	1,193.3	-5.3	
Computer and peripheral equipment .....	183.3	179.9	174.9	174.3	183.8	181.8	180.0	180.3	176.6	175.1	-1.5	
Communications equipment .....	127.7	130.8	130.0	129.7	128.3	129.5	129.1	129.6	129.4	130.0	.6	
Semiconductors and electronic components .....	437.3	409.3	401.2	398.1	439.2	423.2	417.4	410.5	403.8	400.6	-3.2	
Electronic instruments .....	442.7	433.3	430.5	429.6	443.6	438.8	437.5	433.8	431.6	430.8	-.8	
Electrical equipment and appliances .....	425.7	408.4	399.9	389.4	427.4	417.5	412.0	406.1	400.3	391.3	-9.0	
Transportation equipment .....	1,655.5	1,398.9	1,419.3	1,389.4	1,653.8	1,532.5	1,501.8	1,423.5	1,424.2	1,398.3	-25.9	
Motor vehicles and parts <sup>2</sup> .....	922.1	658.3	716.5	704.1	918.3	809.6	781.5	711.2	718.1	700.8	-17.5	
Furniture and related products .....	498.9	424.0	412.0	404.3	501.4	449.6	440.6	428.6	416.6	406.4	-10.2	
Miscellaneous manufacturing .....	633.0	607.3	600.2	598.1	635.2	624.2	618.4	611.0	604.5	602.4	-2.1	
Nondurable goods .....	4,960	4,707	4,658	4,627	5,006	4,866	4,817	4,759	4,719	4,682	-36	
Production workers .....	3,668	3,442	3,400	3,373	3,707	3,581	3,541	3,488	3,452	3,421	-31	
Food manufacturing .....	1,458.6	1,447.5	1,438.6	1,435.7	1,485.7	1,489.0	1,477.6	1,470.7	1,467.0	1,464.2	-2.8	
Beverages and tobacco products .....	193.0	189.3	185.4	186.7	198.9	196.4	195.8	194.2	191.5	192.8	1.3	
Textile mills .....	158.7	133.7	129.0	127.5	158.5	140.6	136.8	133.6	130.2	128.2	-2.0	
Textile product mills .....	151.4	137.5	133.3	128.7	151.0	143.5	141.2	137.4	134.3	129.4	-4.9	
Apparel .....	202.9	178.3	174.4	173.0	203.8	187.1	183.5	178.9	177.2	174.8	-2.4	
Leather and allied products .....	33.3	32.4	31.3	31.4	33.2	32.6	32.6	32.4	31.8	31.6	-.2	
Paper and paper products .....	447.4	426.4	418.6	414.8	449.9	437.1	433.4	427.3	422.0	418.6	-3.4	
Printing and related support activities .....	605.9	555.6	546.1	540.1	607.4	574.1	567.0	558.1	550.0	542.1	-7.9	
Petroleum and coal products .....	113.5	109.9	110.5	111.3	116.3	117.2	116.9	114.2	114.6	114.4	-.2	
Chemicals .....	852.3	828.8	827.0	823.4	854.0	842.6	837.1	832.7	829.7	825.8	-3.9	
Plastics and rubber products .....	742.9	672.8	664.1	654.3	747.3	705.9	694.9	679.7	669.5	659.7	-9.8	

See footnotes at the end of table.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-1. Employees on nonfarm payrolls by industry sector and selected industry detail—Continued

(In thousands)

Industry	Not seasonally adjusted				Seasonally adjusted							Change from Feb. 2009 <sup>P</sup> to Mar. 2009 <sup>P</sup>
	Mar. 2008	Jan. 2009	Feb. 2009 <sup>P</sup>	Mar. 2009 <sup>P</sup>	Mar. 2008	Nov. 2008	Dec. 2008	Jan. 2009	Feb. 2009 <sup>P</sup>	Mar. 2009 <sup>P</sup>		
Service-providing .....	115,597	112,722	112,880	113,013	116,014	114,841	114,542	114,206	113,840	113,482	-358	
Private service-providing .....	92,757	90,275	90,036	90,088	93,573	92,398	92,010	91,666	91,297	90,944	-353	
Trade, transportation, and utilities .....	26,330	25,534	25,212	25,199	26,629	26,005	25,843	25,735	25,614	25,502	-112	
Wholesale trade .....	5,980.8	5,771.5	5,724.4	5,712.2	6,012.5	5,890.3	5,850.7	5,819.3	5,778.9	5,747.7	-31.2	
Durable goods .....	3,086.7	2,944.5	2,906.8	2,888.7	3,099.8	3,004.9	2,978.6	2,959.6	2,928.3	2,901.9	-26.4	
Nondurable goods .....	2,048.1	1,984.9	1,981.1	1,987.6	2,063.0	2,033.6	2,025.1	2,013.9	2,009.2	2,006.0	-3.2	
Electronic markets and agents and brokers .....	846.0	842.1	836.5	835.9	849.7	851.8	847.0	845.8	841.4	839.8	-1.6	
Retail trade .....	15,278.9	14,878.5	14,649.1	14,669.5	15,508.0	15,126.0	15,037.9	14,991.5	14,940.7	14,892.9	-47.8	
Motor vehicle and parts dealers <sup>1</sup> .....	1,874.6	1,694.9	1,689.1	1,683.7	1,890.9	1,770.5	1,745.6	1,730.1	1,716.4	1,700.3	-16.1	
Automobile dealers .....	1,219.6	1,070.8	1,066.8	1,059.7	1,227.6	1,121.2	1,099.9	1,088.6	1,078.8	1,068.9	-11.9	
Furniture and home furnishings stores .....	542.3	511.2	493.5	489.7	550.4	522.6	514.2	508.3	500.0	497.7	-2.3	
Electronics and appliance stores .....	549.4	536.5	533.6	521.6	552.9	541.5	538.6	535.5	536.4	526.2	-10.2	
Building material and garden supply stores .....	1,241.6	1,161.0	1,156.4	1,163.6	1,264.9	1,235.8	1,227.8	1,214.9	1,206.4	1,193.0	-13.4	
Food and beverage stores .....	2,849.1	2,822.7	2,801.7	2,801.7	2,874.7	2,843.5	2,835.1	2,835.3	2,827.1	2,826.7	-.4	
Health and personal care stores .....	1,003.2	986.0	980.1	979.6	1,007.7	989.4	991.2	985.7	986.0	985.1	-.9	
Gasoline stations .....	844.4	824.1	820.9	822.0	854.2	836.9	834.4	833.0	832.2	831.3	-.9	
Clothing and clothing accessories stores .....	1,445.6	1,440.7	1,388.5	1,385.1	1,498.2	1,462.2	1,448.5	1,445.0	1,443.6	1,437.4	-6.2	
Sporting goods, hobby, book, and music stores .....	636.6	634.4	600.3	592.9	653.8	633.1	624.3	620.8	613.8	611.4	-2.4	
General merchandise stores <sup>1</sup> .....	3,022.8	3,033.4	2,964.5	3,028.7	3,060.7	3,024.5	3,029.2	3,040.7	3,043.4	3,057.2	13.8	
Department stores .....	1,544.8	1,540.2	1,489.6	1,501.3	1,583.5	1,517.5	1,521.2	1,528.1	1,533.7	1,533.4	-.3	
Miscellaneous store retailers .....	834.1	805.1	805.4	786.6	854.5	838.3	825.0	819.5	815.7	808.3	-7.4	
Nonstore retailers .....	435.2	426.5	415.1	409.3	443.1	427.7	424.0	422.7	419.7	418.3	-1.4	
Transportation and warehousing .....	4,514.9	4,315.9	4,270.3	4,247.8	4,553.4	4,424.4	4,389.9	4,354.4	4,324.0	4,290.0	-34.0	
Air transportation .....	502.5	472.5	471.9	471.6	505.4	481.6	477.8	476.8	475.1	473.0	-2.1	
Rail transportation .....	230.1	225.9	223.6	223.6	231.4	229.0	226.8	227.1	225.3	224.9	-.4	
Water transportation .....	62.8	58.0	57.2	56.7	66.0	62.6	60.3	59.7	60.5	59.8	-.7	
Truck transportation .....	1,389.4	1,292.8	1,275.7	1,269.5	1,414.6	1,358.0	1,340.8	1,323.3	1,310.4	1,295.5	-14.9	
Transit and ground passenger transportation .....	433.6	418.5	416.9	417.8	420.0	411.7	410.1	408.1	406.6	405.0	-1.6	
Pipeline transportation .....	40.5	42.9	42.7	42.3	40.8	43.2	43.3	43.1	43.0	42.8	-.2	
Scenic and sightseeing transportation .....	23.1	20.8	20.3	20.8	28.7	27.2	27.2	26.9	26.6	26.4	-.2	
Support activities for transportation .....	587.8	564.3	557.0	547.5	591.2	582.2	579.5	569.3	560.4	553.2	-7.2	
Couriers and messengers .....	572.7	565.0	558.3	553.4	577.5	565.7	564.6	563.2	563.7	558.6	-5.1	
Warehousing and storage .....	672.4	655.2	644.7	644.6	677.8	663.2	659.5	656.9	652.4	650.8	-1.6	
Utilities .....	555.2	568.4	568.0	569.0	557.4	564.0	564.6	569.3	570.0	570.9	.9	
Information .....	3,016	2,895	2,903	2,904	3,023	2,965	2,940	2,924	2,917	2,907	-10	
Publishing industries, except Internet .....	891.8	840.5	832.4	825.5	893.3	863.6	857.8	846.3	834.8	827.2	-7.6	
Motion picture and sound recording industries .....	330.8	360.5	360.7	363.5	365.2	365.0	377.2	376.7	389.0	395.0	6.0	
Broadcasting, except Internet .....	317.9	304.8	299.8	298.5	319.0	313.1	308.1	308.5	302.3	299.7	-2.6	
Telecommunications .....	1,027.2	1,001.8	1,001.9	995.6	1,028.0	1,010.2	1,004.0	1,001.6	1,000.3	996.4	-3.9	
Data processing, hosting and related services .....	264.7	252.2	253.3	256.7	263.4	257.5	256.4	257.0	255.4	255.2	-.2	
Other information services .....	133.9	135.0	134.9	133.8	134.2	135.1	136.5	135.7	134.9	133.7	-1.2	
Financial activities .....	8,171	7,901	7,863	7,823	8,204	8,043	8,010	7,954	7,910	7,867	-43	
Finance and insurance .....	6,056.4	5,875.3	5,856.1	5,832.8	6,055.8	5,948.7	5,924.0	5,890.4	5,863.3	5,838.0	-25.3	
Monetary authorities - central bank .....	22.5	20.8	20.8	20.8	22.4	21.5	21.3	21.0	21.0	20.8	-.2	
Credit intermediation and related activities .....	2,765.2	2,661.1	2,651.9	2,636.3	2,763.3	2,692.8	2,680.8	2,665.3	2,652.9	2,637.7	-15.2	
Depository credit intermediation <sup>1</sup> .....	1,823.3	1,799.2	1,791.0	1,781.2	1,824.9	1,806.9	1,804.9	1,798.1	1,792.7	1,785.2	-7.5	
Commercial banking .....	1,361.3	1,346.7	1,340.2	1,335.4	1,352.0	1,352.7	1,351.8	1,346.6	1,342.4	1,336.0	-6.4	
Securities, commodity contracts, investments, insurance carriers and related activities .....	868.4	823.8	818.6	812.0	867.5	842.1	839.9	826.5	819.7	812.4	-7.3	
Funds, trusts, and other financial vehicles .....	2,310.6	2,279.4	2,276.0	2,275.5	2,313.3	2,300.9	2,292.0	2,287.4	2,281.1	2,279.0	-.2	
Real estate and rental and leasing .....	2,114.6	2,025.3	2,006.6	1,990.2	2,148.5	2,093.8	2,085.8	2,063.2	2,047.0	2,029.1	-17.9	
Real estate .....	1,468.7	1,418.8	1,408.8	1,398.6	1,489.4	1,461.7	1,458.2	1,444.9	1,435.1	1,423.4	-11.7	
Rental and leasing services .....	610.0	578.5	569.8	563.5	630.8	603.8	599.3	599.9	588.6	577.1	-6.5	
Lessors of nonfinancial intangible assets .....	27.9	28.0	28.0	28.1	28.5	28.3	28.3	28.4	28.3	28.6	.3	

See footnotes at the end of table.

ESTABLISHMENT DATA

ESTABLISHMENT DATA

Table B-1. Employees on nonfarm payrolls by industry sector and selected industry detail—Continued

(In thousands)

Industry	Not seasonally adjusted				Seasonally adjusted							Change from: Feb. 2009 <sup>P</sup> to Mar. 2009 <sup>P</sup>
	Mar. 2008	Jan. 2009	Feb. 2009 <sup>P</sup>	Mar. 2009 <sup>P</sup>	Mar. 2008	Nov. 2008	Dec. 2008	Jan. 2009	Feb. 2009 <sup>P</sup>	Mar. 2009 <sup>P</sup>		
Professional and business services .....	17,733	16,877	16,741	16,678	17,954	17,488	17,356	17,205	17,027	16,894	-133	
Professional and technical services <sup>1</sup> .....	7,882.5	7,787.7	7,797.5	7,750.9	7,818.8	7,827.7	7,797.2	7,765.5	7,728.8	7,697.5	-31.3	
Legal services .....	1,162.9	1,144.1	1,139.5	1,138.0	1,168.8	1,157.7	1,158.8	1,154.1	1,149.2	1,146.5	-2.7	
Accounting and bookkeeping services .....	1,064.1	1,021.4	1,063.5	1,042.0	948.8	941.0	933.7	927.5	926.3	927.9	1.6	
Architectural and engineering services .....	1,430.5	1,391.3	1,370.7	1,353.9	1,450.9	1,428.6	1,419.4	1,411.1	1,392.5	1,376.2	-16.3	
Computer systems design and related services .....	1,426.5	1,459.7	1,459.7	1,454.0	1,432.4	1,467.9	1,466.8	1,462.4	1,463.9	1,460.0	-3.9	
Management and technical consulting services .....	988.5	1,011.8	1,009.1	1,003.7	997.1	1,024.9	1,020.5	1,025.7	1,020.6	1,014.5	-6.1	
Management of companies and enterprises .....	1,895.5	1,886.9	1,854.0	1,848.9	1,906.7	1,882.0	1,872.1	1,871.7	1,865.3	1,859.0	-6.3	
Administrative and waste services .....	7,955.2	7,222.4	7,089.8	7,076.3	8,228.2	7,778.3	7,686.3	7,567.5	7,432.9	7,357.3	-85.6	
Administrative and support services <sup>1</sup> .....	7,903.6	6,853.0	6,735.5	6,724.3	7,870.7	7,414.2	7,324.4	7,203.1	7,070.9	6,976.6	-94.3	
Employment services <sup>1</sup> .....	3,176.0	2,561.4	2,485.3	2,453.8	3,304.7	2,896.7	2,829.5	2,720.5	2,628.4	2,540.0	-88.4	
Temporary help services .....	2,372.2	1,829.4	1,767.7	1,728.8	2,486.8	2,128.5	2,055.6	1,965.7	1,888.5	1,816.8	-71.7	
Business support services .....	836.5	814.0	806.8	807.6	831.1	823.7	816.0	817.6	806.8	804.4	-2.4	
Services to buildings and dwellings .....	1,721.0	1,652.2	1,628.9	1,657.6	1,853.7	1,829.4	1,818.1	1,812.5	1,798.7	1,791.1	-7.6	
Waste management and remediation services .....	351.6	359.4	354.3	354.0	357.5	364.1	361.9	364.4	362.0	360.7	-1.3	
Education and health services .....	18,833	19,013	19,239	19,269	18,698	19,044	19,080	19,119	19,141	19,149	8	
Educational services .....	3,153.1	3,017.5	3,221.5	3,219.9	3,006.5	3,066.0	3,063.1	3,088.4	3,097.1	3,080.3	-6.8	
Health care and social assistance .....	15,679.4	15,995.7	16,017.7	16,048.7	15,691.1	16,977.8	16,017.0	16,030.3	16,053.5	16,068.3	14.8	
Health care <sup>2</sup> .....	13,168.7	13,455.3	13,471.0	13,492.4	13,199.7	13,442.4	13,475.9	13,490.2	13,512.9	13,526.4	13.5	
Ambulatory health care services <sup>1</sup> .....	5,587.6	5,734.3	5,749.3	5,761.5	5,599.3	5,727.7	5,742.6	5,753.3	5,766.2	5,775.9	7.7	
Offices of physicians .....	2,238.0	2,295.7	2,296.0	2,301.5	2,243.7	2,269.8	2,294.5	2,300.4	2,304.9	2,308.1	3.2	
Outpatient care centers .....	527.6	536.7	537.5	538.6	527.5	536.9	536.7	538.0	538.5	539.2	7	
Home health care services .....	941.7	976.3	965.2	990.9	943.3	975.6	980.7	981.4	989.5	992.2	2.7	
Hospitals .....	4,587.5	4,699.5	4,699.5	4,697.5	4,589.1	4,692.4	4,703.7	4,707.5	4,710.6	4,709.9	-2.7	
Nursing and residential care facilities <sup>1</sup> .....	2,993.7	3,021.5	3,022.2	3,033.4	3,001.3	3,022.3	3,029.6	3,029.4	3,034.1	3,040.6	6.5	
Nursing care facilities .....	1,610.7	1,612.9	1,611.6	1,617.3	1,614.7	1,614.5	1,617.3	1,616.6	1,617.7	1,620.7	3.0	
Social assistance <sup>1</sup> .....	2,510.7	2,540.4	2,546.7	2,556.3	2,491.4	2,535.4	2,541.1	2,540.1	2,540.6	2,541.9	1.3	
Child day care services .....	879.0	899.5	872.8	873.5	861.7	863.2	864.3	862.7	861.4	858.8	-2.6	
Leisure and hospitality .....	13,156	12,667	12,676	12,813	13,528	13,344	13,304	13,268	13,240	13,200	-40	
Arts, entertainment, and recreation .....	1,837.2	1,732.9	1,747.3	1,776.1	1,996.1	1,944.0	1,947.1	1,943.8	1,943.7	1,935.1	-8.6	
Performing arts and spectator sports .....	385.0	366.6	373.5	379.4	409.3	398.8	401.4	405.7	403.7	403.1	-6	
Museums, historical sites, zoos, and parks .....	124.0	119.3	118.8	120.0	133.2	130.6	130.8	130.3	130.6	129.3	-1.1	
Amusements, gambling, and recreation .....	1,328.2	1,246.8	1,255.0	1,278.7	1,453.6	1,414.6	1,414.9	1,407.8	1,408.4	1,402.5	-6.9	
Accommodation and food services .....	11,318.5	10,933.9	10,930.8	11,037.1	11,532.0	11,399.6	11,356.5	11,323.7	11,296.2	11,264.7	-31.5	
Accommodation .....	1,825.0	1,685.5	1,677.1	1,668.0	1,883.9	1,812.1	1,794.3	1,768.4	1,750.9	1,728.3	-22.6	
Food services and drinking places .....	9,493.5	9,248.4	9,253.7	9,369.1	9,648.1	9,587.5	9,562.2	9,555.3	9,545.3	9,536.4	-8.9	
Other services .....	5,518	5,388	5,400	5,402	5,537	5,509	5,477	5,461	5,448	5,425	-23	
Repair and maintenance .....	1,242.5	1,168.8	1,165.5	1,163.4	1,242.2	1,204.7	1,189.9	1,184.7	1,176.7	1,165.4	-10.3	
Personal and laundry services .....	1,317.1	1,292.9	1,296.0	1,295.6	1,324.2	1,323.2	1,320.9	1,313.6	1,313.3	1,304.7	-8.6	
Membership associations and organizations .....	2,958.1	2,926.5	2,938.2	2,943.6	2,970.2	2,980.7	2,965.7	2,963.1	2,958.1	2,953.8	-4.3	
Government .....	22,840	22,447	22,844	22,925	22,441	22,543	22,532	22,540	22,543	22,538	-5	
Federal .....	2,732	2,779	2,780	2,784	2,751	2,783	2,778	2,793	2,795	2,802	7	
Federal, except U.S. Postal Service .....	1,976.7	2,042.0	2,057.8	2,066.5	1,989.6	2,052.4	2,057.3	2,065.8	2,070.7	2,079.1	8.4	
U.S. Postal Service .....	755.6	736.5	722.0	717.7	761.5	730.1	720.9	726.9	724.0	722.8	-1.2	
State government .....	5,293	5,119	5,302	5,320	5,152	5,197	5,198	5,192	5,187	5,184	-3	
State government education .....	2,482.5	2,320.4	2,503.3	2,524.3	2,334.7	2,380.3	2,381.3	2,380.2	2,378.8	2,379.2	.4	
State government, excluding education .....	2,810.1	2,798.6	2,798.8	2,795.9	2,817.3	2,816.4	2,814.8	2,811.6	2,808.5	2,804.6	-3.9	
Local government .....	14,815	14,549	14,762	14,821	14,538	14,563	14,556	14,555	14,561	14,552	-9	
Local government education .....	8,440.8	8,173.3	8,392.1	8,445.4	8,076.4	8,087.6	8,060.6	8,070.7	8,081.1	8,080.3	-8	
Local government, excluding education .....	6,373.9	6,375.2	6,370.3	6,375.5	6,461.5	6,495.6	6,497.7	6,484.7	6,479.5	6,471.8	-7.7	

<sup>1</sup> Includes other industries, not shown separately.

<sup>2</sup> Includes motor vehicles, motor vehicle bodies and trailers, and motor vehicle parts.

<sup>3</sup> Includes ambulatory health care services, hospitals, and nursing and residential care facilities.

P = preliminary.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-2. Average weekly hours of production and nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by industry sector and selected industry detail

Industry	Not seasonally adjusted				Seasonally adjusted							Change from: Feb. 2009-Mar. 2009 <sup>P</sup>
	Mar. 2008	Jan. 2009	Feb. 2009 <sup>P</sup>	Mar. 2009 <sup>P</sup>	Mar. 2008	Nov. 2008	Dec. 2008	Jan. 2009	Feb. 2009 <sup>P</sup>	Mar. 2009 <sup>P</sup>		
Total private .....	33.8	32.9	33.2	33.2	33.8	33.4	33.3	33.3	33.3	33.2	-0.1	
Goods-producing .....	40.4	38.8	38.6	38.7	40.6	39.5	39.4	39.3	39.2	38.9	-.3	
Mining and logging .....	45.7	43.6	43.4	42.6	46.2	45.3	44.3	44.2	44.0	43.2	-.8	
Construction .....	38.5	37.1	37.0	37.3	38.9	37.7	38.0	37.9	38.1	37.8	-.3	
Manufacturing .....	41.1	39.5	39.2	39.2	41.2	40.2	39.9	39.8	39.5	39.3	-.2	
Overtime hours .....	3.9	2.7	2.5	2.5	4.0	3.2	2.9	2.9	2.7	2.7	.0	
Durable goods .....	41.4	39.5	39.2	39.2	41.5	40.4	40.0	39.8	39.5	39.3	-.2	
Overtime hours .....	4.0	2.5	2.3	2.4	4.1	3.1	2.8	2.7	2.5	2.5	.0	
Wood products .....	38.3	35.7	36.0	36.2	38.7	37.6	36.8	36.9	37.0	36.8	-.2	
Nonmetallic mineral products .....	42.6	38.9	38.6	39.2	43.2	40.9	40.9	40.2	40.0	39.8	-.2	
Primary metals .....	43.0	40.3	39.6	40.1	43.0	40.9	40.5	40.4	39.9	40.1	.2	
Fabricated metal products .....	41.7	39.5	39.2	38.8	41.8	40.8	40.3	39.7	39.4	38.9	-.5	
Machinery .....	42.8	40.8	40.5	40.1	42.8	41.4	41.1	40.9	40.5	40.2	-.3	
Computer and electronic products .....	41.0	40.4	40.3	39.9	41.0	41.3	40.4	40.7	40.5	39.9	-.6	
Electrical equipment and appliances .....	41.2	39.3	38.5	38.0	41.3	40.2	39.7	39.4	38.8	38.2	-.6	
Transportation equipment .....	42.5	40.3	40.1	40.1	42.4	40.9	40.9	40.4	40.1	40.1	.0	
Motor vehicles and parts <sup>2</sup> .....	42.0	38.2	38.0	38.1	41.9	40.0	39.9	38.6	38.1	38.2	.1	
Furniture and related products .....	38.5	37.4	36.9	37.8	38.7	37.2	37.3	37.7	37.5	37.9	.4	
Miscellaneous manufacturing .....	39.4	38.3	37.9	38.3	39.2	38.5	38.3	38.4	38.2	38.2	.0	
Nondurable goods .....	40.5	39.4	39.1	39.2	40.7	39.9	39.7	39.7	39.4	39.4	.0	
Overtime hours .....	3.8	3.0	2.8	2.8	3.9	3.4	3.1	3.2	3.0	3.0	.0	
Food manufacturing .....	40.3	39.7	39.3	39.6	40.8	39.9	39.8	40.1	39.9	40.0	.1	
Beverages and tobacco products .....	39.9	36.3	36.4	35.4	40.1	37.9	36.7	37.0	36.8	35.7	-1.1	
Textile mills .....	38.8	36.7	36.0	36.5	38.8	37.7	37.0	37.1	36.5	36.6	-.1	
Textile product mills .....	39.4	36.5	36.9	37.1	39.3	37.9	37.1	37.0	37.0	37.0	.0	
Apparel .....	36.9	35.6	35.3	36.3	36.7	36.2	36.0	36.0	35.6	36.1	.5	
Leather and allied products .....	39.0	33.4	32.5	33.4	38.6	34.4	34.7	34.0	33.1	33.3	-.2	
Paper and paper products .....	43.3	41.4	41.2	40.7	43.6	42.1	41.9	41.6	41.5	41.1	-.4	
Printing and related support activities .....	38.7	37.4	37.3	37.6	38.6	38.2	38.0	37.7	37.5	37.5	.0	
Petroleum and coal products .....	42.8	44.9	43.5	42.7	43.7	44.4	45.3	45.1	43.8	43.9	.1	
Chemicals .....	41.9	40.8	41.0	40.8	41.9	41.3	41.1	41.1	41.0	40.9	-.1	
Plastics and rubber products .....	41.1	39.9	39.3	39.2	41.2	40.6	40.0	39.9	39.5	39.4	-.1	
Private service-providing .....	32.5	31.8	32.3	32.2	32.4	32.2	32.2	32.2	32.1	32.1	.0	
Trade, transportation, and utilities .....	33.3	32.4	32.7	32.8	33.3	33.0	32.9	32.9	32.8	32.8	.0	
Wholesale trade .....	38.6	37.7	38.1	37.8	38.4	38.1	37.8	38.1	37.9	37.7	-.2	
Retail trade .....	30.0	29.2	29.6	29.6	30.2	29.8	29.7	29.7	29.8	29.7	-.1	
Transportation and warehousing .....	36.7	35.5	35.4	36.1	36.6	36.1	36.2	36.0	35.7	36.0	.3	
Utilities .....	43.0	42.5	43.2	42.0	43.2	42.4	42.9	42.6	43.1	42.2	-.9	
Information .....	36.7	36.8	37.1	36.9	36.5	37.0	37.0	37.2	36.9	36.8	-.1	
Financial activities .....	36.2	35.9	36.8	36.5	35.8	36.1	35.9	36.2	36.2	36.1	-.1	
Professional and business services .....	35.1	34.4	34.9	34.9	34.8	34.9	34.8	34.9	34.8	34.7	-.1	
Education and health services .....	32.7	32.3	32.5	32.4	32.7	32.4	32.4	32.4	32.3	32.4	.1	
Leisure and hospitality .....	25.3	24.0	25.0	24.8	25.3	25.0	25.0	24.8	25.0	24.8	-.2	
Other services .....	30.9	30.5	30.7	30.6	30.9	30.7	30.6	30.7	30.6	30.6	.0	

<sup>1</sup> Data relate to production workers in mining and logging and manufacturing, construction workers in construction, and nonsupervisory workers in the service-providing industries. These groups account for approximately four-fifths of the total employment on private nonfarm payrolls.

<sup>2</sup> Includes motor vehicles, motor vehicle bodies and trailers, and motor vehicle parts.  
P = preliminary.



## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-3. Average hourly and weekly earnings of production and nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by industry sector and selected industry detail

Industry	Average hourly earnings				Average weekly earnings			
	Mar. 2008	Jan. 2009	Feb. 2009 <sup>P</sup>	Mar. 2009 <sup>P</sup>	Mar. 2008	Jan. 2009	Feb. 2009 <sup>P</sup>	Mar. 2009 <sup>P</sup>
Total private .....	\$17.97	\$18.49	\$18.57	\$18.56	\$607.39	\$608.32	\$616.52	\$616.19
Seasonally adjusted .....	17.90	18.43	18.47	18.50	605.02	613.72	615.05	614.20
Goods-producing .....	19.06	19.64	19.64	19.72	770.02	762.03	758.10	763.16
Mining and logging .....	22.29	23.41	23.20	23.28	1,018.65	1,020.68	1,006.86	991.73
Construction .....	21.44	22.32	22.26	22.48	825.44	828.07	823.62	838.50
Manufacturing .....	17.62	18.03	18.07	18.07	724.18	712.19	708.34	708.34
Durable goods .....	18.56	18.99	19.08	19.16	766.38	750.11	747.94	751.07
Wood products .....	13.92	14.69	14.76	14.70	533.14	524.43	531.96	532.14
Nonmetallic mineral products .....	16.79	16.82	17.05	17.23	715.25	654.30	658.13	675.42
Primary metals .....	20.23	19.80	19.68	19.62	869.89	797.94	779.33	786.76
Fabricated metal products .....	16.86	17.24	17.29	17.31	703.06	680.98	677.77	671.63
Machinery .....	17.87	18.16	18.21	18.32	764.84	740.93	737.51	734.63
Computer and electronic products .....	20.76	21.46	21.37	21.60	851.16	866.98	861.21	861.84
Electrical equipment and appliances .....	15.64	15.81	15.94	15.99	644.37	621.33	613.69	607.62
Transportation equipment .....	23.52	24.66	24.68	24.79	998.60	993.80	989.67	994.08
Furniture and related products .....	14.42	14.95	14.86	14.96	555.17	559.13	548.33	565.49
Miscellaneous manufacturing .....	15.08	15.66	15.97	15.97	594.15	599.78	605.26	611.65
Nondurable goods .....	16.01	16.51	16.49	16.39	648.41	650.49	644.76	642.49
Food manufacturing .....	13.85	14.34	14.29	14.25	558.16	569.30	561.60	564.30
Beverages and tobacco products .....	19.73	20.07	20.33	20.37	787.23	728.54	740.01	721.10
Textile mills .....	13.45	13.90	13.71	13.77	521.86	510.13	493.56	502.61
Textile product mills .....	11.77	11.59	11.53	11.33	463.74	423.04	425.46	420.34
Apparel .....	11.35	11.46	11.44	11.27	418.82	407.98	403.83	409.10
Leather and allied products .....	12.81	14.10	14.31	14.25	499.59	470.94	465.08	475.95
Paper and paper products .....	18.70	19.27	18.99	18.86	809.71	797.78	762.39	767.60
Printing and related support activities .....	16.64	16.79	16.85	16.76	643.97	627.95	628.51	630.18
Petroleum and coal products .....	27.06	29.13	29.57	29.66	1,158.17	1,307.94	1,286.30	1,266.48
Chemicals .....	19.31	19.89	19.92	19.76	809.09	811.51	816.72	806.21
Plastics and rubber products .....	15.72	16.24	16.23	16.17	646.09	647.98	637.84	633.86
Private service-providing .....	17.70	18.23	18.33	18.31	575.25	579.71	592.06	589.58
Trade, transportation, and utilities .....	16.14	16.37	16.47	16.43	537.46	530.39	538.57	538.90
Wholesale trade .....	20.08	20.44	20.84	20.63	775.09	770.59	786.38	779.81
Retail trade .....	12.88	12.96	12.98	13.02	386.40	378.43	384.21	385.39
Transportation and warehousing .....	18.20	18.68	18.77	18.62	667.94	663.14	664.46	672.18
Utilities .....	28.90	29.27	29.68	29.38	1,242.70	1,243.98	1,282.18	1,233.96
Information .....	24.62	25.03	25.11	25.26	903.55	921.10	931.58	932.09
Financial activities .....	20.17	20.48	20.67	20.69	730.15	735.23	760.66	755.19
Professional and business services .....	21.00	22.16	22.52	22.56	737.10	762.30	785.95	787.34
Education and health services .....	18.74	19.26	19.25	19.22	612.80	622.10	625.63	622.73
Leisure and hospitality .....	10.77	11.03	11.07	10.99	272.48	284.72	276.75	272.55
Other services .....	16.11	16.34	16.33	16.37	497.80	498.37	501.33	500.92

<sup>1</sup> See footnote 1, table B-2.

P = preliminary.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

**Table B-4. Average hourly earnings of production and nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by industry sector and selected industry detail, seasonally adjusted**

Industry	Mar. 2008	Nov. 2008	Dec. 2008	Jan. 2009	Feb. 2009 <sup>P</sup>	Mar. 2009 <sup>P</sup>	Percent change from: Feb. 2009 - Mar. 2009 <sup>P</sup>
Total private:							
Current dollars .....	\$17.90	\$18.34	\$18.40	\$18.43	\$18.47	\$18.50	0.2
Constant (1982) dollars <sup>2</sup> .....	8.28	8.54	8.65	8.64	8.62	N.A.	( <sup>3</sup> )
Goods-producing .....	19.17	19.63	19.69	19.72	19.78	19.84	.3
Mining and logging .....	22.28	23.28	23.23	23.14	23.12	23.30	.8
Construction .....	21.58	22.28	22.41	22.43	22.44	22.61	.8
Manufacturing .....	17.64	17.94	17.98	17.99	18.06	18.08	.1
Excluding overtime <sup>4</sup> .....	16.82	17.25	17.33	17.36	17.46	17.48	.1
Durable goods .....	18.58	18.91	18.94	18.99	19.07	19.16	.5
Nondurable goods .....	16.05	16.37	16.39	16.43	16.50	16.44	-.4
Private service-providing .....	17.58	18.03	18.10	18.14	18.17	18.20	.2
Trade, transportation, and utilities .....	16.07	16.29	16.31	16.36	16.38	16.38	.0
Wholesale trade .....	20.04	20.29	20.31	20.41	20.49	20.56	.3
Retail trade .....	12.83	12.93	12.94	12.97	12.96	12.98	.2
Transportation and warehousing .....	18.25	18.66	18.66	18.72	18.72	18.69	-.2
Utilities .....	28.79	28.91	29.16	29.22	29.67	29.25	-1.4
Information .....	24.58	24.94	24.91	24.98	25.07	25.19	.5
Financial activities .....	20.12	20.41	20.53	20.53	20.56	20.64	.4
Professional and business services .....	20.78	21.78	21.97	22.04	22.20	22.33	.6
Education and health services .....	16.69	19.13	19.20	19.18	19.23	19.21	-.1
Leisure and hospitality .....	10.75	10.90	10.94	10.97	10.98	10.98	.0
Other services .....	15.94	16.29	16.29	16.30	16.25	16.24	-.1

<sup>1</sup> See footnote 1, table B-2.

<sup>2</sup> The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is used to deflate this series.

<sup>3</sup> Change was -0.1 percent from Dec. 2008 to Jan. 2009, the latest month available.

<sup>4</sup> Derived by assuming that overtime hours are paid at the rate of time and one-half.

N.A. = not available.

P = preliminary.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-5. Indexes of aggregate weekly hours of production and nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by industry sector and selected industry detail

(2002=100)

Industry	Not seasonally adjusted				Seasonally adjusted						Percent change from: Feb. 2009 <sup>2</sup> -Mar. 2009 <sup>2</sup>
	Mar. 2008	Jan. 2009	Feb. 2009 <sup>P</sup>	Mar. 2009 <sup>P</sup>	Mar. 2008	Nov. 2008	Dec. 2008	Jan. 2009	Feb. 2009 <sup>P</sup>	Mar. 2009 <sup>P</sup>	
Total private .....	106.2	99.3	99.6	99.5	107.5	104.1	103.2	102.5	101.9	100.9	-1.0
Goods-producing .....	97.2	84.0	81.9	81.1	100.2	92.0	90.4	88.1	86.5	84.1	-2.8
Mining and logging .....	134.8	132.5	129.8	123.8	139.7	143.2	139.1	138.3	135.6	128.8	-5.0
Construction .....	104.1	88.2	85.7	85.9	111.5	100.5	99.8	97.5	96.5	93.4	-3.2
Manufacturing .....	92.3	80.2	78.3	77.1	93.2	86.0	84.0	81.7	79.8	76.1	-2.1
Durable goods .....	95.1	80.2	78.1	76.5	95.8	87.1	84.6	81.6	79.4	77.3	-2.6
Wood products .....	78.9	60.9	57.9	59.1	81.2	70.5	66.7	64.6	62.1	62.0	-2
Nonmetallic mineral products .....	92.3	74.5	71.9	72.5	96.3	86.3	84.0	81.0	78.7	76.4	-2.9
Primary metals .....	91.6	75.6	71.0	69.9	91.5	81.5	78.1	75.6	71.9	70.1	-2.5
Fabricated metal products .....	104.3	89.1	86.3	83.4	104.9	96.6	93.8	89.8	87.1	84.0	-3.6
Machinery .....	104.5	91.3	88.5	84.8	104.8	96.7	94.8	91.8	88.6	85.3	-3.7
Computer and electronic products .....	103.2	95.7	93.3	90.8	103.5	99.7	96.8	96.4	93.9	90.9	-3.2
Electrical equipment and appliances .....	89.3	81.8	78.2	74.8	89.9	86.1	83.8	81.8	79.0	75.6	-4.3
Transportation equipment .....	93.9	71.7	72.3	71.1	93.6	81.0	79.0	73.2	72.6	71.1	-2.1
Motor vehicles and parts <sup>2</sup> .....	78.7	51.2	52.8	51.9	78.2	63.9	61.3	53.5	53.0	51.8	-2.3
Furniture and related products .....	78.8	63.5	60.8	60.9	79.8	67.4	66.1	64.7	62.5	61.5	-1.6
Miscellaneous manufacturing .....	91.1	84.2	82.5	81.8	91.0	87.1	85.9	84.8	83.3	82.1	-1.4
Nondurable goods .....	87.5	79.9	78.3	77.9	88.9	84.2	82.8	81.6	80.1	79.4	-0.9
Food manufacturing .....	98.7	96.1	94.4	94.8	102.1	99.3	98.6	98.7	98.0	98.0	0
Beverages and tobacco products .....	89.2	84.9	82.8	82.8	93.8	91.6	89.3	90.1	88.7	87.1	-1.8
Textile mills .....	51.2	36.6	37.3	37.4	50.9	42.6	40.7	39.7	38.1	37.4	-1.8
Textile product mills .....	73.8	61.6	60.8	58.7	73.3	67.5	65.0	62.7	61.3	58.6	-4.4
Apparel .....	58.1	47.7	47.4	48.3	58.2	52.7	51.3	49.7	48.6	48.6	0
Leather and allied products .....	70.3	60.0	56.0	57.8	69.6	62.0	62.5	60.9	58.3	58.3	0
Paper and paper products .....	84.4	77.3	75.2	73.3	85.6	80.9	79.8	77.9	76.3	74.8	-2.0
Printing and related support activities .....	89.2	77.6	75.9	75.7	89.2	82.5	80.6	78.7	76.9	75.8	-1.4
Petroleum and coal products .....	96.0	87.4	83.5	82.5	101.0	98.6	98.4	93.3	88.9	88.1	-0.9
Chemicals .....	96.3	89.7	89.9	89.0	96.4	93.4	91.8	91.0	90.3	89.4	-1.0
Plastics and rubber products .....	89.5	77.0	74.9	73.4	90.1	82.9	80.2	78.0	76.1	74.7	-1.8
Private service-providing .....	108.8	103.5	104.9	104.7	109.5	107.5	107.0	106.6	105.9	105.5	-0.4
Trade, transportation, and utilities .....	103.7	97.8	97.3	97.7	105.1	101.4	100.6	100.2	99.4	99.1	-0.3
Wholesale trade .....	110.3	103.4	103.6	102.6	110.5	107.0	105.5	105.6	104.3	103.1	-1.2
Retail trade .....	99.5	94.5	94.1	94.3	101.9	97.9	97.1	96.8	96.8	96.3	-0.5
Transportation and warehousing .....	108.5	100.4	99.0	100.7	109.4	104.5	104.2	102.8	101.2	101.7	.5
Utilities .....	97.9	99.7	101.2	98.6	98.9	98.7	100.2	100.1	101.5	99.6	-1.9
Information .....	101.1	97.5	98.3	97.9	100.7	100.2	99.6	99.4	98.4	97.8	-0.6
Financial activities .....	108.6	104.8	106.9	105.5	108.0	107.3	106.2	106.5	105.9	105.0	-0.8
Professional and business services .....	114.6	105.9	106.6	106.2	115.2	112.0	110.8	110.1	108.5	107.2	-1.2
Education and health services .....	116.2	116.1	118.2	118.1	115.4	116.6	116.9	117.2	116.9	117.3	.3
Leisure and hospitality .....	107.5	98.2	102.5	102.8	110.7	108.2	107.8	106.7	107.3	106.1	-1.1
Other services .....	99.8	96.1	97.0	96.7	100.2	99.1	98.3	98.2	97.6	97.2	-0.4

<sup>1</sup> See footnote 1, table B-2.<sup>2</sup> Includes motor vehicles, motor vehicle bodies and trailers, and motor vehicle parts.<sup>P</sup> = preliminary.

NOTE: The index of aggregate weekly hours are calculated by dividing

the current months estimates of aggregate hours by the corresponding 2002 annual average levels. Aggregate hours estimates are the product of estimates of average weekly hours and production and nonsupervisory worker employment.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-6. Indexes of aggregate weekly payrolls of production and nonsupervisory workers<sup>1</sup> on private nonfarm payrolls by industry sector and selected industry detail

(2002=100)

Industry	Not seasonally adjusted				Seasonally adjusted						Percent change from: Feb. 2009 <sup>P</sup> - Mar. 2009 <sup>P</sup>
	Mar. 2008	Jan. 2009	Feb. 2009 <sup>P</sup>	Mar. 2009 <sup>P</sup>	Mar. 2008	Nov. 2008	Dec. 2008	Jan. 2009	Feb. 2009 <sup>P</sup>	Mar. 2009 <sup>P</sup>	
Total private .....	127.5	122.6	123.6	123.4	128.6	127.6	126.9	126.2	125.7	124.8	-0.7
Goods-producing .....	113.4	101.0	98.5	98.0	117.6	110.6	109.0	106.4	104.7	102.2	-2.4
Mining and logging .....	174.7	180.4	175.2	167.7	181.0	193.9	188.0	186.2	182.4	174.5	-4.3
Construction .....	120.5	106.3	103.0	104.3	130.0	120.9	120.8	118.0	116.9	114.0	-2.5
Manufacturing .....	106.3	94.6	92.5	91.1	107.5	100.9	98.7	96.1	94.2	92.3	-2.0
Durable goods .....	110.2	95.1	93.0	91.6	111.2	102.9	100.1	96.8	94.5	92.4	-2.2
Nondurable goods .....	99.0	93.2	91.3	90.2	100.8	97.4	95.9	94.7	93.4	92.3	-1.2
Private service-providing .....	132.0	129.4	131.8	131.4	132.0	132.8	132.8	132.6	131.9	131.6	-2
Trade, transportation, and utilities .....	119.4	114.2	114.4	114.5	120.5	117.9	117.0	116.9	116.2	115.8	-3
Wholesale trade .....	130.5	124.6	126.0	124.7	130.5	127.9	126.2	126.9	125.9	124.9	-8
Retail trade .....	109.9	105.0	104.7	105.3	112.1	108.5	107.7	107.7	107.6	107.1	-5
Transportation and warehousing .....	125.3	119.0	117.9	118.9	126.6	123.7	123.3	122.1	120.2	120.6	.3
Utilities .....	118.1	121.9	125.4	120.9	118.9	119.1	121.9	122.1	125.7	121.6	-3.3
Information .....	123.3	120.8	122.2	122.5	122.5	123.8	122.8	122.9	122.1	122.0	-1
Financial activities .....	135.5	132.7	136.6	134.9	134.4	135.4	134.9	135.1	134.6	134.0	-4
Professional and business services .....	143.2	139.6	142.8	142.5	142.5	145.1	144.9	144.3	143.3	142.4	-6
Education and health services .....	143.2	147.0	149.6	149.2	141.8	146.7	147.5	147.8	147.8	148.1	.2
Leisure and hospitality .....	131.5	123.0	128.8	128.3	135.1	133.9	133.9	132.9	133.8	132.3	-1.1
Other services .....	117.2	114.4	115.4	115.4	116.4	117.6	116.6	116.6	115.6	115.0	-5

<sup>1</sup> See footnote 1, table B-2.

P = preliminary.

NOTE: The index of aggregate weekly payrolls is calculated by dividing the current months estimates of aggregate payrolls

by the corresponding 2002 annual average levels. Aggregate payroll estimates are the product of estimates of average hourly earnings, average weekly hours, and production and nonsupervisory worker employment.

ESTABLISHMENT DATA

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Table B-7. Diffusion indexes of employment change

(Percent)

Time span	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Private nonfarm payrolls, 271 industries <sup>1</sup>												
Over 1-month span:												
2005	52.6	60.1	54.1	58.1	56.6	58.3	58.5	59.2	54.2	55.9	62.7	57.6
2006	64.9	62.2	63.8	59.6	49.1	51.8	59.2	55.4	55.7	56.3	59.4	60.7
2007	53.5	55.5	52.4	49.4	55.9	48.3	50.7	46.5	55.9	57.2	59.4	57.9
2008	42.1	40.6	44.1	41.1	42.6	36.9	37.6	39.1	34.7	33.0	27.1	20.5
2009	22.1	P 21.4	P 22.0									
Over 3-month span:												
2005	51.7	57.2	59.0	59.6	57.9	62.0	60.5	62.9	60.3	55.5	56.3	62.7
2006	67.7	68.6	65.1	65.1	60.5	56.9	55.5	57.0	55.0	54.4	59.0	64.2
2007	62.5	54.8	54.2	54.6	54.1	50.4	52.8	48.7	53.3	53.9	58.3	62.5
2008	57.7	44.8	40.2	39.7	37.3	33.6	33.6	32.8	34.9	33.2	26.9	20.6
2009	18.6	P 15.3	P 16.4									
Over 6-month span:												
2005	55.4	57.9	58.1	57.0	58.3	60.9	63.1	63.3	61.6	59.6	61.4	62.5
2006	64.6	63.8	67.5	66.2	65.5	66.6	60.3	61.1	57.9	57.9	62.4	59.0
2007	60.3	57.2	60.5	59.3	55.5	56.5	52.8	52.4	56.6	54.4	56.8	59.0
2008	56.6	53.0	50.7	47.4	40.2	33.4	31.0	33.4	30.6	29.0	26.0	24.4
2009	21.6	P 18.6	P 15.7									
Over 12-month span:												
2005	60.9	60.9	60.0	59.2	58.3	60.3	61.3	63.3	60.7	59.2	59.8	61.8
2006	67.2	65.5	65.9	62.6	65.5	66.8	64.8	66.6	66.6	65.9	64.9	65.2
2007	63.3	59.4	61.1	59.6	59.2	58.3	56.8	57.2	59.4	58.9	58.1	59.6
2008	54.4	56.1	52.6	49.1	50.2	47.8	43.7	42.3	38.0	37.8	32.3	28.2
2009	24.0	P 22.5	P 20.1									
Manufacturing payrolls, 63 industries <sup>1</sup>												
Over 1-month span:												
2005	36.7	46.4	42.2	46.4	40.4	33.7	41.0	43.4	45.8	47.6	44.6	47.0
2006	57.8	49.4	53.6	47.0	37.3	50.6	49.4	42.2	40.4	42.8	41.0	44.0
2007	44.6	41.0	30.7	24.7	38.0	32.5	43.4	30.7	39.2	42.8	60.8	48.2
2008	30.7	28.9	37.3	32.5	40.4	25.3	25.9	27.7	22.9	18.7	15.1	10.2
2009	6.0	P 11.4	P 15.7									
Over 3-month span:												
2005	36.7	43.4	41.0	41.6	35.5	36.1	34.9	36.7	42.2	44.0	38.6	48.8
2006	56.6	57.2	48.2	48.2	44.6	50.0	43.4	45.2	36.7	33.1	35.5	39.2
2007	40.4	33.1	33.1	28.9	29.5	30.1	31.9	28.9	30.7	30.7	39.2	51.2
2008	48.8	33.7	28.3	29.5	26.5	22.9	19.9	16.9	22.3	21.1	15.1	11.4
2009	6.0	P 3.0	P 6.0									
Over 6-month span:												
2005	33.7	39.8	38.0	36.1	35.5	34.9	39.8	36.1	36.1	38.0	36.7	39.6
2006	45.2	45.2	50.6	48.8	50.6	50.0	45.2	47.0	43.4	42.2	39.8	34.3
2007	37.3	33.1	29.5	28.9	30.7	34.9	28.9	26.5	29.5	28.3	33.7	38.0
2008	34.3	30.1	37.3	35.5	25.3	20.5	17.5	18.1	16.9	13.3	11.4	9.6
2009	9.0	P 6.0	P 3.6									
Over 12-month span:												
2005	45.2	44.0	42.2	41.0	36.7	35.5	32.5	34.3	33.1	33.7	33.7	38.0
2006	44.0	41.0	41.0	39.9	39.8	45.2	42.2	42.8	47.0	48.6	45.8	44.6
2007	39.8	36.7	37.3	30.7	28.9	29.5	30.7	26.9	33.1	28.9	34.3	35.5
2008	27.7	28.9	26.9	25.3	30.7	27.1	24.7	19.3	21.7	21.7	16.9	15.1
2009	8.4	P 4.8	P 7.2									

<sup>1</sup> Based on seasonally adjusted data for 1-, 3-, and 6-month spans and unadjusted data for the 12-month span.  
P = preliminary.

plus one-half of the industries with unchanged employment, where 50 percent indicates an equal balance between industries with increasing and decreasing employment.

NOTE: Figures are the percent of industries with employment increasing

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## **New Keynesian versus Old Keynesian Government Spending Multipliers**

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February 2009

### **Abstract**

Renewed interest in fiscal policy has increased the use of quantitative models to evaluate policy. Because of modelling uncertainty, it is essential that policy evaluations be robust to alternative assumptions. We find that models currently being used in practice to evaluate fiscal policy stimulus proposals are not robust. Government spending multipliers in an alternative empirically-estimated and widely-cited new Keynesian model are much smaller than in these old Keynesian models; the estimated stimulus is extremely small with GDP and employment effects only one-sixth as large and with private sector employment impacts likely to be even smaller.

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In a recent paper<sup>1</sup> Christina Romer, Chair of the President's Council of Economic Advisers, and Jared Bernstein, Chief Economist of the Office of the Vice-President, provided numerical estimates of the impact of an increase in government spending on GDP and employment in the United States. Such estimates are a crucial input for the policy making process. They help determine the appropriate size and timing of countercyclical fiscal policy packages and they help inform members of the Congress and their constituents about whether a vote for a policy is appropriate. For packages approaching \$1 trillion including interest, as in 2009, the stakes are enormous. The estimated economic impacts matter.

The Romer-Bernstein estimates are based on two particular quantitative macroeconomic models – one from the staff of the Federal Reserve Board and the other from an unnamed private forecasting firm. By averaging the impacts generated by these two models, they estimate that an increase in government purchases of 1 percent of GDP would induce an increase in real GDP of 1.6 percent compared to what it otherwise would be. Their results are shown in Figure 1. Also shown in Figure 1 are the estimated effects of exactly the same policy change—a permanent increase in government purchases—as reported in another study published a number of years ago by one of us.<sup>2</sup>

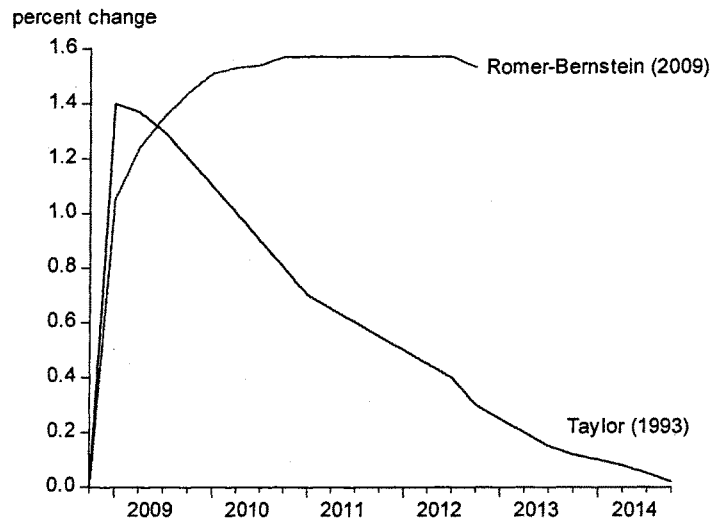
It is clear from Figure 1 that the results are vastly different between the different models. Perhaps the most important difference is that in one case higher government spending keeps on adding to GDP “as far as the eye can see,” while in the other case the effect on GDP diminishes as non-government components are crowded out by government spending.

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<sup>1</sup> See Romer and Bernstein (2009), Appendix 1, page 12. This paper was written during the transition period in early January before Christina Romer was sworn in as Chair of the Council of Economic Advisers.

<sup>2</sup> See Taylor (1993), Figure 5-8A, page 166. This is a rational expectations model with staggered wage and price setting and thus could be described as “new Keynesian” as defined below.





**Figure 1. Estimated Impact on GDP of a Permanent Increase in Government Purchases of 1 percent of GDP**

Macroeconomists remain quite uncertain about the quantitative effects of fiscal policy. This uncertainty derives not only from the usual errors in empirical estimation but also from different views on the proper theoretical framework and econometric methodology. Therefore, robustness is a crucial criterion in policy evaluation. Robustness requires evaluating policies using other empirically-estimated and tested macroeconomic models. From this perspective Figure 1 is a concern because it shows that the Romer-Bernstein estimates apparently fail a simple robustness test, being far different from existing published results of another model. For these reasons an examination of the Romer-Bernstein results is in order.

### I. The Need for an Alternative Assessment

We think it is best to start by conducting a fresh set of simulations with a macroeconomic model other than one of those used in Figure 1. We focus on the Smets-Wouters model of the U.S. economy.<sup>3</sup> The Smets-Wouters model is representative of current thinking in macroeconomics. It was recently published in the *American Economic Review* and is one of the best known of the empirically-estimated “new Keynesian” models. It is very similar to, and “largely based on” according to Smets and Wouters, another well-known empirically-estimated new Keynesian model developed by Christiano, Eichenbaum and Evans (2005). The Smets-Wouters model was highlighted by Michael Woodford (2009) as one of the leading models in his review of the current consensus in macroeconomics.<sup>4</sup>

The term “new Keynesian” is used to indicate that the models have forward looking, or rational, expectations by individuals and firms, and some form of price rigidity, usually staggered price or wage setting. The term also is used to contrast these models with “old Keynesian” models without rational expectations of the kind used by Romer and Bernstein.<sup>5</sup> New Keynesian models rather than old Keynesian models are the ones commonly taught in graduate schools because they capture how people’s expectations and microeconomic behavior change over time in response to policy interventions and because they are empirically estimated and fit the data. They are therefore viewed as better for policy evaluation. In assessing the effect of government actions on the economy, it is important to

<sup>3</sup> See Smets and Wouters (2007) for a complete review of their model. It determines 14 endogenous variables: output, consumption, investment, the price of capital, the capital stock, capital services, the capital utilization rate, labor supply, the interest rate, the inflation rate, the rental rate on capital, the wage rate, the marginal product of labor, and the marginal rate of substitution between work and consumption. The 14 equations include forward looking consumption, investment, price and wage setting as well as several identities.

<sup>4</sup> See Woodford (2009), which also contains a useful survey of the whole “new Keynesian” literature.

<sup>5</sup> There is a rational expectations version of the FRB/US model. We simulated a permanent increase in government purchases in this version and found that the multipliers declined sharply over time unlike those reported by Romer and Bernstein (2009) but similar to the Taylor (1993) rational expectations model as shown in Figure 1. We infer that the FRB/US model and the private sector model used by Romer and Bernstein are not new Keynesian models with rational expectations. Also, as explained below, new Keynesian models would not allow an assumption of a constant zero interest rate forever.

take into account how households and firms adjust their spending decisions as their expectations of future government policy changes.

We first show that the assumptions made by Romer and Bernstein about monetary policy—essentially an interest rate peg for the Federal Reserve—are highly questionable according to new Keynesian models. We therefore modify that assumption and look at the impacts of a permanent increase in government purchases of goods and services in the alternative model. According to the alternative model the impacts are much smaller than those reported by Romer and Bernstein.

We then consider more realistic scenarios. We look at the impact when government spending follows the fiscal policy legislation enacted in February 2008 and we look at a scenario in which monetary policy is more responsive. For these scenarios the impact with the alternative model is even smaller.

## **II. The Problem with an Interest Rate Peg**

Romer and Bernstein assume that the Federal Reserve pegs the interest rate—the federal funds rate—at the current level of zero for as long as their simulations run. Given their assumption that the spending increase is permanent, this means forever. In fact, such a pure interest rate peg is prohibited in new Keynesian models with forward-looking households and firms because it produces calamitous economic consequences. As Thomas Sargent and Neil Wallace<sup>6</sup> pointed out more than thirty years ago, a pure interest rate peg will lead to instability and non-uniqueness in a rational expectations model. Inflation expectations of households and firms become unanchored and unhinged and the price level may explode in an upward spiral.

A permanent increase in government spending as a share of GDP would eventually raise the real interest rate. This is the mechanism by which other shares of spending

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<sup>6</sup> See Sargent and Wallace (1975). Though the Sargent and Wallace model assumes perfectly flexible prices the same results hold in models with sticky prices.

(consumption, investment, and net exports) would be reduced to make room for the increased government share. With the Fed holding the nominal interest rate constant at the current value near zero, and thus below inflation, the lower real rate would cause inflation to rise and accelerate without limit. Thus the combination of a permanent increase in government spending and the Fed setting the interest rate at zero would lead to hyperinflation.

If the combination of a permanent government spending increase and a zero interest rate peg were assessed by the Smets-Wouter model or, for that matter, any of the new Keynesian models, the economy's projected performance would reflect the aforementioned consequences. To achieve stability of output and inflation in such a model one must instead assume that, at some point, the federal funds rate is allowed to move above zero and respond to the state of the economy rather than be held fixed.

For the simulations presented here we therefore assume that the Federal Reserve only keeps the federal funds rate constant for a finite period of time after which it moves the interest rate depending on what is happening to the economy. We begin by assuming that it keeps the interest rate equal to zero and constant through 2009 and 2010 and then follows a standard monetary policy rule thereafter. Thus, in 2011, nominal interest rates will change somewhat and forward-looking households and firms will incorporate this monetary policy response in their decision making. Keeping interest rates constant for two years still does not seem very realistic and would likely result in an increase in inflation, but it is certainly more realistic than pegging the interest rates at zero forever, or even for four years.

### **III. Government Spending Multipliers: New Keynesian versus Old Keynesian**

Table 1 shows the response of real GDP to a permanent increase in government purchases of 1 percent of GDP in the new Keynesian model and contrasts these with the average of the two models of Romer and Bernstein. The simulations are done using a new database of macroeconomic models designed explicitly with the purpose of doing such policy

evaluation and robustness studies.<sup>7</sup> The increase in government spending is assumed to start in the first quarter of calendar 2009. The forward looking models require explicit assumptions about what household's and firms expect. Our assumption is that, as of the first quarter of 2009, people expect the government spending increase to continue permanently (as in the Romer-Bernstein policy specification), and that the spending increase is initially debt-financed. The Smets-Wouters model assumes that any increase in debt used to finance the increased government spending is paid off with interest by raising taxes in the future. We assume that these taxes are "lump sum" in the sense that they not affect incentives to work, save or invest. They do, however, lower future after tax earnings and thereby wealth. If we took such incentive effects into account the increase in government spending would eventually reduce real GDP. Hence, our assumptions err on the side of overestimating the size of the impact of government spending on real GDP.

**Table 1: Impact of a Permanent Increase in Government Spending by 1 Percent of GDP** (federal funds rate set to zero throughout 2009 and 2010)

	Percentage increase in real GDP				
	2009Q1	2009Q4	2010Q4	2011Q4	2012Q4
Romer/Bernstein	1.05	1.44	1.57	1.57	1.55
Smets/Wouters	1.03	0.89	0.61	0.44	0.40

Observe that the Smets-Wouters model predicts a much smaller boost to GDP than the estimates reported by Romer and Bernstein. The Smets-Wouters multiplier is smaller throughout the whole simulation period, and by 2011 is only about one-third the size of the Romer-Bernstein multiplier. The Smets-Wouters model also shows a rapid reduction in the size of the impact over time. Overall the Smets-Wouters impacts are very similar in size and

<sup>7</sup> The model database is described in Wieland, Cwik, Mueller, Schmidt and Wolters (2009) and used in a model comparison exercise by Taylor and Wieland (2008).

timing to those found in the Taylor (1993) model shown in Figure 1. In sum, the Romer-Bernstein estimates are much more optimistic in their GDP estimates than the alternative model considered here.

The Smets-Wouters model predicts that the increase in GDP by the end of 2009 is smaller than the increase in government expenditures itself; that is, the multiplier is less than one. Thus, the model predicts that government “stimulus” quickly produces a permanent contraction in private sector investment and/or consumption. Note that the magnitude of the contraction grows over time. By the end of 2012, for each dollar of “stimulus”, the flow of goods and services produced by the private sector falls by sixty cents.

#### IV. Alternative Assumptions about Monetary Policy

Table 2 shows what would happen if the length of time for which the federal funds rate is anticipated to remain constant is shorter and extends only through the end of 2009. In other words we now assume that the Fed starts following its feedback rule for policy starting in 2010 rather than waiting until 2011.

**Table 2: Impact of a Permanent Increase in Government Spending By 1 Percent of GDP (federal funds rate set to zero throughout 2009)**

	Percentage increase in real GDP				
	2009Q1	2009Q4	2010Q4	2011Q4	2012Q4
Romer/Bernstein	1.05	1.44	1.57	1.57	1.55
Smets/Wouters	0.96	0.67	0.48	0.41	0.40

The impacts in Table 2 are uniformly smaller through 2011 than those in Table 1 because interest rates can begin to increase earlier (in 2010 rather than 2011) accelerating the crowding out process in the new Keynesian model. Note that the differences between the Smets-Wouters simulations in Table 1 and 2 are not nearly as large as the differences between

either of these and the Romer-Bernstein impacts. In what follows we will continue with the assumption that the Fed can start to increase interest rates if necessary in 2010.

#### V. A More Realistic Path for Government Purchases

Although a permanent increase in government purchases of goods and services is a good way to understand the properties of a model, it is not a realistic description of the fiscal policy packages under consideration in the United States and other countries recently nor of the final \$787 billion fiscal stimulus package enacted and signed into law<sup>8</sup> on February 17, 2009. For example, about half of that fiscal stimulus package consists of transfer payments for unemployment assistance, nutritional aid, and health and welfare payments, and temporary tax cuts. In addition, the package does not provide for an immediate *permanent* increase in government purchases of goods and services. Most of the purchases authorized by the law are one-time and phased in, with the lion's share of the purchases completed within four years.

Table 3 shows the U.S. fiscal stimulus package's impact on the federal deficit and federal government purchases in billions of dollars. The government purchases column corresponds to the permanent increase in government purchases simulated and reported in Tables 1 and 2 except of course that it is not permanent. Observe that \$21 billion or just 2.1 percent of the total \$787 billion increase in the deficit spending occurs in fiscal year 2009, which is when the economy is expected to be weakest.<sup>9</sup> Federal purchases then increase in 2010, stay relatively steady for two years, and then begin to decline again in 2012. Since the stimulus bill is a mixture of increased transfer payments, tax refunds, and higher government purchases, the path for the deficit is different from the path of the increase in government purchases.

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<sup>8</sup> The official name of the legislation is The American Recovery and Reinvestment Act of 2009.

<sup>9</sup> The U.S. government's 2009 fiscal year runs from October 1, 2008 to September 30<sup>th</sup>, 2009.

One component of federal government transfers—certain transfers going to state and local governments—is similar to federal purchases in that the funds are to be used by the states to purchase goods and services. These intergovernmental transfers, which consist mainly of funds for education and public safety activities, are shown in the third column of Table 3. During the first three years, these government transfers exceed federal purchases. It is difficult to determine how much of the transfers to states and localities will ultimately result in an increase in spending on goods and services. States and localities might use some or all of the funds to avoid raising taxes or increasing borrowing. To the extent that they do, the transfer would not produce a net increase in government purchases of goods and services. Romer and Bernstein (2009) assume that 60 percent of these transfers go to purchases of goods and services. In keeping with that assumption, we consider in what follows the impact on GDP of an increase in government purchases equal to column 2 plus 60 percent of column 3 in Table 3. We assume that the path of purchases is constant for all the quarters within a fiscal year and that, as assumed Romer and Bernstein (2009), there is a one quarter lag in the effect of the increase of transfers to states and localities on their purchases of goods and purchases. We also experimented with other interpolation schemes but the results were not substantially different and we focus here on the simple constant level assumption.



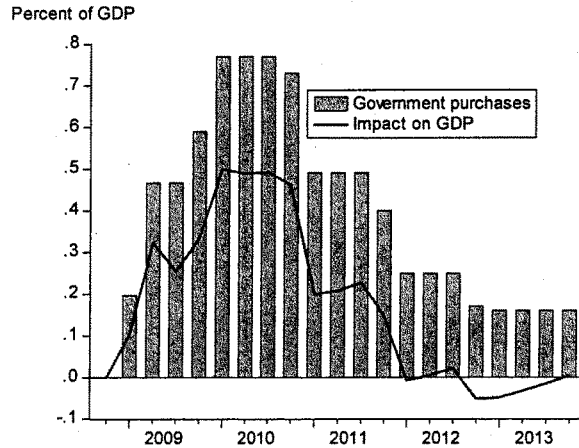
**Table 3. Increased Deficit, Federal Government Purchases, and Transfers to State and Local Governments for Purchases of Goods and Services in the February 2009 Stimulus Legislation (billions of dollars)**

<b>Fiscal Year</b>	<b>Increase in Federal Purchases</b>	<b>Increase in Transfers to States, Localities</b>	<b>Increase in Federal Deficit*</b>
2009	21	48	184
2010	47	107	400
2011	46	47	134
2012	36	8	36
2013	25	4	27
2014	27	0	22
2015	11	0	5
2016	-2	0	-8
2017	-3	0	-7
<u>2018</u>	<u>-2</u>	<u>0</u>	<u>-6</u>

Source: Authors' calculations derived from Congressional Budget Office, "Cost Estimate for Conference Agreement for H.R.1", February 13, 2009

\*Excludes impact of interest payments on the public debt incurred to finance the stimulus package.

Figure 2 presents the results of the simulation. The bar graph shows the increased government purchases as a share of GDP, and the line graph shows the impact of the increase in purchases on real GDP according to the Smets-Wouters model. The quarters in Figure 2 refer to the calendar year rather than the fiscal year. We show the results through 2013 even though we simulate the impacts over the full ten years.



**Figure 2. Estimated Output Effects of Government Purchases in the February 2009 Stimulus Legislation.** (Government purchases equal federal purchases plus 60 percent of transfers to state and local governments for purchases of goods and services)

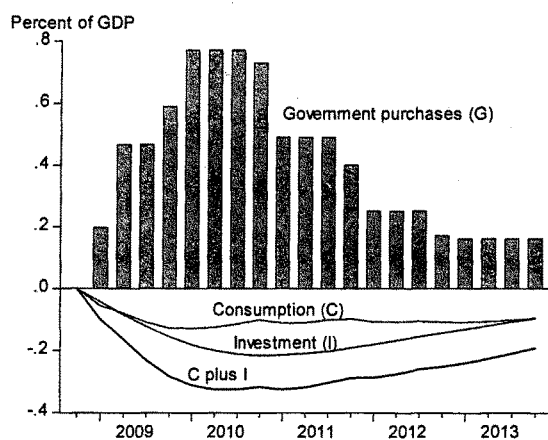
#### VI. Estimated Impacts

According to the Smets-Wouters model, the impacts of this package on GDP are very small. But particularly worrisome is that during the first year the estimated stimulus is minor and then even turns down in the third quarter. Why the very small effect in the first year?

The answer comes in part from the timing of the government expenditures and the forward-looking perspective of households. The small amount of government spending in the first year is followed by a larger increase in the second year. Households and firms anticipate the second year increase during the first year. They also anticipate that ultimately the expenditures will be financed by higher taxes. The negative impact of the delayed government spending and the negative wealth effect on private consumption of higher

anticipated future taxes combine to reduce the positive impact of the stimulus. As a result, the first-year GDP impact is initially small and turns down.

In the Smets-Wouters model there is also a strong crowding out of investment. Hence, both consumption and investment decline as a share of GDP in the first year according to the Smets-Wouters model. This negative effect is offset, as shown in Figure 1, by the increase in government spending in the first year, but it causes the multiplier to be below one right from the start. Figure 3 shows the impact on consumption and investment.



**Figure 3. Crowding Out of Consumption and Investment in the February 2009 Stimulus Legislation** (Government purchases are as in Figure 2)

Note that as the government purchases come back down in 2013, the multiplier turns negative. The declines in consumption plus investment are greater than the increases in government spending. Though not shown in Figure 2, the simulations show that the impact on GDP is negative for many years beyond 2013.

Because of the negative effects on consumption and investment, it is possible to get negative GDP multipliers in the first year with government purchases paths slightly different from those in Figures 2 and 3. For example, a sharper increase in government spending in the second year compared to the first leads to more crowding out of consumption and investment in the first year and the multiplier can turn negative. In fact, our simulations of the first stimulus bill passed by the House of Representatives in 2009 had this property, but changes by the conference committee and revised estimates of the path of government purchases by the Congressional Budget Office removed the negative multiplier.

There is a large literature on whether an increase in government spending reduces consumption and investment in real business cycle models, and the literature carries over to some degree to new Keynesian models with sticky prices and wages like the Smets-Wouters model. See Coenen and Straub (2005) for a discussion and references to many other contributions. In the standard real business cycle model government spending has a negative wealth effect. Households consume less. Investment also declines.

A possible criticism of new Keynesian models like the Smets-Wouters model is that they are not Keynesian enough, because they assume that all households are forward-looking and optimize their spending decisions. Some have suggested that one should allow for the possibility that some households follow “rules of thumb” like the original Keynesian consumption function with a high and constant marginal propensity to consume. Others have suggested that one should assume that many households are constrained to consume all their current income. See for example, Gali, Lopez-Salido, Valles (2007). However, Coenen and Straub (2005), show that it is empirically unlikely that an increase in government spending crowds in consumption even with such assumptions. There are two reasons: the estimated share of constrained households is relatively low and the negative wealth effects induced by government spending shocks are large.

Although some might worry that new Keynesian models are faulty because they miss old Keynesian rule-of-thumb or constrained consumers, we note that the Smets-Wouters model is estimated and it fits the data well. People might also worry that the small and negative multipliers depend on assumptions about monetary policy responses and the particular time profiles of fiscal spending packages. It is for this reason that we have used actual data on fiscal policy and realistic assumptions about monetary policy.

It is also possible to criticize new Keynesian models such as Smets-Wouters because they are too Keynesian. In contrast with real business cycle models, the estimated new Keynesian models assume “sticky prices” by introducing staggered price and wage setting. But as Chari, Kehoe, and McGrattan (2009) have emphasized the models go further in the Keynesian direction by assuming “the backward indexation of prices” in “a mechanical way” which amplifies Keynesian aggregate demand effects of policy.

## VII. Impacts of an Entire U.S. Stimulus Package

Although the simulations in this paper have focussed on government spending multipliers in the case of changes in government *purchases* of goods and services, it is possible to say something about the impact of a the broader U.S. fiscal stimulus package, which also includes tax rebates and one-time transfer payments to individuals. For this purpose we focus on the impact in the fourth quarter of 2010 where the size of the increased government purchases (including 60 percent of transfers to states and localities for this purpose) is .73 percent of GDP and the impact on GDP is .46 percent, implying a multiplier in that quarter of .63 ( $=.46/.73$ ). We choose this quarter for two reasons. First, as shown in Figure 2, it is close to the quarter of maximum GDP impact, so by choosing this quarter we will in no way be understating the results. In fact, the impact declines sharply after this quarter. Second, this is the quarter for which Romer and Bernstein (2009) report their

widely-cited calculation that the fiscal stimulus package of February 2009 will increase GDP by 3.6 percent and employment by 3-1/2 million. Hence, the last quarter of 2010 is useful for comparison purposes.

As Table 3 shows, the deficit (excluding interest payments) increases by more than the increase in government purchases in fiscal year 2009 through 2011. The lion's share of the difference between the deficit and purchases, 80 percent, consists of temporary tax rebates and entitlement benefits for unemployment insurance, Medicaid benefits, health insurance subsidies, and cash welfare payments. The fourth quarter of 2010 (calendar year) is the first quarter of fiscal year 2011. In fiscal year 2011, the deficit minus purchases is \$41 billion ( $=134-93=41$ ). However, this is a large decrease from fiscal year 2010 where the difference is \$246 billion ( $400-154=246$ ). So for the purpose of estimating the impact of the broader package in 2010Q4 (calendar) we take the average of fiscal year 2010 and 2011, or the average of 41 and 246, which is \$144 billion or about 1 percent of GDP.

How much of this "non-government-purchases" increase in the deficit should we add to government purchases to compute the impact on GDP? To the extent that the tax rebates and transfers to individuals are temporary, permanent income theory, even in the presence of liquidity effects, says that the impact on consumption and thereby aggregate demand will be small. Although there is a great deal of uncertainty, a review of the literature over the years suggests that the marginal propensity to consume for such tax and transfer payments is at most 0.3, though it will depend on timing, expectations, and other factors. Recent aggregate evidence suggests that it may be much smaller. For example, an examination of the Economic Stimulus Act of 2008 indicates that the impact of the tax rebates on consumption was insignificantly different from zero.<sup>10</sup> Transfers to individuals, such as entitlement payments for unemployment compensation, and health and welfare benefits, could be expected to have an effect on consumption similar to temporary tax rebates. Although such

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<sup>10</sup> The estimated regression coefficients reported in Taylor (2009) are not statistically different from zero.

payments may temporarily boost household income, they also create employer incentives for layoffs and for household members to delay their return to work. In sum, in our view, a coefficient of .3 for the impact of these tax and transfers payments on consumption is likely an upper bound and certainly a generous assumption about the size of the impact.

In any case, by assuming that the impact on consumption of the extra 1 percent discretionary increase in the deficit is .3 percent of GDP and using the above mentioned multiplier of .63 the impact will be to increase GDP by an additional .19 percent. If we add this to the .46 percent GDP increase from purchases, the total impact will be to increase GDP by .65 percent in the fourth quarter of 2010 compared to what it would otherwise be.

Romer and Bernstein (2009) calculated that the impact of the 2009 stimulus package would be to raise GDP by 3.6 percent by the fourth quarter of 2010, which is 6 times greater than our calculation based on the new Keynesian model simulations of the impact of purchases and a generous assessment of the impact of tax rebates and temporary transfers.

Romer and Bernstein (2009) also give an estimate of the increase employment from the fiscal package. They assume an additional 1 million jobs for each 1 percent increase in real GDP. Thus they estimate an increase of 3-1/2 million jobs as a result of the fiscal policy package enacted in February 2009. Using the same method our estimate is closer to ½ million additional jobs. To put that smaller number into perspective it is less than the 598 thousand payroll jobs lost in the single month of January 2009 while the fiscal policy packages were being debated.

Romer and Bernstein also report job estimates in a number of private sector industries which would have to be radically scaled down if the numbers we have calculated are correct. In addition, our finding of crowding out of private consumption and investment due to the increase in government purchases raises doubts about the estimate that 90 percent of the jobs will be created in the private sector. Indeed, with the impact of government purchases on

GDP (.46) nearly three times greater than the impact of tax rebates and transfers on GDP (.19), a net decline in private sector jobs is likely.

### VIII. Conclusion

In this paper we used a modern empirical approach to estimate government spending multipliers, and we contrasted these multipliers with those that have recently been used in practice to analyze fiscal policy in the United States. We focused on an empirically estimated macroeconomic model—the Smets-Wouters model—recently published in the *American Economic Review*. As attested by leading macroeconomic researchers, such as Michael Woodford in his recent survey, this model well represents new Keynesian macroeconomic thinking of the kind that many macroeconomists now teach their graduate students and use in their research.

We find that the government spending multipliers from permanent increases in federal government purchases are much less in new Keynesian models than in old Keynesian models. The differences are even larger when one estimates the impacts of the actual path of government purchases in fiscal packages, such as the one enacted in February 2009 in the United States or similar ones discussed in other countries. The multipliers are less than one as consumption and investment are crowded out. The impact in the first year is very small. And as the government purchases decline in the later years of the simulation, the multipliers turn negative.

The estimates reported here of the impact of such packages are in stark contrast to those reported in the paper by Christina Romer and Jared Bernstein. They report impacts on GDP for a broad fiscal package that are six times larger than those implied by government spending multipliers in a typical new Keynesian model and our calculations based on generous assumptions of the impacts of tax rebates and transfers on GDP. They also report job estimates that are six times larger than these alternative models, and the impacts on



private sector jobs are likely to be at variance with the alternative models by an even larger amount. At the least, our findings raise serious doubts about the robustness of the models and the approach currently used for practical fiscal policy evaluation.

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## PREPARED STATEMENT OF REPRESENTATIVE ELIJAH E. CUMMINGS

I'm saddened, though not surprised, by the latest job loss numbers. In February we heard the staggering totals of 660,000 jobs lost. Today we find out that 663,000 more jobs were lost in March.

The labor statistics know no sector bounds either. While layoffs began in the early months of the recession in the housing and construction and manufacturing sectors, we're now seeing enormous job loss and mass layoffs in the employment services and professional services sectors.

Further, we find that our silver lining—the increase in home sales—is just another storm cloud. The home price index shows prices are still falling, and a sizeable portion of new home sales are being made at distressed prices.

Finally, economists predict that unemployment rates will continue to rise before the recession is over—with the Congressional Budget Office saying the rate could reach as high as 9.4 percent.

Today's announcement of an 8.5 percent unemployment rate only confirms CBO's dark predictions.

Those out of work are staying out of work longer, and those lucky enough to have jobs often only work part-time, due to the want for full-time jobs.

In February the unemployment rate would have been 14.8 percent if we had included those folks who were in part-time positions but wanted to work full time.

I see the impact of the suffering that these numbers add up to produce in the lives of my constituents every day.

The financial markets have been in such disarray that these hard-working people are suddenly unable to retire.

After 30-year careers as civil servants, teachers, secretaries and bus drivers in Baltimore, they have earned the right to a decent and dignified retirement. Suddenly they are working with no end in sight.

Many of my constituents are also struggling to hang on to their homes. I have an employee in my district office who spends 100 percent of her time helping constituents with mortgage issues.

These are honest people who are not in default on their mortgages. They are not speculators or investors. They are fighting to get by, and they need help to save their homes.

My only comfort in this rising tide of bad news is that we have taken decisive action. We know the reality is that the capital markets are not going to heal themselves, and not in any way that is fair to all Americans.

So, I'm proud to have voted with so many of my colleagues for the American Recovery and Reinvestment Act, which constitutes a bold stroke that will help revive our domestic economy.

Unlike like the fat cats on Wall Street, I'm here on planet earth. We have to face facts. The research suggests that stimulus money takes time to show up in the economy.

But it will show up. And I'm confident it will create jobs and help our constituents stay in their homes.

So, while things may get worse before they get better, I know that we are on the right track toward helping all Americans.

Thank you, Madam Chair. I yield back.