Prospects for Employment: Evidence from Prior Recoveries

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I am very pleased to be back at this important event, focused on the economy in the year ahead. I thank Jim Smith for that generous introduction, and the CBIA and the MetroHartford Alliance for inviting me to share my perspectives with you.[*]

As we begin a new year, financial markets are in a much better state than they were a year ago. Interest spreads reflecting a "panic premium" on risk have narrowed to more normal levels, markets have resumed much more normal trading patterns, and the Federal Reserve is likely to be able to wind down many of its emergency lending

[*] *Of course, the views I express today are my own, not necessarily those of my colleagues on the Board of Governors or the Federal Open Market Committee (the FOMC).*

facilities without any adverse impacts, as soon as next month – as the Federal Open Market Committee affirmed in its statement last month.

But despite the improvement in *financial* conditions, the recovery in the real economy has proceeded more slowly – with the declines in the first half of 2009 turning to slow but positive growth in the third quarter, and what appears to be stronger growth in the fourth quarter. This is resulting, in part, from firms less aggressively cutting inventories as their sales prospects improve.[1]

In sum it seems to me that growth will be positive, but slow enough that unemployment remains much higher than I would like. I would be happy if in hindsight it is clear I have been too pessimistic. But as I see it, the economy faces three significant "headwinds."

First, while the banking *crisis* has passed, banking *problems* remain. Most economies that experience significant banking problems have been slow to recover, and that is likely to be true this time in the U.S. Loans at banks have declined over the past several quarters, as many businesses are constrained by their balance sheets and reluctant to take on new debt.[2] Many banks are also concerned with *their* balance sheets – and particularly their capital ratios[3] -- and have restrained their terms of lending to avoid taking on too much additional risk, given that they are still working through problems with existing loans.

Second, consumers and businesses will likely remain cautious – which is consistent with positive but slow growth. Consumption will continue to be subdued, as consumers are fully aware that housing prices are well off their peak, unemployment rates are high, and home foreclosures are continuing. Consumer caution and the desire to

rebuild savings will likely result in some increase in the savings rate, which is of course good in the long run but dampens growth in the short term. Many businesses seem likely to only gradually expand investment, at least until they are more confident that the economy will continue expanding even after some of the stimulative government support winds down. Also, many businesses may be limited in how much external funding they can raise.

The third headwind involves the fact that recessions this severe have broader ramifications for labor markets. Workers become discouraged and leave the labor force, while the skills of workers that are unemployed for long periods may atrophy, and new entrants in the labor market often have to settle for jobs at levels below what they would be offered in a more robust economy.

Indeed, to most Americans, economic prospects are better measured by an expansion of *jobs* rather than growth in GDP. So I would like to spend the rest of my time with you reviewing some of the patterns we have seen in labor markets during early stages of previous recoveries. Of course, given the severity of this recession, consumer and business behavior this time may be somewhat more restrained than in past recoveries.

To reveal a bit of the "punch line," my conclusions from the analysis I am about to walk through are that the employment response in the last two recoveries was much slower than it was in the two earlier recoveries in the 1970s and 1980s.[4] And unfortunately the financial headwinds, lingering labor market problems, and a cautious attitude of consumers and businesses in the wake of the financial crisis make it likely that recovery in employment terms will also be slow this time.

Unfortunately, I expect a rather slow recovery in output, *and* a rather slow recovery in employment *given* the level of output growth – and I will explain why, this morning. But since unemployment is so fundamentally important, I think it is good to study our labor markets and earlier recovery periods so policymakers, businesses, and workers can anticipate and adapt to the experience we are likely to see.

In addition, I would note that during the early phases of a recovery, improvements in unemployment tend to lag those in the economy. But the strength of the recovery is partly dependent on *how confident* businesses and consumers are becoming that the economy will be able to grow fast enough for tangible progress in labor markets and the recovery will become self sustaining.

Employment Patterns in the First Year of Recovery

Allow me to walk you through a few slides that help illustrate employment patterns in the first year of recoveries.

GDP growth in the just-completed fourth quarter of 2009 looks like it will prove to have been stronger than in the third quarter, a result largely driven by businesses bringing their significant inventory draw-down to a close.

As shown in **Figure 1**, this is not unusual for the first year of a recovery. Consider the following logic. The difference between real GDP and real final sales is the change in inventories. In the first year of the recovery from the four previous recessions, real GDP grew faster than real final sales. This shows how the normalizing of inventories has been an important source of economic growth in the early stages of most recoveries.

The figure shows that the smallest inventory response was in the recovery in the early 1990s. Since inventories are often bank-financed, so-called headwinds provided by the troubles in the banking system that result in credit constraints are, unfortunately, a potential source of restraint on inventory replenishment now, as then. Indeed, research I have done with colleagues Joe Peek and Geoff Tootell confirms that inventory buildup tends to be more restrained during periods of significant banking problems.

Thus today, as in the early 1990s, inventory levels became quite low during this recession as businesses prepared for the worst, and I expect that inventory buildup will be an important source of growth – but also that it will likely be more restrained than one might have otherwise expected, because of tighter credit conditions.

Figure 2 shows that the past two recoveries did not feature job growth in the first year of the recovery, in sharp contrast to the recoveries of the 1970s and 1980s. The past two recessions had positive *economic* growth in the first year of the recovery, but it was not rapid enough to generate *job* growth. In contrast, in the recoveries in the 1970s and 1980s, growth was sufficient to yield *employment* growth in the first year of the recovery.

Figure 3 illustrates another pattern typical of recoveries. While there has been a longstanding downward trend in the average weekly hours of production workers, it is common for average hours to decline more steeply during a recession. Note that in prolonged recessions, where the shading is the widest, average weekly hours decline more significantly – as workers are placed on shortened work weeks.

As the economy begins to recover, businesses will restore the hours of such workers before hiring additional new workers. Note that in our current recession, there

was a significant decline in the hours of production workers, which are just beginning to show signs of a rebound.

Another harbinger of a recovery in employment is growth in temporary services. Firms often extend work weeks and hire temporary workers before committing to hiring permanent workers. As **Figure 4** highlights, the use of temporary workers fell quite dramatically during the recession, but has been rebounding more recently. Of course temporary jobs reduce the unemployment rate, and provide a needed bridge for workers looking for, but not yet finding, more permanent employment. But when businesses become more confident of the strength of the recovery, they will begin to hire permanent workers rather than rely on temporary workers.

Labor-Market Dynamics that Impact Employment Growth

Now I would like to explore with you some of the labor-market dynamics that will likely restrain employment growth in this recovery.

The severity of a recession can have a significant impact on how quickly firms resume hiring. As **Figure 5** shows, this recession was quite severe in a number of respects. This recession was much longer than typical, making it difficult for those that lost their jobs to find employment. Research has highlighted the fact that workers that have been unemployed for extended periods can have significant difficulty being rehired. It may be that their skills atrophy, or just that their sector of the economy is particularly hard-hit. And potential employers may worry about the underlying reasons for the long unemployment spell.

As shown in the figure, currently the percentage of the unemployed who have been out of work for 27 weeks or more is much higher than in previous recessions, at just under 40 percent. This is likely to be one impediment to our seeing significant, speedy declines in unemployment.

The next set of challenges is related to the lack of business confidence that I cited earlier. Businesses are most likely to hire new workers when they are confident that their sales and orders will increase significantly for an extended period of time. Absent this confidence, businesses have at their disposal several alternatives for deploying more labor without incurring all the costs entailed in new hires.

The first of these alternatives is reflected in the blue line in **Figure 6**. Roughly 6 percent of the labor force is working part time for reasons related to the economy. Such a high percentage of workers being placed on part time work schedules is, as you can see in the figure, much higher than in the past two recessions – and was last at these levels in the 1980s.

Many workers reflected in these data had their schedules reduced to part time because employers want to retain them but did not have sufficient work to keep them on full time. Before an employer is likely to do any significant new hiring, they will usually return these workers to full time work. While that defers new hiring, it does of course mean additional income for the worker.

A second alternative to permanent hires is evident in the data for weekly overtime, which declined quite significantly during this recession, as shown in **Figure 7**. Businesses frequently will not only restore the aforementioned workers to full time status, but also begin incurring overtime before making the investment in new hires.

While there has been some rebound in overtime work, you can see in the figure that it remains well below pre-recession levels.

A final alternative to employment growth is improving the efficiency of the existing work force. In recent quarters, employers have found ways to produce more goods with fewer workers. While a more productive work force is very good news for the economy in the long run, it lessens the need for hiring in the short run.

The combination of these labor market challenges and the headwinds from problems in the banking sector make it quite likely that the unemployment rate will decline only gradually. While layoffs are subsiding, in sum it seems that new hiring is likely only after employers more fully utilize existing employees.

Industry Patterns

Now I would like to share some thoughts on various industries and recoveries.

Figure 8 shows the changes that have occurred in the industrial mix of employment over the past 30 years. Overall, much less of the work force is employed in manufacturing, which has fallen from 21 percent of the work force to only 9 percent of the work force now. The two areas that have increased significantly are professional and business services, and education and health services – both areas that have tended to be less responsive to economic downturns.

Given the difficulties in predicting overall employment trends going forward, it is even more difficult to determine which industries are likely to be engines of growth. However, it is instructive to see which industries, in the past, have tended to grow in the first year of a recovery.

Figure 9 shows four industries that have tended to perform well in the first year of a recovery – professional and business services, education and health services, leisure and hospitality, and to a lesser extent government. The first three are areas that have increased their share of total employment, and all have tended to be less sensitive to economic downturns.

While it is quite possible that these areas will grow in the initial stages of this recovery, that growth is likely to be restrained by various factors. In education and health services, there is the matter of the significant retrenchment in college endowments, and uncertainty as national health reform proposals are debated in Washington. Government spending grew modestly in the first year of the past recoveries from recessions. This time, however, the outlook for government employment remains quite dim – as federal, state, and city governments struggle with rather severe revenue shortfalls and budget issues.

Professional and business services, and leisure and hospitality, have often increased employment in the first year of a recovery; however, the degree has been significantly less in the past two recoveries compared to the 1980s (and in fact negative for professional and business services in 2001-2002). The strength in these sectors this time around will depend on how quickly consumer and business confidence returns.

Figure 10 highlights industries that have had more mixed results in the first year of a recovery and are uncertain this time as well. While construction employment will be restrained by low housing prices and elevated foreclosures – and commercial construction employment is restrained in many areas by falling commercial real estate

prices and high vacancy rates – employment levels in these sectors have experienced such significant declines that we may still see some rebound.

The behavior of the consumer will help determine employment in manufacturing and retail trade. It is unclear how willing consumers will be to increase spending once the government's various stimulus programs abate. If consumption is relatively restrained, as many expect, then these sectors are not likely to hire significantly until consumers become more confident. On the bright side, though, a potential upside to manufacturing employment is the strong growth occurring in some emerging economies and prevailing exchange rates that favor U.S. exports.

Concluding Observations

To sum up my remarks and conclude, I think we can gain insights on this recovery from the experience and trends of the past. Certainly for economies that experience substantial financial shocks, recovery is normally quite slow. While inventory rebuilding will likely provide some spark, the strength of underlying demand as government stimulus subsides is an open question.

The employment picture overall has improved, and the outlook is certainly much brighter than one year ago. Layoffs are abating, although many firms are not yet ready to do new permanent hiring. Any significant hiring will likely have to wait while current labor resources are more fully utilized.

So it appears that this recovery will likely experience only a slow improvement in the employment picture, and that the unemployment rate will remain quite elevated during the early phases of the recovery. GDP growth is expected to be strong enough to

produce some employment growth, but that rate of employment expansion will not likely be rapid enough to put a large dent in the unemployment rate.

Our research and analysis at the Boston Fed suggests that with significant capacity in labor markets, wages and salaries and the ability of businesses to increase prices are all likely to be restrained, resulting in little immediate inflationary pressures. In my view this should allow for accommodative monetary policy to continue to support the economy until the underlying demand of consumers and businesses becomes self-sustaining.

Thank you again for inviting me to speak with you today. I do wish each of you solid improvements in your businesses in the year ahead, and better economic times for all New Englanders as the recovery proceeds. Thank you.

NOTES:

[1] While most private forecasters have inventories declining in Q4 of 2009 and Q1 of 2010, the decline is projected to be at a slower rate (i.e., firms *cutting less* from their inventories), thus adding to GDP growth.

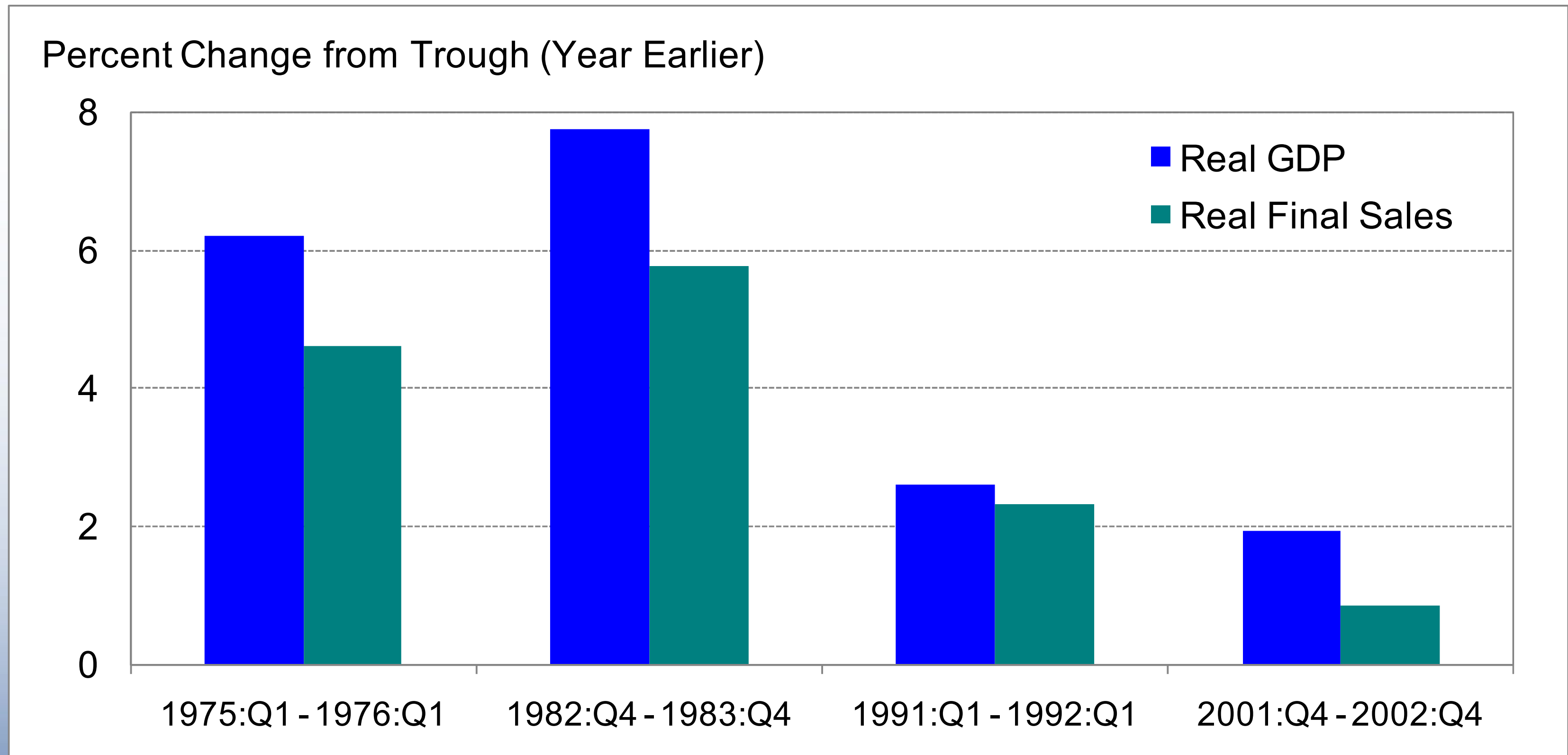
[2] In a recent speech, Federal Reserve Governor Elizabeth Duke noted that "the decline in bank loans outstanding has been stark. For example, our data show that total loans on banks' books fell at an annual rate of more than 11 percent during the third quarter of 2009, with all major loan categories contributing to the decline…" She goes on to describe a number of factors at work in explaining the reduction in bank loans in her remarks, available at http://www.federalreserve.gov/newsevents/speech/duke20100104a.htm.

[3] As I have noted in prior talks, the losses of capital and de-leveraging of balance sheets at financial institutions serve as a drag on the economy, as financial institutions focus on restructuring their balance sheets with the consequent tightening of lending standards. Recall that a loan is counted as an asset on a bank's balance sheet. Banks hold capital in part to reserve against the possibility that a loan defaults, and must maintain a reasonable ratio of capital to assets. If a bank experiences a reduction in the value of its capital, it must take steps to shrink the asset side of its balance sheet in order to restore its desired capital-to-assets ratio. The bank

becomes more restrictive in its lending – no small matter for the broader economy when you consider that, thanks to leverage, when a bank's capital declines, the bank must reduce its loans by much more to maintain its capital-to-assets ratio. In addition to this state of affairs, often referred to as a "credit crunch," a new and unwelcome wrinkle occurred in many short-term credit markets during the recent financial turmoil − something you might call a "liquidity lock." By liquidity lock, I mean extreme risk aversion by many investors and institutions, which makes short-term financing difficult to come by for even the most creditworthy firms – even financing for very short maturities, measured in days. *See "The Impact of Financial Institutions and Financial Markets on the Real Economy: Implications of a 'Liquidity Lock'", delivered at The University of Wisconsin – Madison in October 2008 (available at http://www.bos.frb.org/news/speeches/rosengren/2008/100908.htm*

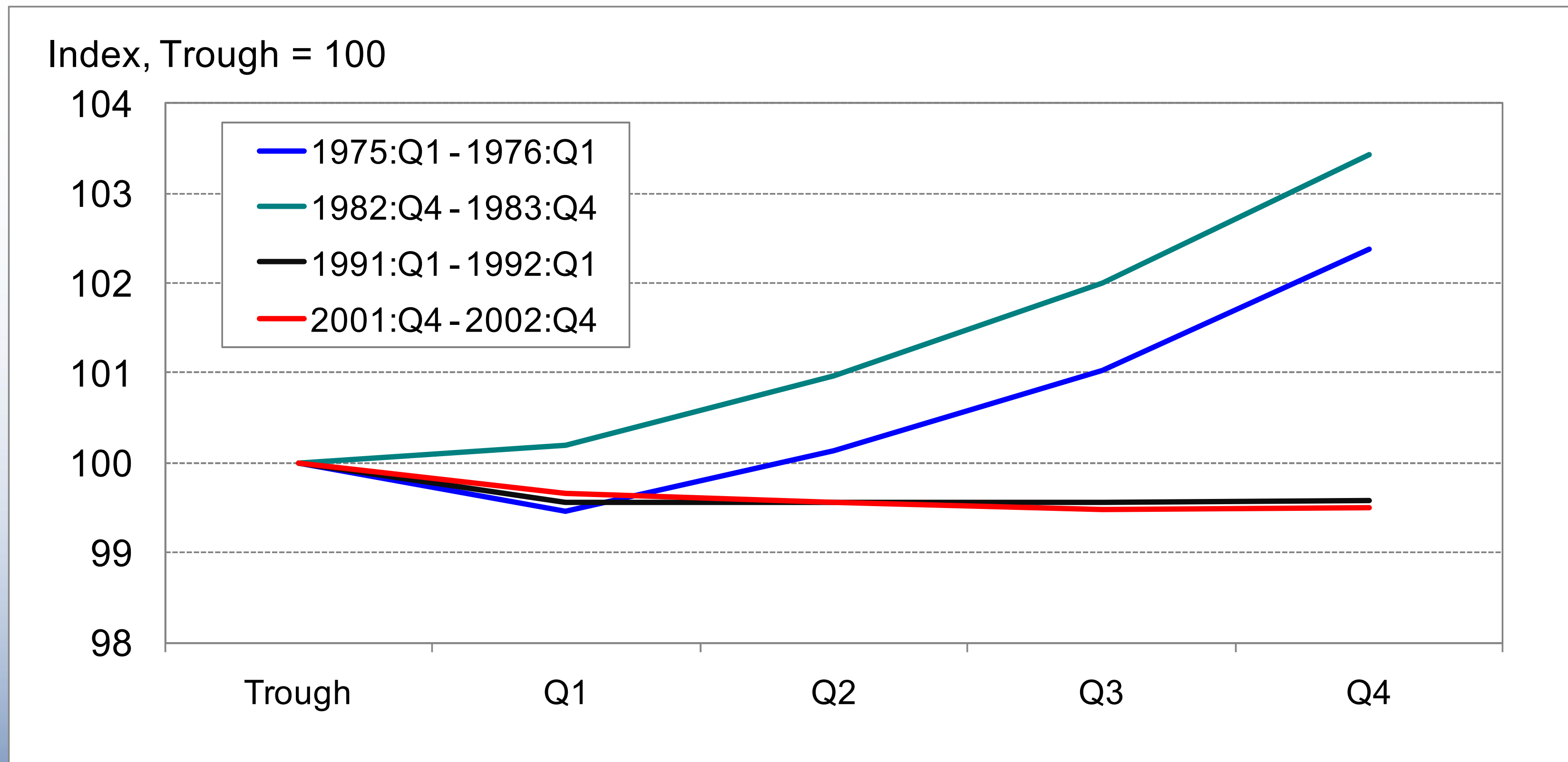
[4] As is often done, here we lump the very brief 1980:Q2 "credit" recession with the 1981-82 recession.

Figure 1
Real Growth in First Year of Recovery



Source: BEA, NBER / Haver Analytics

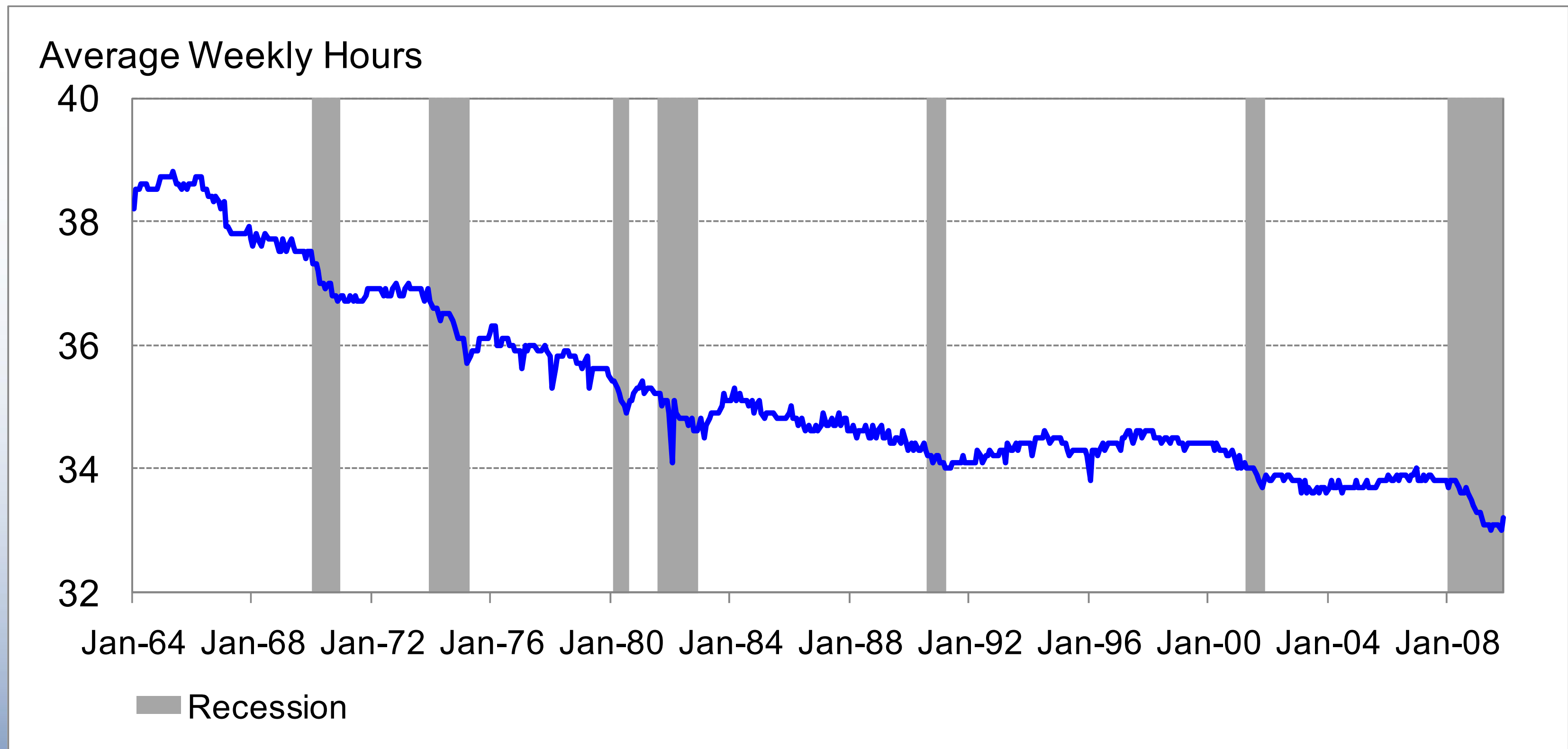
Figure 2
Employment Growth in First Year of Recovery



Source: BLS, NBER / Haver Analytics

Figure 3
Average Weekly Hours of Production and Nonsupervisory Workers

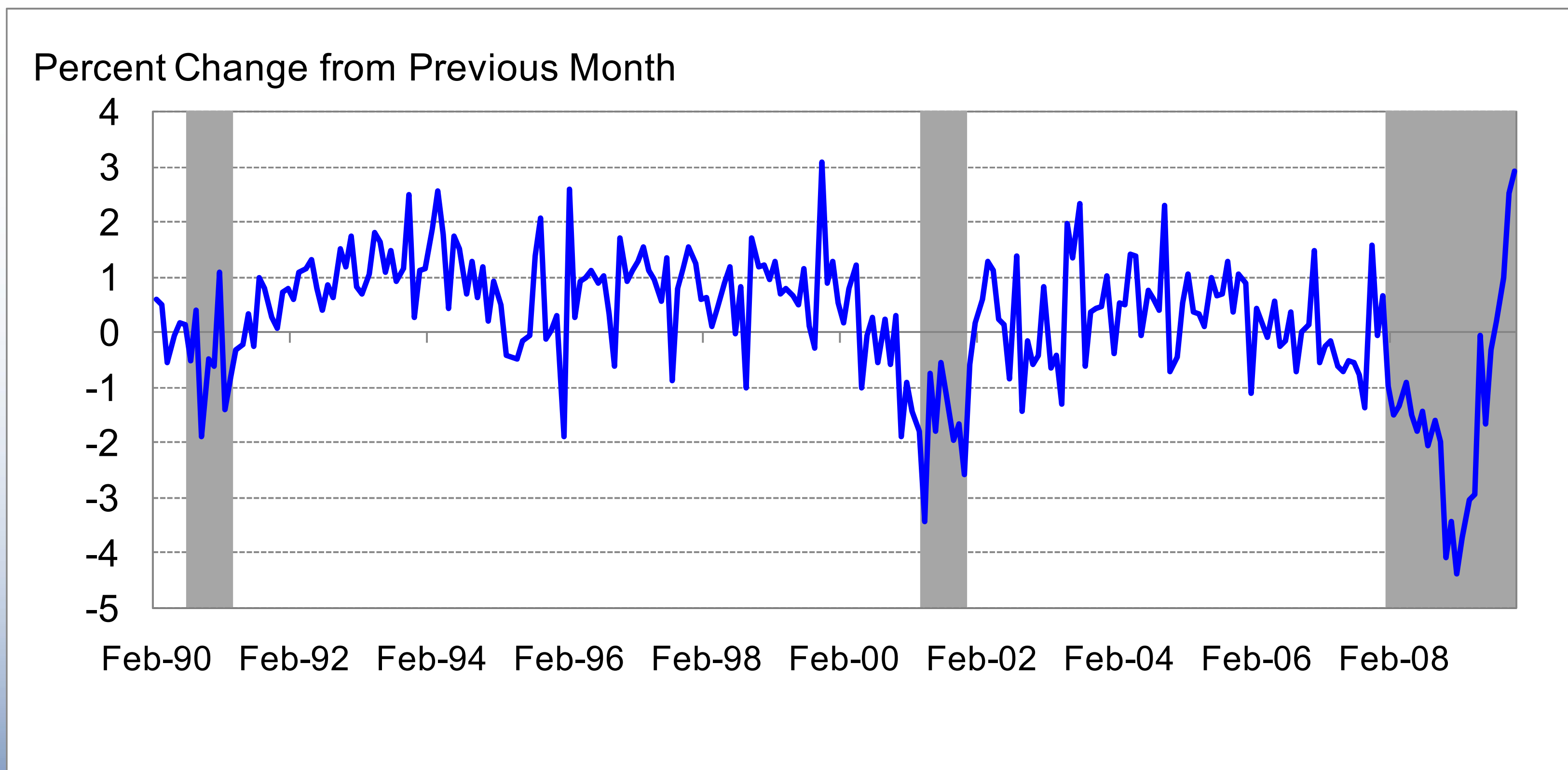
January 1964 – November 2009



Source: BLS, NBER / Haver Analytics

Figure 4
Growth in Temporary Help Services Employment

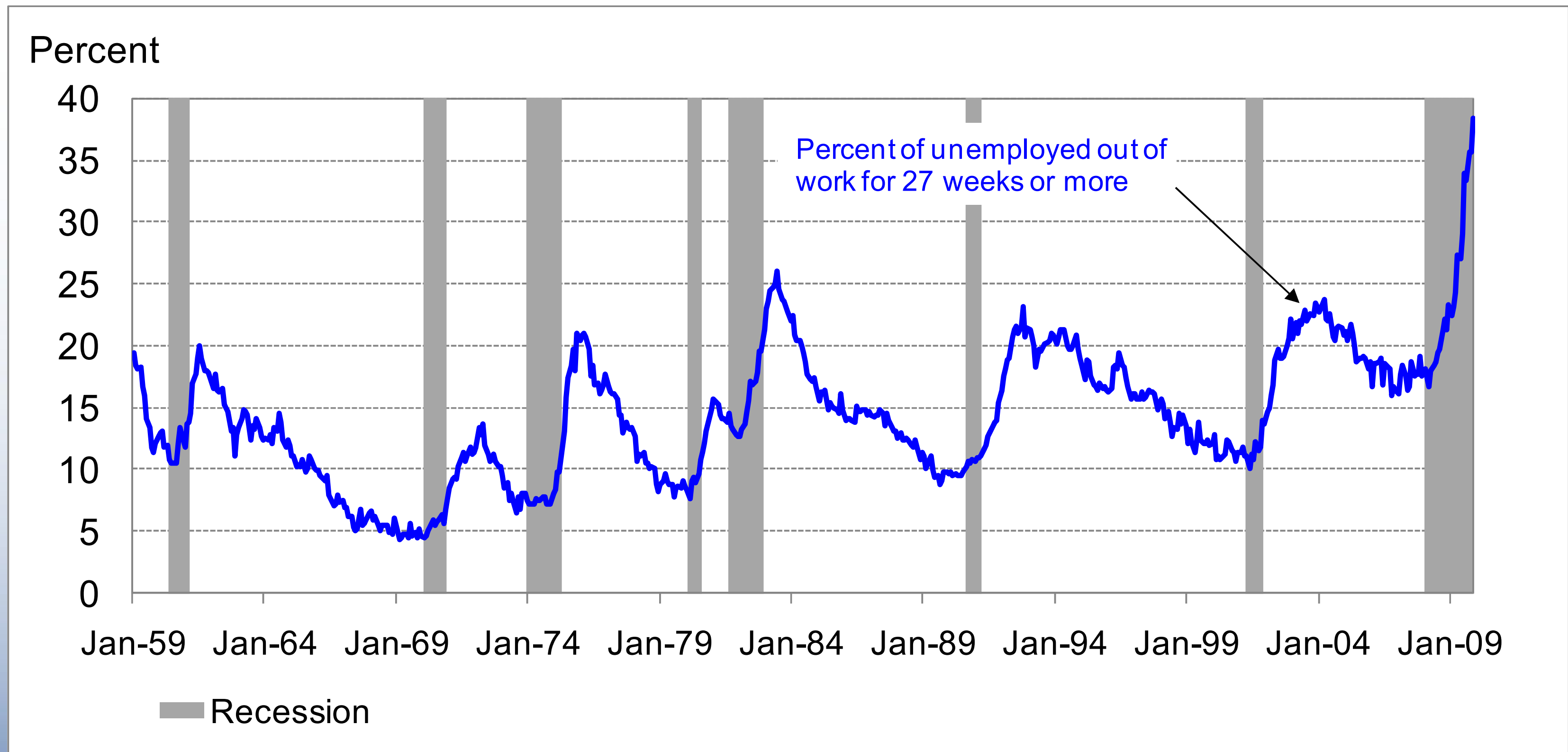
February 1990 – November 2009



Source: BLS, NBER / Haver Analytics

Figure 5
Employment Challenges:
Percent Unemployed for 27 Weeks or More

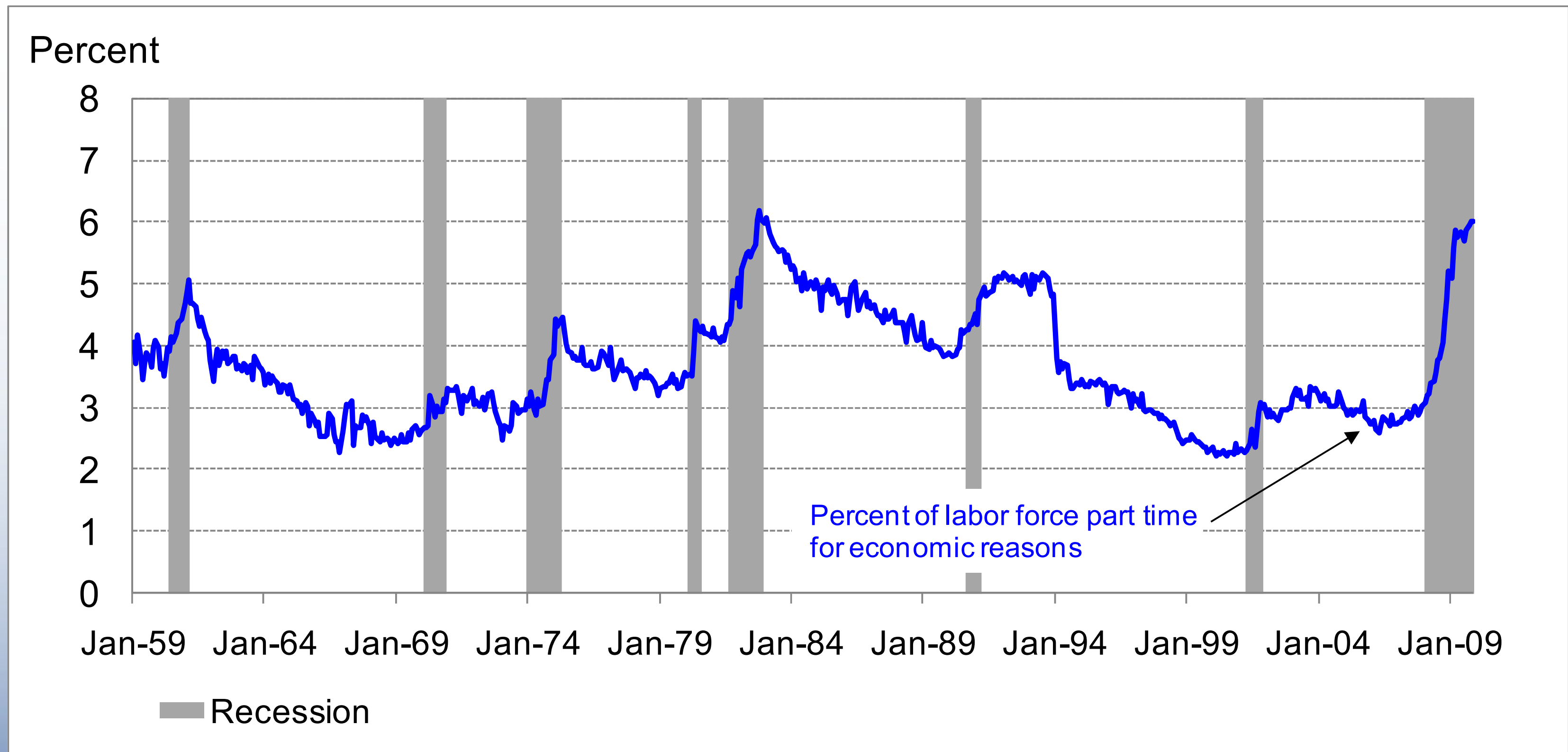
January 1959 – November 2009



Source: BLS, NBER / Haver Analytics

Figure 6
Employment Challenges: Percent of Labor Force Part Time for Economic Reasons

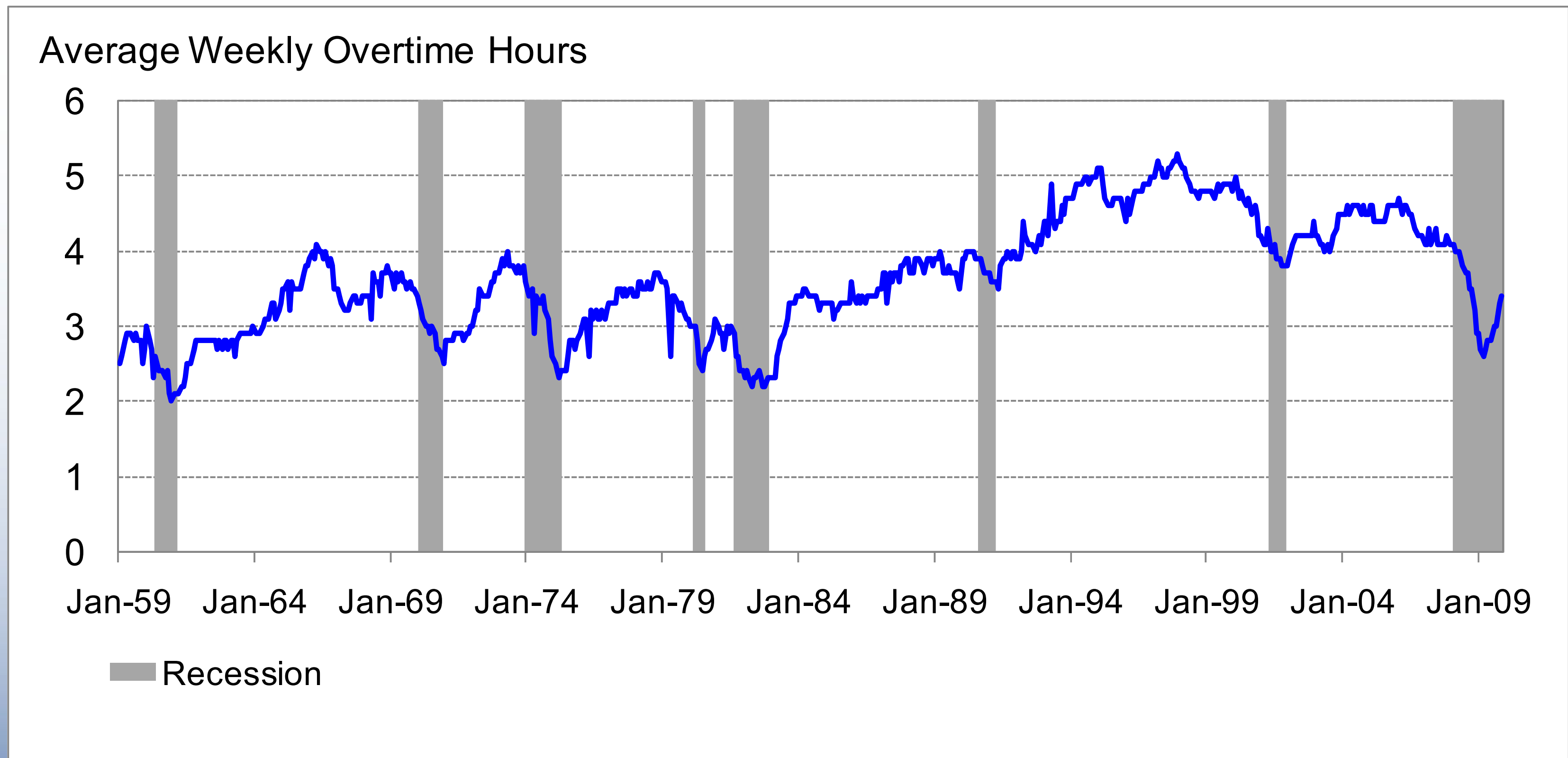
January 1959 – November 2009



Source: BLS, NBER / Haver Analytics

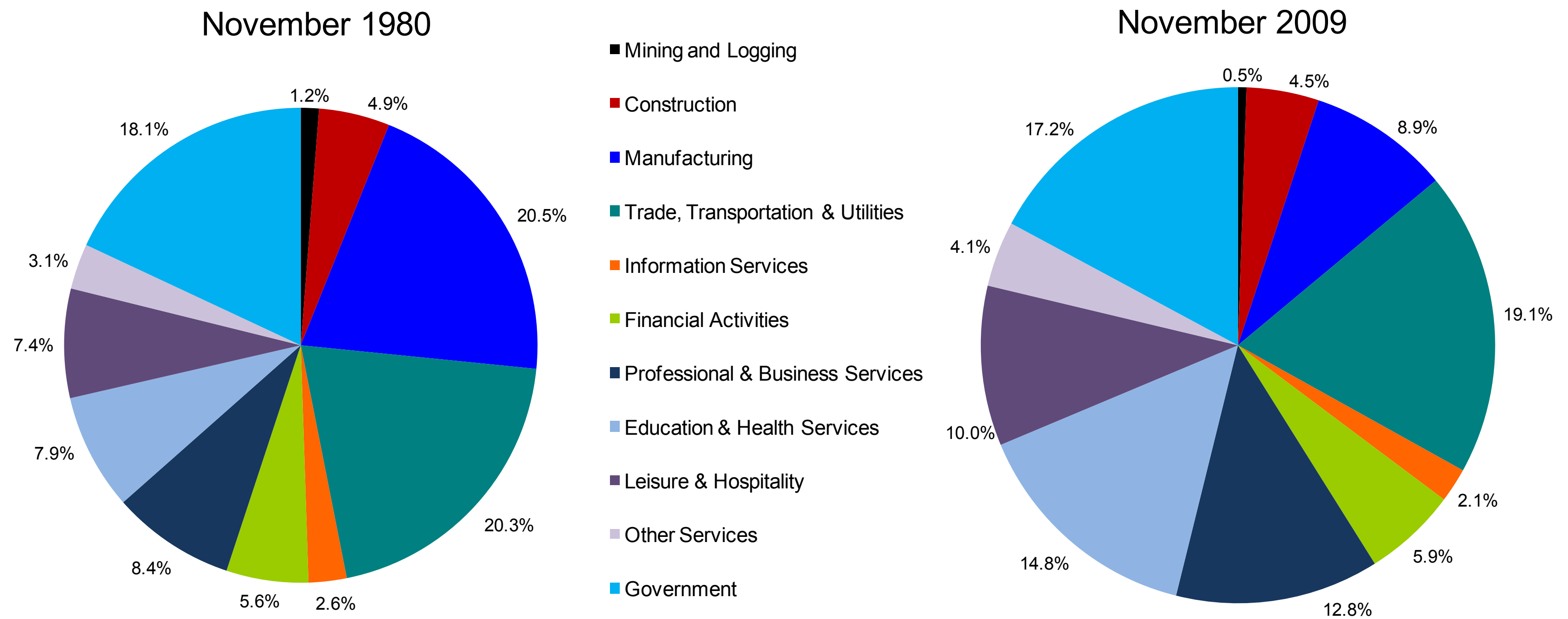
Figure 7
Average Weekly Overtime Hours of Production and Nonsupervisory Workers

January 1959 – November 2009



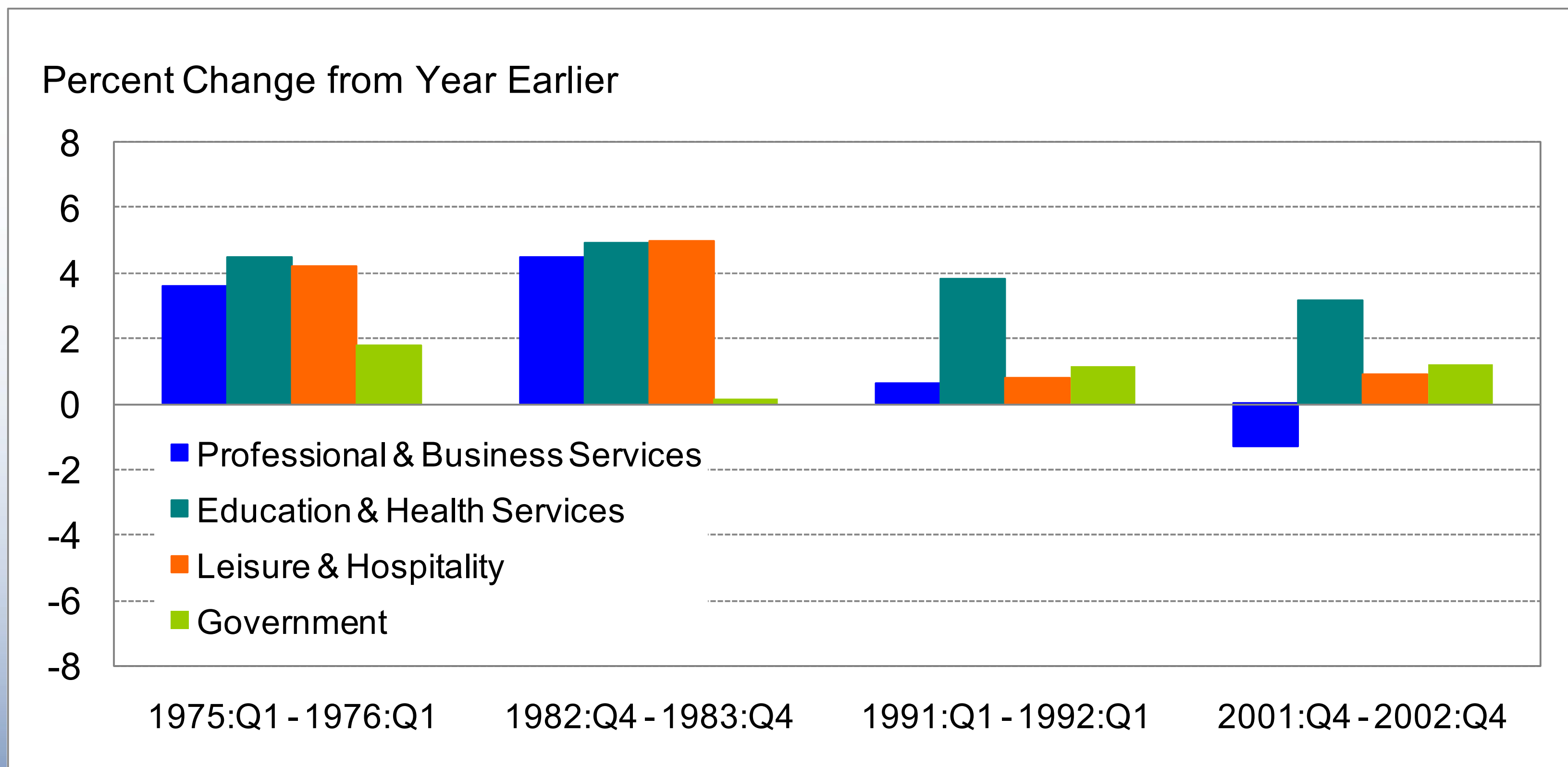
Source: BLS, NBER / Haver Analytics

Figure 8
Employment Composition by Major Industry Sector



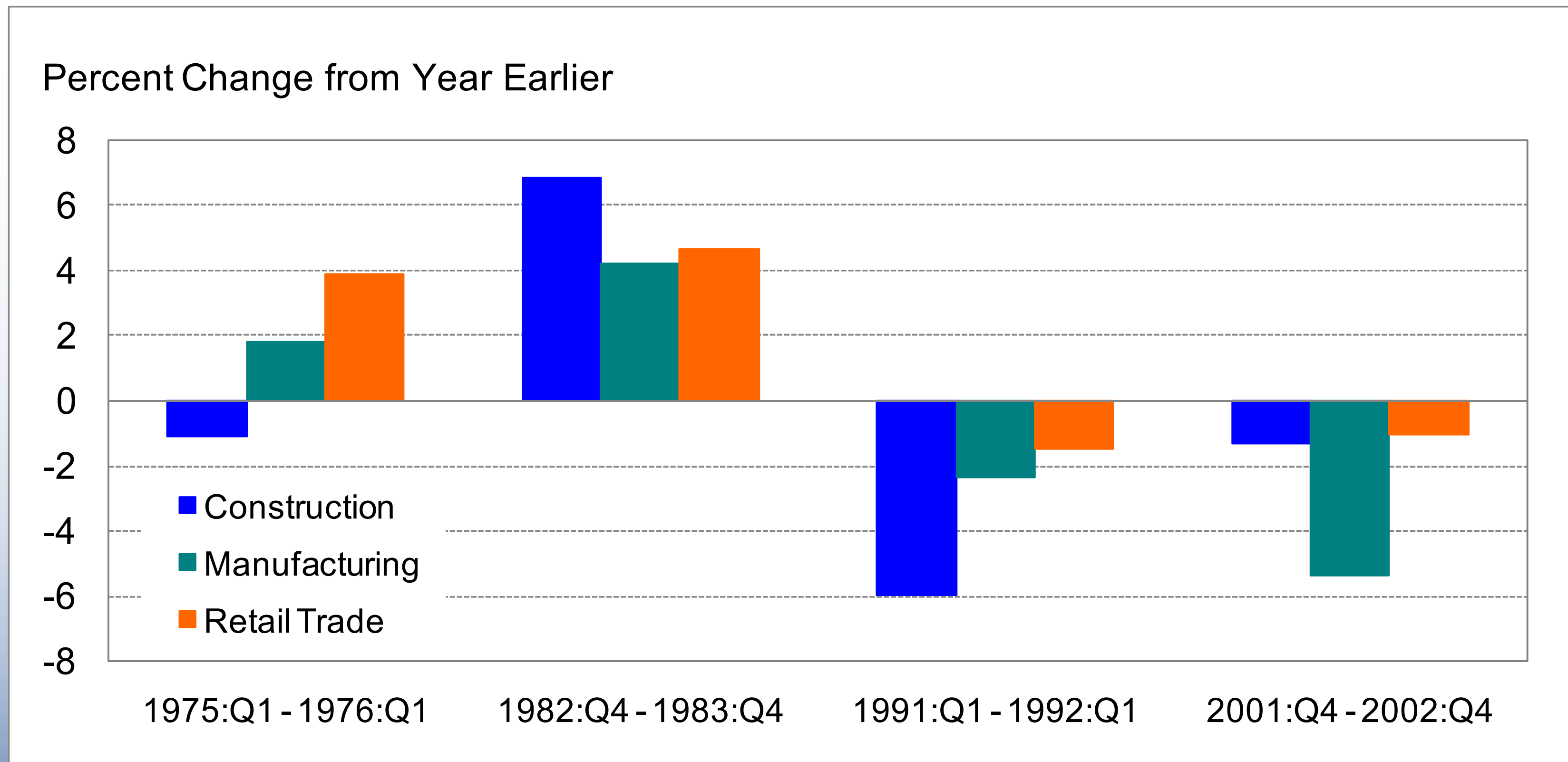
Source: BLS / Haver Analytics

Figure 9
Recovery in Employment by Industry Sector: Growth in First Year of Recovery



Source: BLS, NBER / Haver Analytics

Figure 10
Recovery in Employment by Industry Sector: Growth in First Year of Recovery



Source: BLS, NBER / Haver Analytics