



# **Wisconsin Economic Outlook**

**Wisconsin Department of Revenue  
Division of Research & Policy  
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The quarterly Wisconsin Economic Outlook is prepared by Romina Soria and Emily Camfield of the Division of Research and Policy, Wisconsin Department of Revenue. Global Insight, Inc. prepared the national forecast on August 11, 2008. The forecast does not incorporate data released subsequent to that date.

# ECONOMIC OUTLOOK

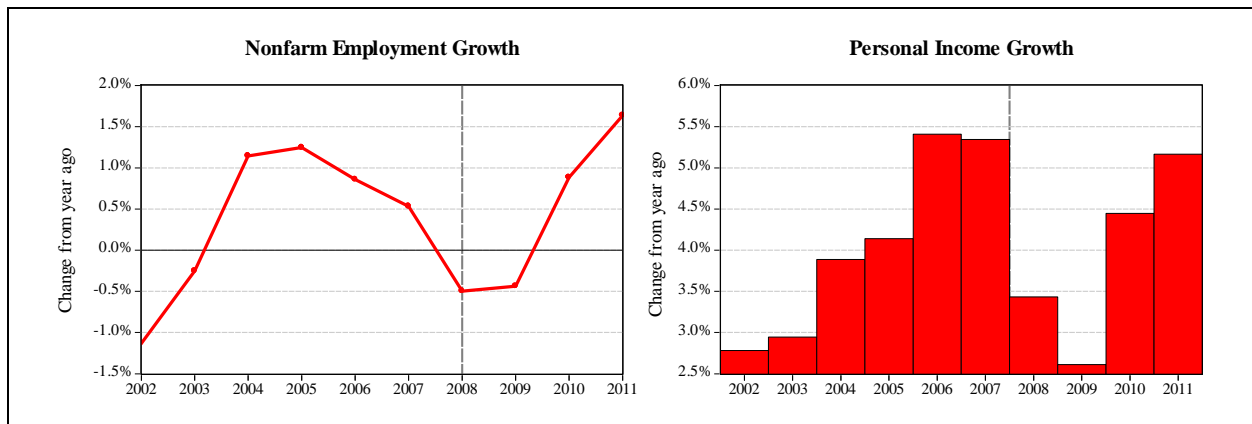
## I. WISCONSIN OUTLOOK

The Wisconsin economy will slow its pace of growth during 2008 and 2009 following the national economic trend. However, the outlook is now expecting 2009 to be the year with the weakest income growth as opposed to 2008 in the May outlook. The main drivers of the current economic downturn are the slump in the housing sector and the tightness in credit markets, which combined with high food and gas prices, are impacting consumer spending.

The August national forecast is calling for a real GDP growth rate of 1.6% in 2008 and 1.0% in 2009, revised from the 1.2% and 1.4% expected in May. The U.S. labor market is expected to show slower employment growth, 0.0% and -0.2% in 2008 and 2009 respectively, compared with the average employment growth of 1.5% of the last two years. The three major factors that have taken the outlook down in August are a downgraded outlook for housing and consumer spending, the worsening of the credit market, and higher oil prices. The outlook for consumer prices was considerably revised up from our last release in May responding mainly to a higher forecast for oil prices. Global Insight is now expecting the price of the West Texas Intermediate crude oil to average \$120.8 per barrel in 2008 and \$130.5 in 2009, compared to \$105.1 and \$96.6 forecasted in May. Consequently, the CPI forecast was also upwardly revised; the August outlook expects consumer prices to increase 4.8% for the current year and 3.0% for 2009, instead of the 3.8% and 1.9% forecasted in May.

As shown in the left panel of Chart I.1, Wisconsin employment grew 0.5% in 2007 and is expected to decline 0.5% this year and 0.4% in 2009. Wisconsin job growth will recover towards the end of 2009, advancing 0.9% in 2010 and 1.6% in 2011, led by strong growth in the services industries and slower declines in the Construction and Manufacturing sectors.

Chart I.1



Wisconsin personal income rose 5.3% in 2007 and is expected to show weak growth in 2008 and 2009. With the help of the rebates from the stimulus package, Wisconsin personal income is expected to grow 3.4% in 2008. The outlook shows the weakest annual growth rate of the cycle in 2009 (2.6%) as the economy hits bottom in early 2009 and starts a slow recovery. After this downturn, Wisconsin personal income is projected to grow 4.4% in 2010 and 5.2% in 2011. Given the high price outlook, real personal income is expected to decrease in 2008 and 2009 as wages fail to keep up with inflation.

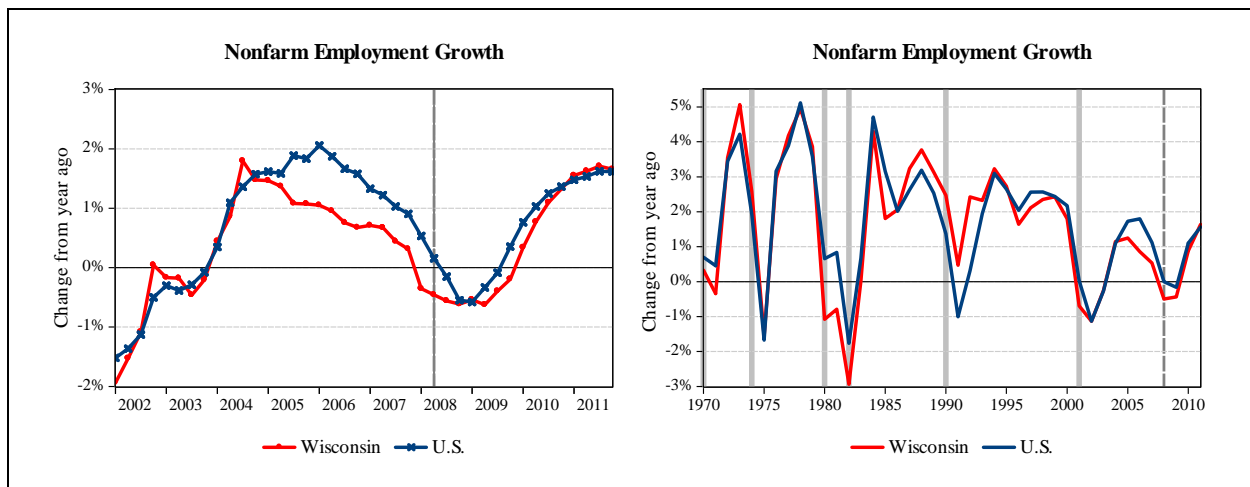
Since the last outlook in May, the Bureau of Economic Analysis (BEA) released preliminary first quarter 2008 estimates and revised estimates for the four 2007 quarters of personal income and its components.

## Employment Outlook

Total employment in Wisconsin grew 0.5% in 2007. The first half of the year showed employment losses of 0.4% over the same period for 2007. It is expected to decline 0.5% in 2008 and 0.4% in 2009. It will recover a stable growth path toward 2010, posting growth rates of 0.9% in 2010 and 1.6% in 2011.

The left panel of Chart I.2 shows total nonfarm employment growth for the U.S. and Wisconsin. The vertical line at the second quarter of 2008 separates history from forecast. However, it should be noted that the last five quarters (2007Q2-2008Q2) of history will be revised at the time of the 2008 Benchmark, to be published in February/March 2009. We anticipate upward revisions to total Wisconsin employment in the first and second quarters of 2008. The forecast expects an annual employment decline of 0.5% in 2008 as a result of the sluggish domestic demand, generating job losses in the Construction, Manufacturing, Trade, Transportation and Utilities, and the Leisure and Hospitality sectors. A similar pattern of employment change is expected for 2009, with the Professional and Business Services and Leisure and Hospitality sectors showing some improvement from 2008. Employment is expected to rebound showing a growth of 0.9% in 2010 and 1.6% in 2011.

Chart I.2



The right panel of Chart I.2 shows total nonfarm employment growth for the U.S. and Wisconsin over history, making clear that the current downturn is expected to be milder than any previous one. Considering U.S. employment, the current downturn shows year over year employment to decline from the 1.8% growth in 2006 to -0.2% in 2009, a growth spread of 2%. However, the two previous downturns showed considerably larger growth spread from the fastest growing year to the year showing the largest drop. The downturn in the early nineties showed a spread of 5.7%, from a growth of 4.7% in 1984 to -1.0% in 1991. Also, the last downturn showed a spread of 4.2%, from a growth rate of 3.1% in 1994 to a decline of 1.1% in 2002.

Considering Wisconsin employment, the current downturn is expected to be milder than any previous downturn for the state. This is true, in terms of growth spread, even for the downturn of the early nineties when employment growth in Wisconsin never turned negative. The current downturn shows year over year employment growth decreasing from 1.2% in 2005 to -0.5%, a growth spread of 1.7%. The early nineties downturn showed a spread of 4.8%, from a growth of 4.3% in 1984 to 0.5% in 1991. Also, the last downturn showed a spread of 4.3%, from a growth rate of 3.2% in 1994 to a decline of 1.1% in 2002.

The housing sector has not hit bottom yet as home sales continue posting year over year declines. Inventories are still too high, prices are still falling and conditions in the mortgage credit market are tightening. Global Insight forecasts the start of the housing recovery in the second quarter of 2009, when the residential

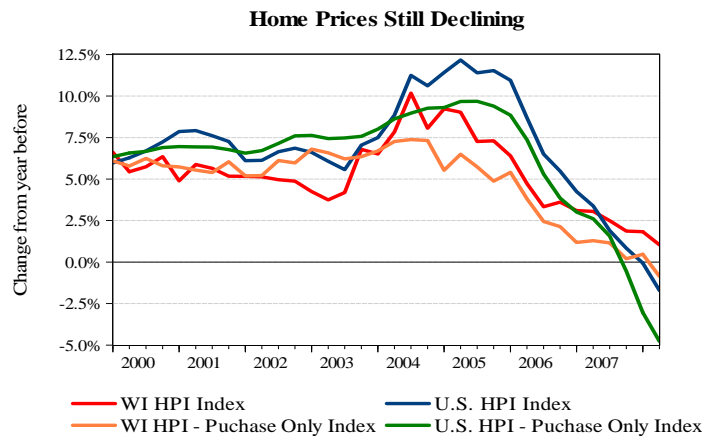
investment component would once again contribute to GDP growth. Existing home sales are also expected to hit bottom the first quarter of 2009.

The housing sector in Wisconsin did not experience the exorbitant growth in past years as the rest of the country. Hence it will not experience a negative impact as strong from the burst of the bubble. However, Wisconsin, as well as the national housing sector, has not reached bottom yet. Wisconsin home building permits continue to fall, and foreclosures continue to rise, increasing the excess of inventory in the market.

Wisconsin permits (see left panel of Chart I.4) declined 29% and 27% the first and second quarter of 2008 from a year earlier, continuing the declining path started in 2004. Wisconsin permits are expected to hit bottom in late 2008 and into 2009 but start to recover in late 2009. The RealtyTrac released 2008Q2 foreclosure data showing that national foreclosures increased 121% from 2007Q2. Following the national trend, foreclosures in Wisconsin also increased (156%) over the same period. Wisconsin ranked 28<sup>th</sup>, with one out of 408 households in foreclosure in the second quarter of 2008, compared with one out of 171 households in foreclosure nationwide.

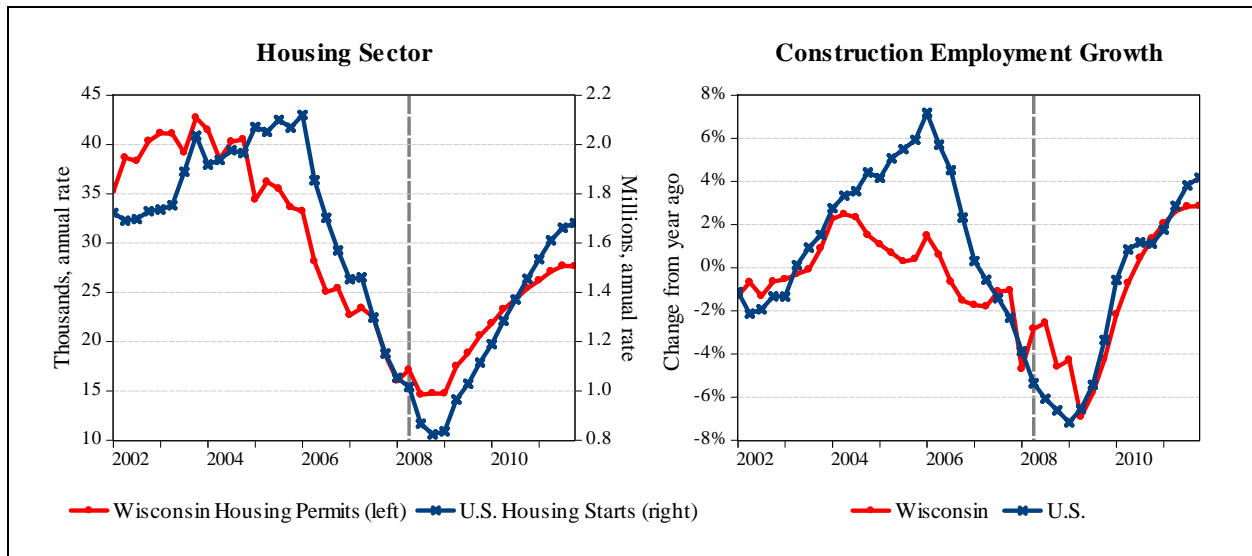
Home sales in Wisconsin are still declining. According to the Wisconsin Realtors Association, home sales in the second quarter of 2008 were down 20.7% from the second quarter of 2007; nationwide home sales were down 16.3%. Growth in home prices in Wisconsin continue their declining trend started in 2004, though it's not as steep as for the U.S as a whole. The median home price statewide for the second quarter of 2008 was \$162,200, down 3.0% from the second quarter of 2007, less than half the decline of 7.6% nationwide. The Office of Federal Housing Enterprise Oversight (OFHEO) also released its measures of home prices, the house price index (HPI) that includes valuations for refinancing operations and the purchase-only house price index. The chart below shows the still declining trend in both series for the U.S. and Wisconsin. The HPI was 1.0% higher than a year ago in Wisconsin and the 1.7% lower in the U.S. The purchase-only HPI was 0.9% lower than a year ago in Wisconsin and 4.8% lower for the U.S.

Chart I.3



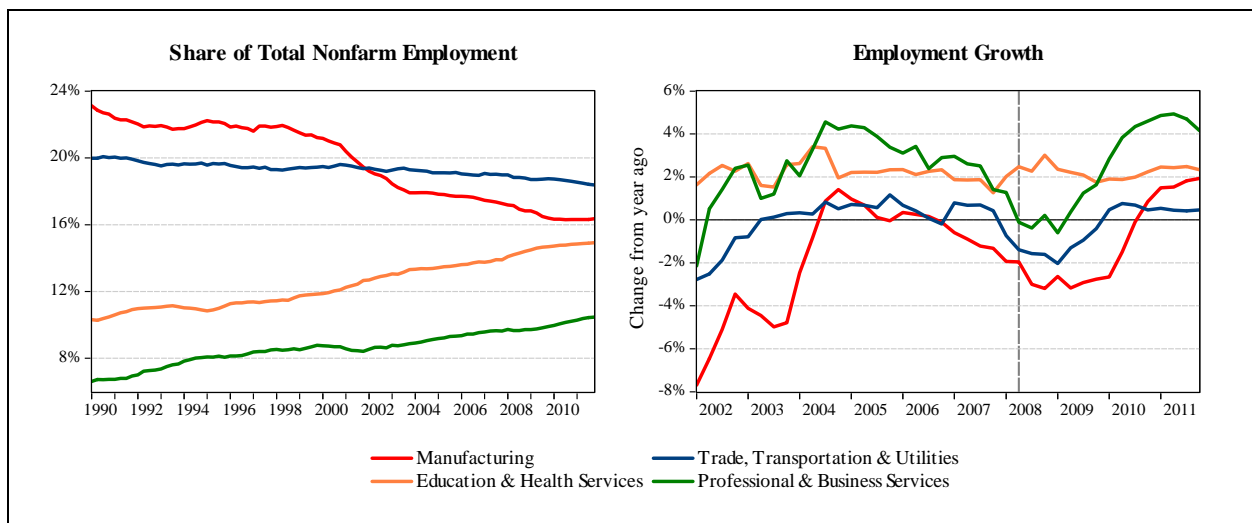
The housing slowdown has a direct impact on employment in the Construction sector, but is already showing its indirect impact in other sectors. Wisconsin employment in the Construction sector started to slow since 2004 following the decline in housing starts, showing negative year over year growth since the third quarter of 2006. Wisconsin employment in the Construction sector declined 1.4% in 2007, losing 1,800 construction jobs. The outlook for Construction employment calls for three more years of job losses reaching bottom by the end of 2009/beginning of 2010 and recovering to positive growth toward the second half of 2010.

Chart I.4



The services industries, particularly the Education and Health Services and the Professional and Business Services sectors support job creation as employment in the Manufacturing and the Construction sectors were a drag to total employment in 2007. As shown on the left panel of Chart I.5, the share of these two service sectors have been increasing over the time. In 1990 these sectors represented 17% of employment and they increased their participation of total employment by 4 percentage points over the next decade, reaching a share of 21% in 2000; these sectors gained another 4 percentage points since then, reaching a share of 24% by 2008. The outlook for these sectors is still positive, and both sectors are expected to continue being a plus for the economy during the current slowdown. As shown on the right panel of Chart I.5, the Education and Health Services sector is expected to continue to grow at a pace about 2%. The Professional and Business Services sector is expected to show weaker employment growth than in the past and even some quarters with negative growth rates but is still expected to add 700 jobs in 2008 and more than 1,800 in 2009.

Chart I.5



The other two largest private sectors of the economy, Trade, Transportation and Utilities and Manufacturing show a declining share of total employment. Combined, the sectors' share of total employment fell from 43% in 1990 to 36% in 2008. Manufacturing experienced the most dramatic change, falling from 33% of total

employment in 1970 to 23% in 1990; it continues its declining path, losing another 6 percentage points since then, falling to 17% in 2008. Manufacturing employment declined 1.0% in 2007 and is expected to decline the next three years before a return to a growth path. The forecast expects the Manufacturing sector to lose 36,000 jobs between 2007 and 2010. In the last recession the losses for this sector were more than double this figure, when it lost 92,000 jobs between 2000 and 2004. Trade, Transportation and Utilities showed weak but positive growth over the last four years, but given the visible weakness of domestic demand, the forecast calls for a decline in the sector's employment just above 1.0% for 2008 and 2009. With the recovery of the economy towards the end of 2009, this sector will add jobs, growing 0.6% and 0.5% in 2010 and 2011.

The Leisure and Hospitality sector had been contributing to employment growth in past years. In 2007 it grew by 0.7%, higher than the 0.5% growth in total employment. In 2008 it is expected to show a decline of 0.6%, as consumers show more cautious behavior. In 2009, the sector will recover its steady growth path, posting 0.9% growth for the year and 1.1% and 1.5% increases in 2010 and 2011.

Employment in the Finance sector is holding up despite the turmoil in the credit market that started with the subprime mortgage sector. Finance employment grew 0.6% in 2007 and is expected to continue growing through 2011 at an average annual rate of 0.6%. The Information sector grew at a strong 1.8% in 2007 after three years of job losses. Following the national trend, Wisconsin employment in the Information sector is expected to show three years of job losses, before it resumes positive growth in 2011. Information employment is forecasted to decline 1.6% this year and 2.6% and 0.6% in 2009 and 2010. The forecast for employment in the Other Services sector sees no changes for 2008 and 2009; the sector is expected to post a small loss (-0.1%) in 2010 and a 1.0% growth in 2011.

The Government sector was flat in 2006 and grew by just 0.1% in 2007. The outlook calls for moderate increases for the current and next year (0.4% and 0.6%). In 2010, due to the Census activities, government employment will grow 0.9%, with federal government employment growing at 2.4% for the year.

The Wisconsin unemployment rate was 4.9% in 2007 and 4.8% in the first quarter of 2008, but declined to 4.4% in the second quarter of 2008, while employment growth is still showing a declining trend. We expect this exceptionally low unemployment rate to be revised up. The forecast calls for an annual unemployment rate of 4.8% for this year and 5.3% for the next two years. Wisconsin and national unemployment are expected to peak in mid 2009.

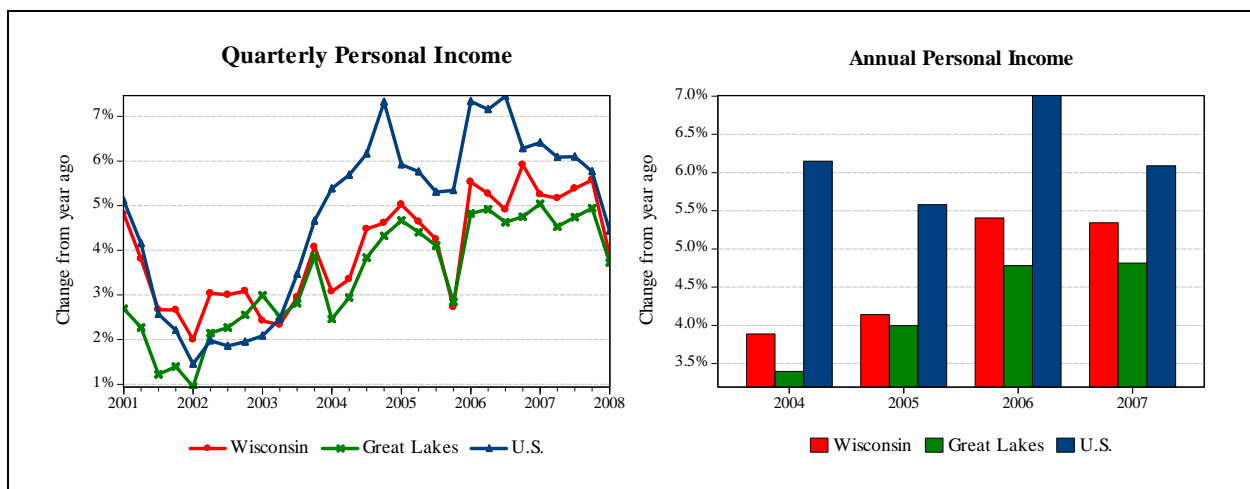
Details of the Wisconsin employment forecast are presented in Appendices 1 and 2.

## Income Outlook

As we mentioned before, since the May outlook the Bureau of Economic Analysis (BEA) released revised quarterly 2007 estimates for personal income and its components, and preliminary estimates for the first quarter of 2008. According to BEA, Wisconsin total personal income grew 5.3% in 2007, higher than the regional average growth of 4.8% for the Great Lakes region<sup>1</sup>, and lower than the national growth of 6.1%. Wisconsin showed higher personal income growth than the region in the last four years, as shown on the right panel of Chart I.6.

Revisions to the first three quarters of 2007 were minor; the only significant revision was to the fourth quarter of 2007 that was revised upward 0.4%. This was the result of upward revisions to wages and personal interest income and downward revisions to rental and personal dividend income. Wisconsin wages and salaries growth in 2007 was revised up to 4.3%, from a 4.2% rate before the revision.

Chart I.6

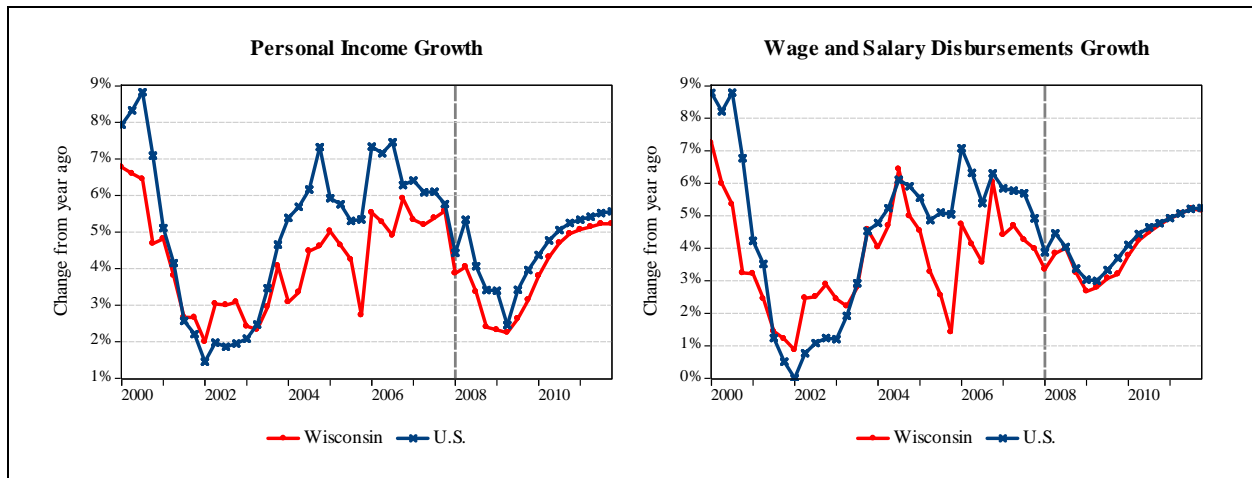


As shown on the left panel of Chart I.6, the first quarter of 2008 showed weaker growth than in recent quarters for the U.S., the Great Lakes region, and Wisconsin. BEA reported that personal income from the last quarter of 2007 to the first quarter of 2008 grew 1.1% in the U.S. and 1.0% in the Great Lakes region, while Wisconsin posted a growth of 0.6%. This growth was mainly affected by large increases in grain prices (corn prices jumped 22% in the first quarter, while wheat prices rose 18% and soybean prices 17%). This has a positive impact for states that are crop producers but a negative impact for states where these crops are used as an input. The other sector impacting personal income growth in the first quarter of 2008 was Finance that was significantly positive for the US, but making only a small contribution to Wisconsin and being a small drag for the Great Lakes region. As shown in the left panel of Chart I.6, year over year growth of personal income in the first quarter of 2008 was 3.9% in Wisconsin, still growing faster than the region (3.7%) but behind the U.S. (4.4%).

The steady growth of Wisconsin personal income shown over the last three years is expected to stall in 2008 and 2009 as shown in the left panel of Chart I.7. After posting 5.3% growth in 2007, Wisconsin personal income is expected to grow 3.4% in 2008, 2.6% in 2009 and return to a healthy growth of 4.4% and 5.2% in 2010 and 2011. Wisconsin personal income growth in the current downturn is expected to be lower than in the last recession. However, comparing the year with lower growth with the peak in each cycle, the current downturn represents a smaller fall. The maximum growth rate reached during the last expansion cycle was 5.4% in 2006 compared with a 7.4% growth posted in 1998.

<sup>1</sup> The Great Lakes Region is comprised of Illinois, Indiana, Michigan, Ohio, and Wisconsin.

Chart I.7



Wage and salary disbursements, being the biggest component of personal income, accounted for 55.1% of Wisconsin total personal income in 2007. Wisconsin wage and salary disbursements grew 4.3% in 2007 and 3.4% in the first quarter of 2008 (4.4% seasonally adjusted annual rate) from a revised annualized level of \$113.0 billion in the fourth quarter of 2007 to \$114.3 billion in the first quarter of 2008. Wage and salary disbursements in Wisconsin are expected to grow 3.6% in 2008 and 2.9% in 2009, before resuming stronger growth of 4.3% and 5.1% in 2010 and 2011 respectively. Supplements to wages and salaries<sup>2</sup> grew 3.6% in 2007 and are expected to continue growing through the horizon of the forecast at an average annual rate of 4.2%. Contributions for group health insurance account for 37% of the total supplements to wages and salaries. The forecasted growth is in part driven by the steady price increase in the health sector.

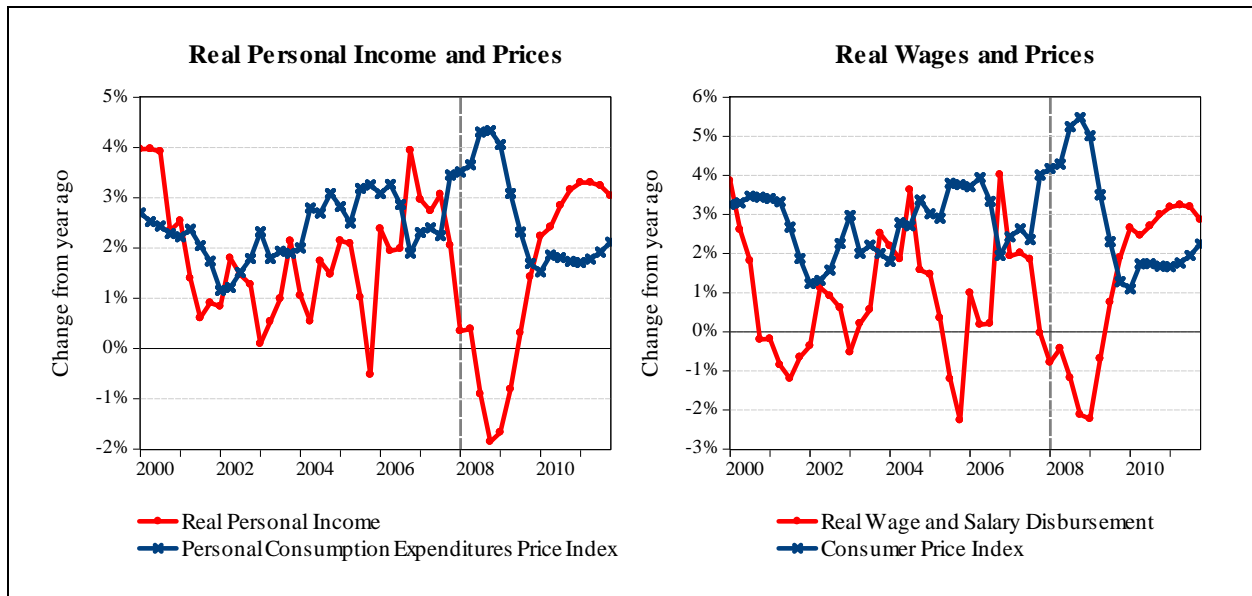
Proprietor's income is expected to be a drag on personal income this year, declining 1.2% after posting a small decline in 2006 and growing 8.0% in 2007. Between 2009 and 2011, it is expected to post positive growth rates. Rental income posted a 6.8% gain in 2007 after two year of strong declines, in 2005 (-40.3%) and 2006 (-28.9%). The forecast calls for positive growth in 2008 and 2009 with rental income growing at 32.6% and 11.4% respectively as the deterioration in the housing sector increases the demand for rental property.

Dividend income grew 11.7% in 2007 and is forecasted to grow 8.5% in 2008, before easing to just above 2% growth through 2011. Interest income grew 8.6% and 4.9% in 2006 and 2007, reflecting the market response to the reduction of interest rates by the Fed. Personal interest income is expected to decline 3.1% and 1.6% in 2008 and 2009 before resuming strong growth rates above 9% in 2010 and 2011.

Wisconsin disposable personal income (total after-tax income received by persons available for spending or saving) grew 4.8% in 2007 and is forecast to grow 4.0% in 2008 despite the weak growth in personal income, but helped by reduced personal taxes due to the 2008 federal stimulus package. In 2009 disposable personal income will grow just 2.5% given the weak personal income growth. In 2010 and 2011 Wisconsin disposable personal income is expected to regain rhythm, growing at 4.4% and 5.0% as total personal income recovers a stronger growth pace and tax growth moderates.

<sup>2</sup> This component of personal income consists of employer contributions for employee pension and insurance funds and of employer contributions for government social insurance.

Chart I.8



Wisconsin real personal income grew 2.6% and 2.7% in 2006 and 2007 respectively. As shown in the left panel of Chart I.8, personal consumption expenditure prices will peak in the last quarter of 2008 and drop to below 2% growth in late 2009. For the following two years, prices are expected to maintain moderate growth below 2% year over year. As a result, Wisconsin real personal income is expected to decrease 0.5% in 2008 and 0.2% in 2009. It will resume positive growth in 2010, posting 2.7% growth in 2010 and 3.2% in 2011 as personal income growth recovers from the downturn and inflation eases. Real per capita income in Wisconsin grew 2.1% in 2007 and is forecasted to decline 1.1% and 0.8% in 2008 and 2009 as the pace in the economy reflects the adjustment of the housing sector and inflation peaks. However, it is expected to grow at 2.1% in 2010 and 2.6% in 2011, as the economy recovers from the housing slowdown and prices recede to the Fed’s comfort zone.

Wisconsin real wages grew 4.6% and 4.3% in 2006 and 2007 but posted negative growth rates in the last quarter of 2007 (-0.03) and first quarter of 2008 (-0.8%) as shown in the right panel of Chart I.8. Given that the national forecast is calling for the CPI to increase at 4.8% this year and 3.0% in 2009, real wages are expected to decline 1.1% in 2008 and 0.06% in 2009. Real wages growth will recover positive growth toward 2010, posting 2.7% and 3.1% in 2010 and 2011.

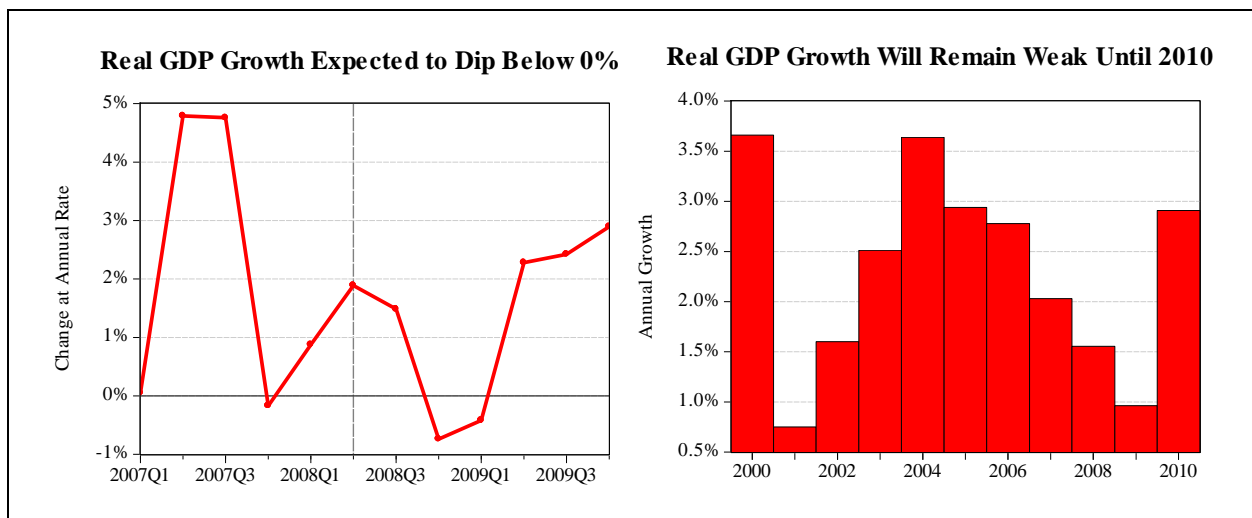
Details of the Wisconsin income forecast are presented in Appendices 3 and 4.

## II. U.S. OUTLOOK

### The Forecast in Brief

The U.S. economy did better during the first half of the year than feared, managing an average growth pace of 1.4%. Although domestic demand fell, some of that weakness was passed on to the rest of the world via lower imports, while exports climbed higher. But the economy is far from out of the woods. The housing downturn is not over, nor is the financial crisis. Credit conditions are continuing to tighten, with the latest Federal Reserve survey of bank loan officers showing a tightening in standards for consumer loans.

Chart II.1



Global Insight continues to expect a post-stimulus-payments hangover that will bring two negative quarters at the turn of the year. As a result, the forecast retains a W-shaped profile, with the two middle quarters of 2008 the strongest. Overall, the GDP growth forecast for 2008 is higher than in the May forecast (1.6% vs. 1.2% in May), while the 2009 forecast has been lowered to 1.0% (from 1.4%). This is brought about by stronger-than-expected GDP growth through the second quarter, but a weaker outlook moving into 2009. It is not until mid-2009 that a sustainable recovery emerges as house prices bottom out, the Fed's low interest-rate medicine becomes more effective, and financial institutions begin to lend more freely.

Foreign trade has been the crucial factor preventing a more severe economic downturn. In the second quarter, domestic demand fell by 0.5%. At the same time, surging exports and declining imports added 2.4 percentage points to growth, and real GDP rose 1.9%. Recent GDP revisions have shown that a reduction in the trade deficit for June resulted in a trade boost of more than 3 percentage points, with GDP growth coming in at 3.3%. But with signs accumulating that growth overseas is weakening, the support to growth from trade will be less spectacular in coming quarters.

The signs of weakness overseas have brought a silver lining for the U.S. consumer. It is contributing to the dramatic tumble in oil prices from nearly \$150/barrel in mid-July to less than \$120/barrel in early August. This is bringing some relief at the gasoline pump. The latest forecast has not fully taken on board the recent oil-price roller-coaster, given the extreme volatility shown by prices this year. The projection is for a late-2008 price peak of \$135/barrel, which keeps pump prices at or below \$4/gallon. This is in contrast to the May Outlook, which did not expect oil prices to rise above \$113/barrel.

The key question for the outlook, though, is whether lower gasoline prices can outweigh the major headwinds facing the U.S. consumer. The consumer is being squeezed by a weakening labor market, falling home prices, tighter credit availability, high food and energy prices, and lower stock market wealth. Consumer sentiment remains at recession levels. Payroll employment has declined for seven months in a row, and the unemployment rate has risen to 5.7%.

The fiscal-stimulus package has given consumers some relief from soaring energy and food costs. But revised data indicate both that consumer spending was growing more weakly than previously thought before the stimulus payments began in May, and that the second-quarter bounce in spending was muted. Spending rose at a 1.5% annual rate in the second quarter, up from only 0.9% in the first. Without the rebates, that spending growth would have slowed even further.

The forecast expects a softer 0.6% increase in spending during the third quarter, as the rebate effect starts to fade. This is followed by a 2.0% decline in spending during the fourth quarter. This year, even with the rebate boost, consumer spending growth will slip to 1.0%, from 2.8% in 2007. In 2009, without the rebate boost, the forecast expects spending to rise just 0.4%. Under pressure from high gasoline prices, light-vehicle sales fall to 14.0 million units in 2008, their worst year since 1993; 2009 will be no better.

Housing remains a major drag on growth. The excess supply of homes for sale, expressed as a monthly selling rate, seems to be peaking, but is still very high. The latest financial market convulsion involving Fannie Mae and Freddie Mac was somewhat calmed by the Treasury Department's takeover of the government state-sponsored enterprises (GSEs). The capital structure of the GSEs will see a radical restructuring, with the Treasury taking \$1 billion in preferred shares in each entity and also receiving warrants on 79.9% of the common stock. The Treasury also created a new credit facility of secured loans, and pledged to provide up to an additional \$200 billion in capital if necessary. With several bold strokes, the Treasury effectively has taken the solvency issue of the GSEs off the table. While the takeover is bad news for existing shareholders, it will be good news for American households who are either looking to purchase a home for the first time, or refinance their existing mortgage. However, the episode leaves the housing market facing more headwinds. The forecast expects housing starts to hit bottom only in the fourth quarter of 2008 at 823,000 units (annual rate), and to improve only very gradually during 2009. The decline in house prices has accelerated, and the OFHEO house price index will drop 9.5% from the first quarter of 2008 to the first quarter of 2009.

Slower growth in consumer and housing demand, coupled with soaring input costs, will make businesses more cautious about capital spending. The latest national accounts data show that equipment spending declined in the second quarter of 2008 and did so more sharply than in the first. The stimulus package will do little for equipment spending. There will be some bunching of outlays at the end of the year, just before bonus depreciation expires, followed by a weak first quarter of 2009.

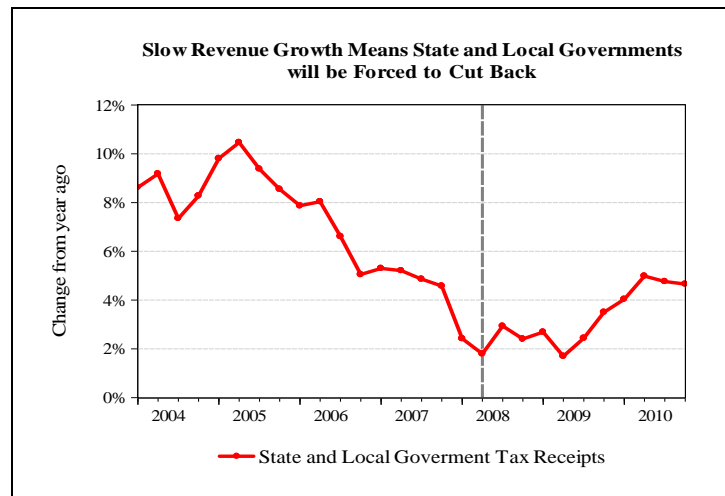
During 2007 and in the first half of 2008, rising private nonresidential construction helped cushion the blow from plunging residential construction. But the availability of financing for commercial real estate has tightened sharply, while the need for extra retail and office space is diminishing. Global Insight anticipates declines in private nonresidential construction starting in the second half of 2008 and extending through 2009.

Higher commodity prices have increased the inflation forecast, and it is now expected that consumer price inflation will average more than 5% year-on-year (y/y) during the second half of 2008. In addition, some of the previous commodity price hikes will be passing into core inflation over the next few months. Core PCE inflation (now 2.3% y/y) is likely to hover in the 2.3-2.4% range over the rest of this year and in 2009. But there remains no sign that wage inflation is responding. When workers see higher prices, they do not expect a wage hike, but rather a drop in their standard of living. If the labor market were strengthening, the story might be different, but the unemployment rate is on its way to 6% as employment steadily falls.

The Federal Reserve remains caught between high inflation on the one side and anemic growth and the continuing financial crisis on the other side. The recent easing in oil prices, the strengthening in the dollar, the Fannie Mae/Freddie Mac crisis, and signs of weakening growth around the world have all lessened the chances of a precautionary rate hike. There is not expected to be a tightening cycle beginning until mid-2009.

In the state and local government sector, revenue growth is slowing. All the while, financing has become more expensive, a recipe for sharp cutbacks in outlays (and not just in construction). Real state and local government purchases are expected to decline during the second half of 2008 and throughout 2009.

Chart II.2



The good news on the federal budget deficit is now in the past. Faster spending growth and slower revenue growth, combined with the cost of the stimulus package, will raise the deficit to \$392 billion in fiscal 2008. The weak economy expands the deficit to \$483 billion in 2009.

Robust global growth, along with a weakening dollar, has been supporting U.S. export growth. But global growth now appears under threat, with growth weakening in Europe and Japan. If these economies do fall into recession, then export growth will suffer. Exports should rise 8.4% this year, before easing to 7.6% growth in 2009. With U.S. interest rates bottoming out, the dollar is also bottoming out against the euro, pound sterling, and Canadian dollar, although not yet against the yen and renminbi.

The current-account deficit narrowed in 2007 for the first time since the recession year of 2001. A wider deficit is in store for 2008, as a \$195-billion increase in the oil import bill more than offsets a \$159-billion improvement in the rest of the account.

### KEY FORECAST ASSUMPTIONS

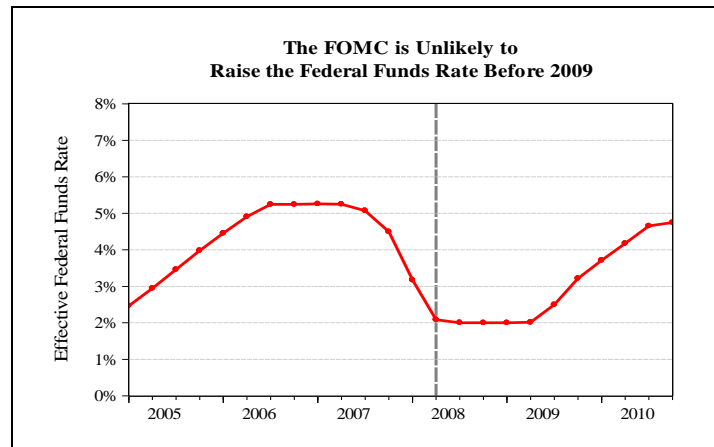
**Fiscal-Stimulus Package:** The forecast assumes that the rebate payments will fall short of expectations, with a total of \$94 billion, rather than the anticipated \$107 billion, delivered during fiscal 2008. By the end of July, \$92 billion in tax rebates had been delivered, but the flow of payments had slowed to a trickle.

**Oil Price Projection Lowered:** Oil prices have fallen back below \$120/barrel, after nearing \$150 in mid-July. The forecast now projects that the price of oil in the second-half of 2008 will average \$131/barrel (instead of \$105 in the May forecast), and also assumes an average \$131/barrel (instead of \$97) in 2009. The longer-term price profile has moved upwards, so that it remains in the region of \$120/barrel over the next five years, instead of remaining below \$100/barrel. The forecast expects retail gasoline prices to average \$3.95/gallon in the third quarter, and remain in the \$3.80-\$4.00 region over the next five years.

**Natural Gas Prices Down Sharply:** Natural gas prices have tumbled, falling to just over \$8 per million Btu (Henry Hub cash price), from more than \$13 in early July. The forecast assumes they average \$9.93 in the second half of 2008, then just under \$10 in 2009 and just over \$10 in 2010.

**Federal Reserve Expected to Stay On Hold:** The forecast assumes that the Fed will keep the federal funds rate at 2.0% through mid-2009. It then begins a tightening cycle, returning the funds rate to 3.50% by the end of 2009 and 4.75% by the end of 2010.

Chart II.3



**Dollar Is Stabilizing:** The Fed has become more concerned about the currency's weakness, and growth around the world is weakening. Both factors have helped produce a bounce in the dollar in recent weeks. Although Global Insight believes the dollar has passed its low point against the euro, sterling, and the Canadian dollar, this does not necessarily mean that this marks the start of a sustained dollar uptrend. That would require the Fed to start hiking interest rates, which is not anticipated this year. The U.S. dollar fell about 10% against major currencies in 2007 (fourth quarter-to-fourth quarter basis), and should drop another 4% during 2008. This would imply some renewed easing in the greenback from current levels. The forecast assumes end-2008 values of \$1.58/euro, 104 yen/dollar, and C\$0.99/dollar. The Chinese renminbi should continue to rise, and a 7.1% appreciation against the dollar over the next 12 months is expected.

**Foreign Growth Is Cooling:** The forecast assumes GDP growth in the United States' major-currency trading partners at 1.6% in both 2008 and 2009, down from 2.7% in 2007. Growth for other trading partners should ease from 6.1% in 2007 to 5.2% in 2008 and 5.0% in 2009.

**Tax Burden to Rise:** The forecast assumes that Congress will not allow all of the Bush administration's personal tax reductions to expire as scheduled at the end of 2010. But it is assumed that some increase in the income-tax burden, whether through the Alternative Minimum Tax (AMT) or through some kind of tax reform that raises a similar amount of revenues.

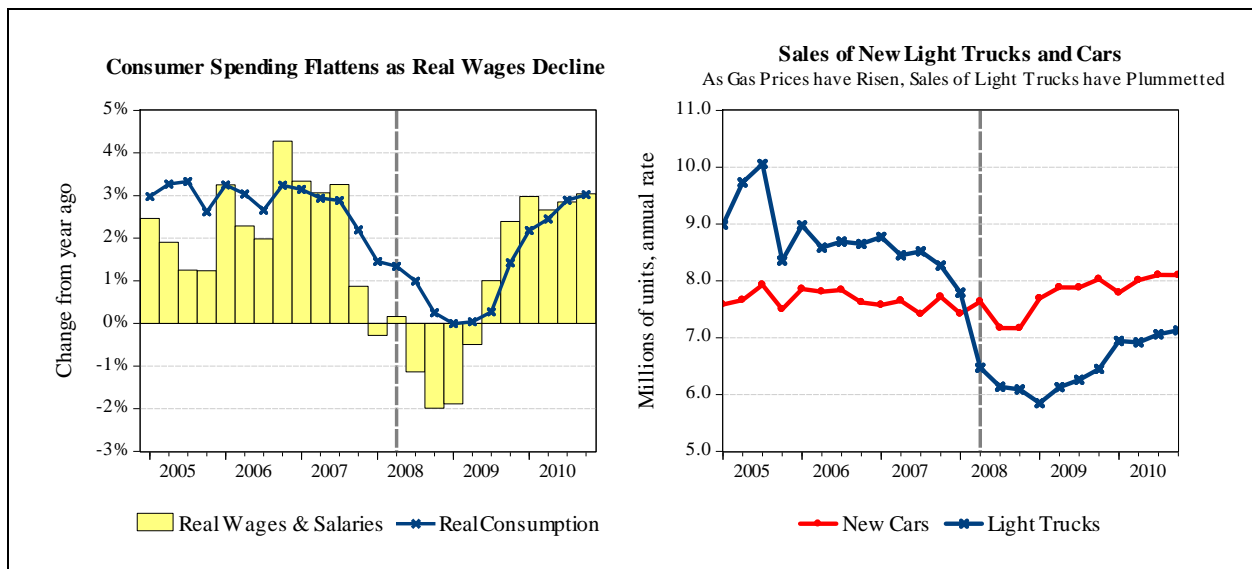
**Defense Spending Growth Quickens:** Spending for the wars in Iraq and Afghanistan continues to climb. The forecast expects real federal defense purchases to rise 5.4% in calendar 2008, up from 2.5% growth in calendar 2007. Overall federal purchases will rise 4.3% in 2008, up from 1.6% growth in 2007.

DETAILS OF THE U.S. OUTLOOK

Consumer Markets

Declines in employment, real wages, and household wealth will cause consumers to retrench once fiscal-stimulus payments are gone. Real consumer spending is expected to decrease in the fourth quarter of 2008 and first quarter of 2009, its first contraction in 17 years. Light-vehicle sales will drop to a 15-year low of 2008.

Chart II.4



The annual revisions to the National Income and Product Accounts left real disposable income and consumer spending lower since mid-2007. Downward revisions to spending were concentrated in services, including electricity and gas, intercity transportation, housing, medical, and personal business services. Spending increased at a 1.5% annual rate in the spring quarter, suggesting that consumers are saving most of their tax rebates. Indeed, without the fiscal-stimulus payments of \$78 billion in the second quarter, real consumer spending probably would have declined. Nominal retail sales fell 0.1% in July. Excluding autos and gasoline, sales advanced 0.3%, led by gains at furniture, electronics and appliance, and non-store channels.

Automotive markets will be hit hard by tightening credit conditions and weakening household finances. Light-vehicle sales are projected to drop from 16.1-million units last year to 14.0 million in 2008 and 2009. High gasoline prices, job losses, falling asset values, new restrictions on leasing, and tighter credit standards are hurting sales. Light truck sales will plummet 22.1% this year, while car sales decrease a modest 3.2%. It will be 2015 before light-vehicle sales surpass their 2000 record of 17.3-million units.

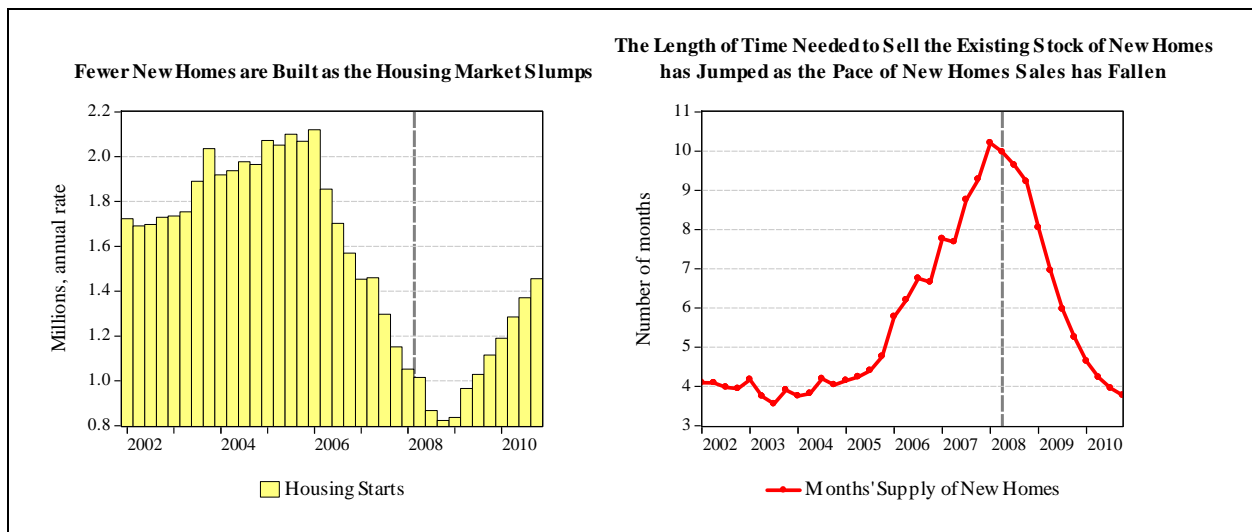
Home sales will likely decrease into early 2009, depressing sales of appliances, furniture, and decorating items. Once housing markets recover and inflation subsides, consumer spending will gradually revive. As employment, income, and asset values recover, real consumption growth will pick up from 0.4% in 2009 to 2.6% in 2010 and 3.0% in 2011. The medium-term consumer outlook is more cautious than in the May forecast because oil prices are so much higher than three months ago, even with the recent declines. With limited additions to new supply, Global Insight expects crude oil prices to average \$123 per barrel during 2011-15, compared with \$85 in the May forecast.

**Housing and Construction**

A huge inventory overhang remains the biggest obstacle to a recovery in the housing market. Reducing inventories will require lower housing prices, fewer housing starts, and time. The housing forecast has weakened, as credit conditions have worsened and new data shows that inventories of unsold homes remain near record highs. Housing starts will bottom out in late 2008, with prices hitting bottom in 2009.

In June, the number of completed, new one-family homes for sale fell for the 14th straight month, to 426,000 units. This number still needs to drop by another 100,000 in order to reduce the backlog of unsold new homes. The number of completed new homes for sale is also trending down.

**Chart II.5**



Inventories of existing homes, on the other hand, are near all-time highs and may rise later this year. The National Association of Realtors (NAR) reported that the months supply of existing single-family homes rose to a 22-year high of 11 months in June.

Meanwhile, banks continue to tighten credit. According to the July 2008 Senior Loan Officer Opinion Survey, about 75% of domestic respondents reported tighter lending standards on prime mortgages. Hard evidence of bank tightening can be seen in the spread between the 30-year loan rate and the 10-year bond rate, which in mid-August was approaching its highest level in 22 years. These credit market conditions point to further declines in home sales over the next few months.

In the forecast, housing starts continue to slide over the course of the year, slipping under the 1-million-unit mark this year for the first time since 1945. The 2009 rebound is not strong enough to push starts back above this threshold. Based on these declines, Global Insight expects that residential investment will cut real GDP growth by 0.8 percentage point during the second half of this year. The drag from housing then diminishes, however, and by the second quarter of 2009 residential investment is contributing to growth.

The outlook for existing home sales is also grim. There are many forces working to depress sales: credit remains tight, the economy is losing jobs, consumer sentiment is at recessionary levels, gasoline prices are close to record highs, and Fannie Mae and Freddie Mac are on the ropes. Thus, despite a recent leveling of sales, Global Insight's view is that existing home sales will fall nearly 10% before hitting bottom in the first quarter of 2009. Housing prices will also continue to drop. In the forecast, the median price of an existing home drops 15% from second-quarter levels and bottoms out in early 2009, but rebounds around 4% on average over the subsequent four years.

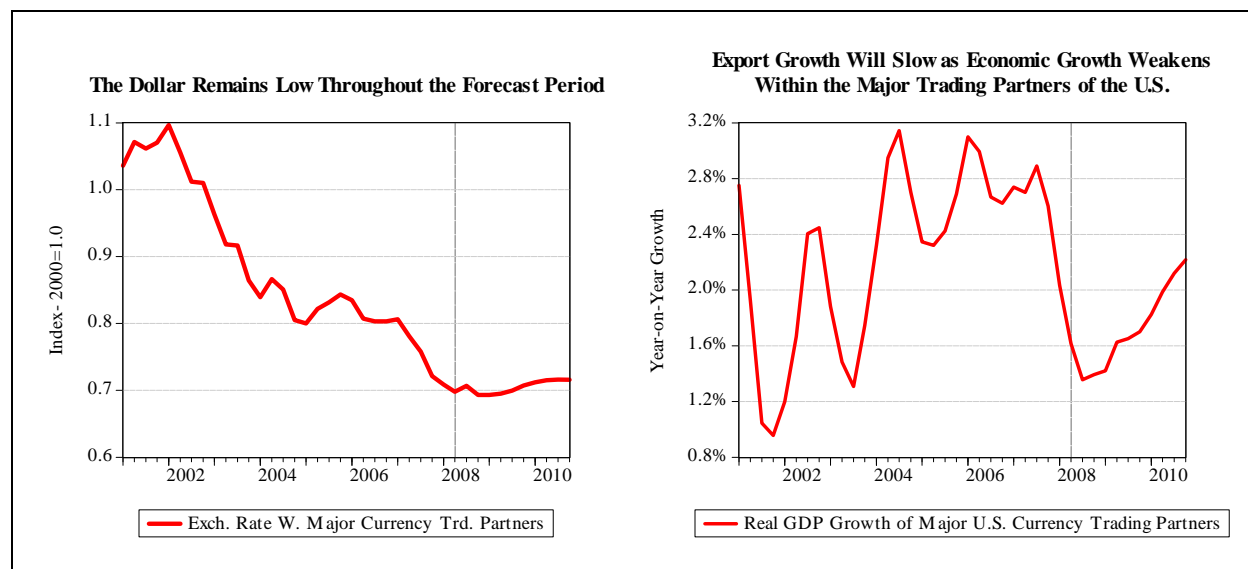
**International Trade**

The advance GDP release placed trade’s second-quarter GDP contribution at 2.4 percentage points. With total GDP growth of 1.9%, the trade improvement kept overall growth in positive territory. Import reductions accounted for half of the trade contribution, and export growth for the other half. But the latest trade news is even stronger. June export growth was so spectacular that the GDP revision raised the total trade contribution to over three percentage points, with almost two-thirds of that from export gains. Nominal exports jumped 4.0% in June, with goods up by 5.1% in nominal dollars and 4.0% in real dollars. With real imports slipping by 0.6%, the inflation-adjusted goods balance has narrowed by 22% since last December (the best month of last year), with export volumes up 8.7% and import volumes down 2.6%.

Two important messages are buried in the GDP figures. First, the economy achieved a good quarter of 1.9% growth (recently revised to 3.3% growth), with the foreign trade accounts more than offsetting other declining sectors. Second, this remarkable performance came on both sides of the ledger, through higher exports and lower imports. Declining imports can be a sign of consumer retrenchment, but a decent portion of the reduction in imported materials has come through import substitution, replacing imported materials with domestic sources of supply. The drop in the dollar has been pivotal in promoting both renewed export competitiveness and import substitution.

The dollar weakened further this past winter and spring. But a dreary second quarter performance in Europe sharply raised the odds that the next move by the European Central Bank will be to cut interest rates and begin to reverse that rate-gap drag on the greenback. The dollar rallied more than 7.5% against the euro from mid-July to mid-August. In the forecast, the dollar is expected to bottom out against the major trading partners of the U.S., but will continue to stay in it's current low range.

**Chart II.6**



This will be the peak year for exports, as the United States enjoys the most favorable combination of robust foreign growth and a weak dollar. The inflation-adjusted trade deficit (GDP basis) narrows by \$150 billion in 2008, to \$397 billion, and falls another \$115 billion in 2009 before the improvement stalls. In nominal dollars, the story is different. The nominal trade shortfall widens by almost \$40 billion this year, rather than improving, in large measure because of surging oil prices. The nominal trade deficit moves sideways from early 2009 to early 2011, but begins to widen again toward the end of the forecast period on higher oil prices and slower export gains. The current-account shortfall more closely follows the nominal deficit, with large oil import volumes at high prices hiding the underlying improvement excluding oil.

**Inflation**

Soaring energy and food prices pushed the consumer price index (CPI) up 1.1% in June and 0.8% in July. The headline CPI was up 5.6% in July over the previous 12 months, the largest year-on-year advance since January 1991. The good news is that the tumble in energy prices that began in mid-July will slash these figures next month, with a good chance of further relief down the road.

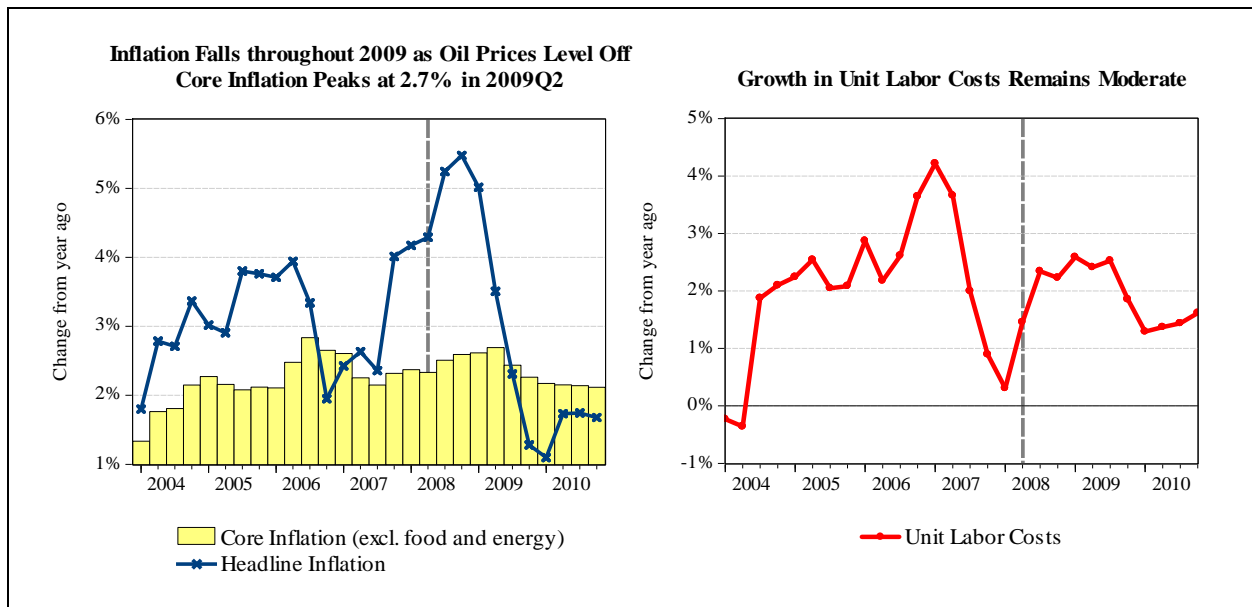
Unfortunately, the same pattern is unlikely for “core” consumer prices. Excluding food and energy, consumer prices accelerated, rising 0.3% in both June and July, following four consecutive increases of either 0.1% or 0.2%. The uptick in the core rate does not come as a shock, as past commodity price hikes were expected to trickle into core prices. The July report revealed that the normally muted core (consumer) commodity index jumped 0.5%, following a more typical 0.1% rise in the previous month. This rise in core commodity prices signals more of the same in coming months.

In June the core personal consumption expenditures (PCE) deflator, another measure of inflation, mimicked the CPI acceleration and rose 0.3%, up from the 0.2% rate that prevailed in each of the preceding three months. Year-on-year core PCE inflation increased to 2.3% after three straight months at 2.2%, drifting further from the Fed’s 1.5-2.0% target band.

Aside from the risks posed by the now flagging commodity price surge, the fundamental inflation indicators are in decent shape. Preliminary data on productivity and labor costs continue to indicate no acceleration of labor costs. Robust productivity gains in the second quarter, coupled with only moderate compensation growth, implied a modest 1.3% (annualized) rise in unit labor costs. Furthermore, bond market measures of inflation expectations, which had been drifting higher during May and June, are now on the wane.

Even with the latest commodity price surge in retreat, continued labor market weakness, and waning inflation expectations, the near-term inflation outlook has risen since the May forecast, mostly because of elevated oil prices. Global Insight now expects headline CPI inflation of 5.5% y/y in the fourth quarter of 2008, compared with the 3.2% rate in the May forecast. Despite the recent break from the commodity price surge, Global Insight expects to see some of the previous price hikes pass into the core inflation measures in the coming months. Core PCE inflation, which is the Fed’s preferred inflation gauge, rises to 2.4% y/y by the second quarter of 2009, before falling below 2.0% by the beginning of 2011.

**Chart II.7**

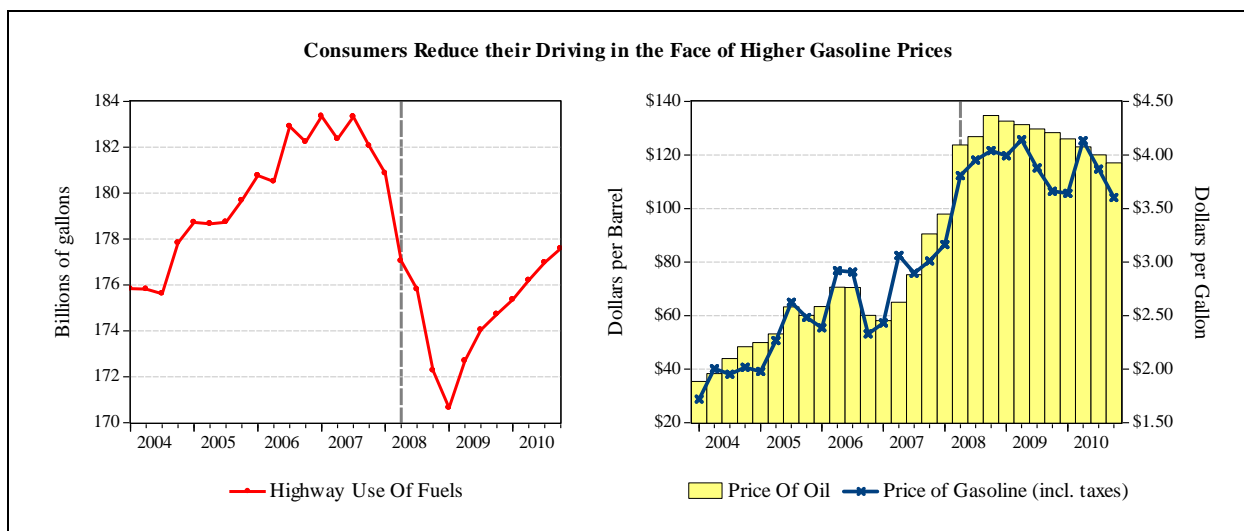


**Energy**

Crude oil prices have fallen sharply since early July, but the baseline forecast assumes they have undershot. Oil prices are expected to average \$121/barrel for the year. Gasoline prices have fallen along with crude prices, but should firm as well. Natural gas prices have fallen faster than oil prices, as supply has proven to be adequate.

The oil market entered July like a lion, but left like a lamb. Oil prices surged to \$147/barrel in the first week of the month, sank to \$124 at the end of the month, and kept fading to close out the first half of August at under \$114/barrel, down 23% from the peak. West Texas Intermediate prices averaged \$133.44/barrel in July, \$0.48/barrel below June, but still 80% above a year earlier.

**Chart II.8**



Natural gas prices came down even faster, tumbling more than 40% from their July peak by mid-August. The market had feared the seasonal refilling of working inventories, but the effects of the June heat wave were not severe, and the absence of major hurricanes during the first part of the refill season left inventories comfortable. Gasoline pump prices have eased consistently, as the total spread from crude to the pump has remained wide. Pump prices averaged \$4.11/gallon in July, but have fallen more than \$0.36/gallon from the peak.

Oil prices in the August forecast rebound from their current lull later this year to average \$121/barrel in 2008 and climb to \$131 in 2009. Oil prices recede back to \$122 in 2010. The firming in crude oil prices should keep gasoline prices within the \$3.50- 4.00/gallon range. Henry Hub natural gas prices have fallen back from their peaks of July, but average \$9.88/mmBtu in 2008 and only shave a few pennies off that in 2009. They range between \$10 and \$11/mmBtu through 2013.

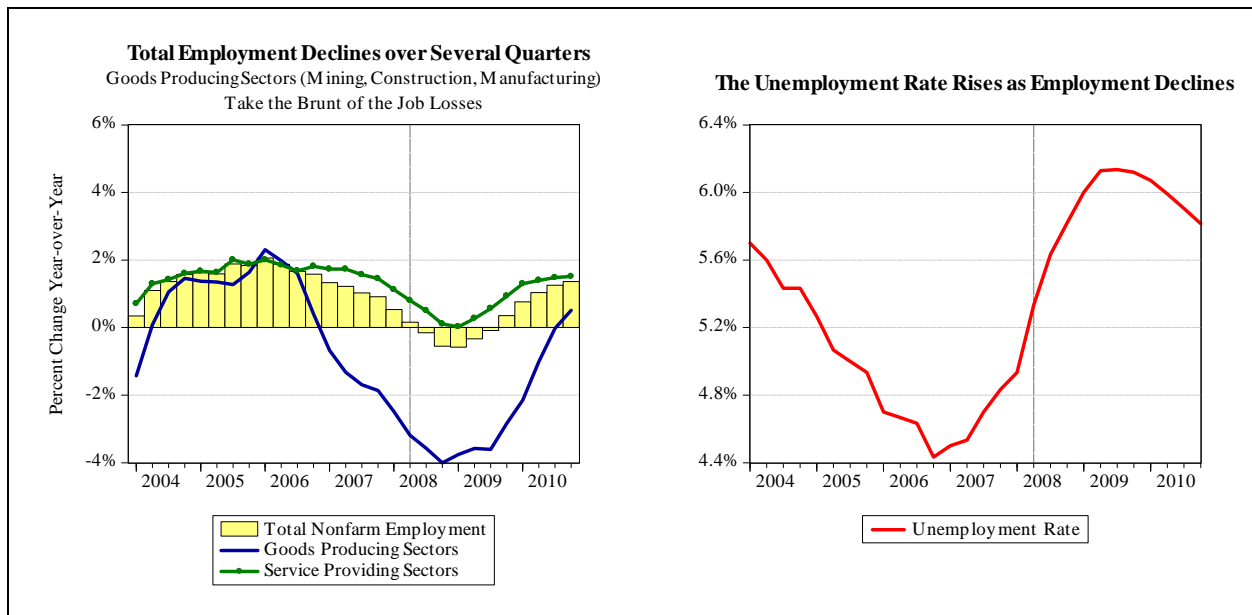
**Employment**

Total payrolls fell by 51,000 in July, and private payrolls fell 76,000. This was almost identical to May and June for total payrolls, but for private payrolls it was their smallest monthly decline so far this year. Manufacturing jobs fell by 35,000, and construction payrolls dropped 22,000 for their smallest decline since last October. Outside of construction and manufacturing, private-sector employment losses totaled 19,000, a bit worse than the 12,000 average monthly losses seen over the prior six months.

Most industry sectors showed job declines in the July report, although the private education and healthcare sector is still posting strong gains. The finance and insurance sector cut the number of employees by 2,100 as the insurance side added about half as many jobs as the finance sector trimmed. Real estate and rental/leasing added 2,300 jobs, with rental/leasing adding jobs while real estate employment slipped. The unemployment rate moved up by 0.2 percentage point, from 5.5% to 5.7%.

Payrolls are expected to be flat on average this year and down 0.2% in 2009. The 2008 weakness pushes jobs down to the low end of this range by the first quarter of 2009, and they do not rise above 138 million until 2010. Only very late next year will average monthly payroll gains exceed 100,000 per month, a feat regularly achieved from late 2003 until late 2007. Job growth returns to the robust range from 2010 through 2012, with average gains of more than 1% (annual).

**Chart II.9**



By sector, employment in the goods-producing sectors (Mining, Construction, and Manufacturing) take the brunt of job losses. Together, the sector loses over 700,000 jobs in 2008 and 2009, with 2009 slightly worse than 2008. Construction loses 5.5% of employment in 2008 followed by another 5.7% decline in 2009. Manufacturing does a little better, with job declines of 2.6% in both years. Employment in Mining and Natural Resources is the only goods-producing sector to show job increases, growing 6.5% and 2.6% in 2008 and 2009, respectively.

In contrast, the service-providing sectors do relatively well. In 2008, the service-providing sectors increase employment 0.6%, and grow 0.5% in 2009. Education and Health Services see the strongest employment growth, with increases of 3.0% in both years. Employment in Leisure and Hospitality increases 1.6% in 2008 but then is flat in 2009, and government employment increases 1.3% in 2008 before slowing to 0.7% growth in 2009.

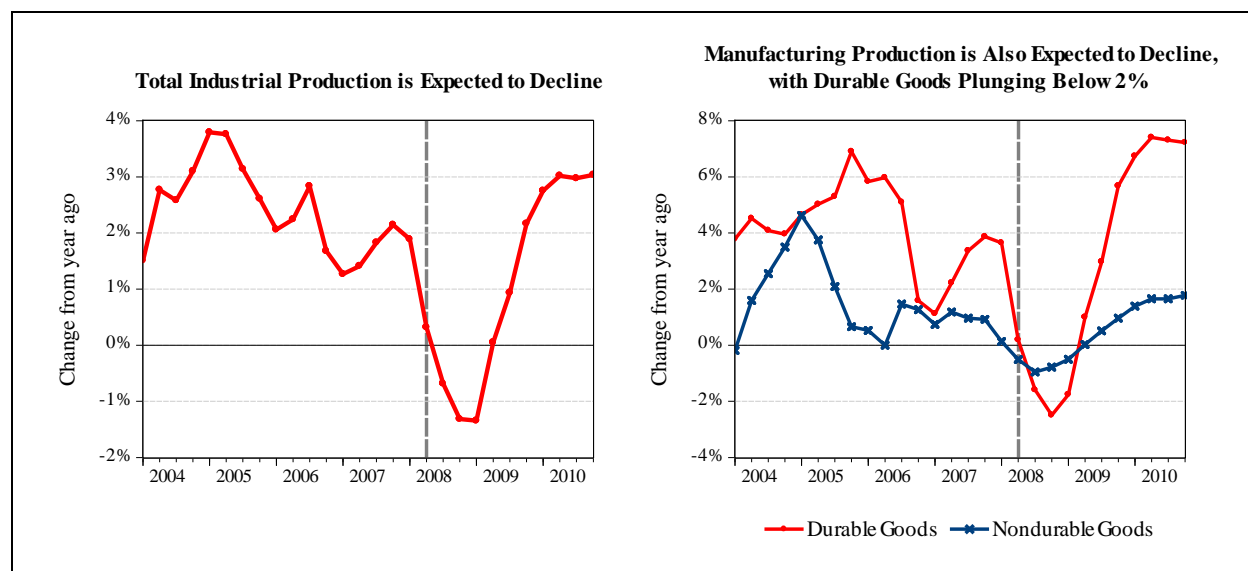
## Industrial Production

The ISM purchasing managers' index (PMI) is basically noncommittal, as July's reading was exactly 50.0, which suggests the manufacturing sector is neither growing nor contracting. Even though these numbers are stronger than the readings indicating a contraction between January and May, it is difficult to be optimistic about the manufacturing sector in the near term. The recent improvement may come from the impact of the Economic Stimulus Act of 2008. However, there is still a strong chance the PMI may again register below 50 before year-end and the U.S. manufacturing sector will remain in contraction until next spring.

New orders for manufactured goods increased 1.7% in June, and were up 5.8% year-to-date. While strong exports and substantial import declines have contributed to the increase, most of the growth is due to pricing, with sharply higher prices for metals, chemicals, and energy-related products. Processed food prices have also risen significantly. Through year-end, new orders on a dollar basis may remain higher versus a year earlier, but business on a volume basis should be off.

Consumer confidence recently fell to its lowest level since May 1980, sending a strong negative shockwave throughout manufacturing. Big-ticket durable goods sectors like autos, appliances, and furniture have taken the brunt of the pressure. Motor vehicle production is expected to decline more than 13% this year, appliance production 10% and furniture 9%. However, nondurable manufactured items such as processed foods (up 2.7%), pharmaceuticals (up 1.5%), beverages (down 7.6%), and tobacco (down 6.5%) are all expected to see either significant slowdowns or major declines in output growth versus last year.

Chart II.10



Cautious capital spending has also taken a toll on the manufacturing sector. This year, industrial machinery is anticipated to see an 8.5% decline in output, but other capital equipment, like construction machinery (down 9.3%), HVAC (down 6.8%), engine and power transmissions (down 6.7%), metalworking machinery (down 1.8%), and commercial and service equipment (down 0.3%) will also suffer. Declines in domestic orders should offset the positive impacts of robust exports and weaker import penetration.

A manufacturing contraction has already occurred from fourth-quarter 2007 to second-quarter 2008, according to the latest published Federal Reserve industrial production data. The forecast expects further declines in the second half of the year. Annually, manufacturing output is slated to decline 0.5% this year and then advance only 1.0% next year. By the middle of 2009, some optimism among manufacturers is likely to return, but it will not be truly reflected in the annual production numbers until 2010, when manufacturing is slated to expand by 4.0%.

**Business Investment**

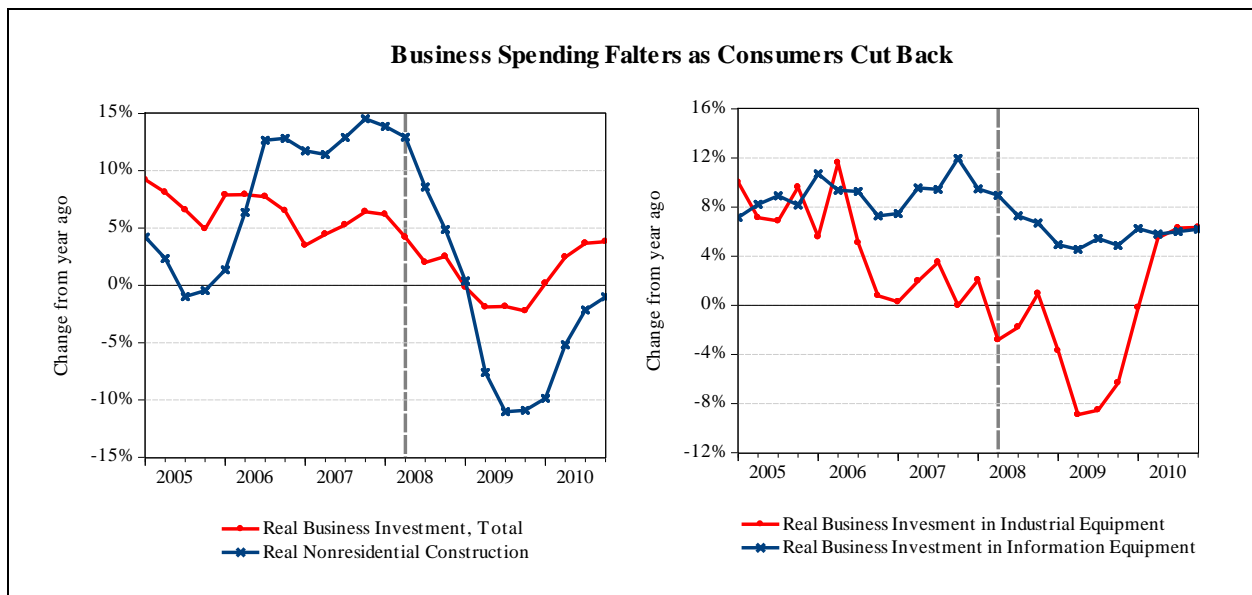
Nonresidential construction remains one of the few bright spots in the economy. Real spending in this investment sector increased 14.4% (annual rate) in the second quarter, posting broad-based gains. These strong numbers, however, are a result of decisions made long ago, when the outlook was more favorable than it is today. Going forward, this sector faces hard times.

One reason for the bearish outlook is that credit is tightening. Moreover, the market for commercial mortgage-backed securities (CMBS) is still broken. According to Moody’s Investors Service, investment banks issued \$12 billion in CMBSs in the first half of this year, a 90% drop from the same period of 2007.

Some sectors are already showing strain. Office construction, for example, has peaked for this cycle. Nationally, vacancy rates in the second quarter of 2008 rose for the third consecutive quarter. Data revisions are expected to show that real spending on offices dropped for the third straight time in the second quarter.

Real spending on equipment and software dropped 3.4% (annualized) in the second quarter, dragged down by a 48% drop in transportation equipment, due almost entirely to light vehicles. If one excludes light vehicles from the calculations, real spending on equipment and software increased 5.6% (annualized).

**Chart II.11**



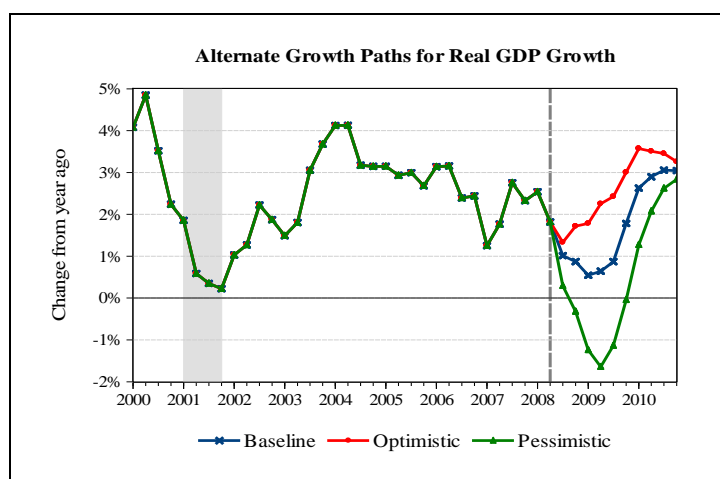
Despite recent solid gains, Global Insight still expects spending on nonresidential construction to decline later this year because of four converging forces: the housing/economic downturns, the credit crunch, rising construction costs, and payback for recent excesses. Overall, spending on nonresidential construction rises 9.9% in 2008, but then drops 7.3% in 2009 and 4.7% in 2010.

Real equipment and software spending is forecasted to advance 0.7% in 2008 and then 1.5% in 2009. Transportation equipment will take a big spending hit, falling 18.3% this year, but rebounding in 2009 on a pickup in light vehicle sales. Companies continue to spend on information processing equipment and software, despite the slowdown in the economy. This trend is expected to continue. Spending on “other” equipment (which includes construction equipment) and industrial equipment drops both this year and next.

## RISKS TO THE FORECAST

The U.S. economy is losing jobs, but growth in the first half of 2008 was positive, thanks to the stimulus package, Federal Reserve interest rate cuts, and robust foreign demand. These factors will help keep the economy moving forward in the third quarter. Afterward, though, the outlook darkens. Consumer spending will take a hit as the effects of the stimulus package wears off, the economy loses more jobs, housing remains a significant drag on growth, and energy prices remain high.

Chart II.12



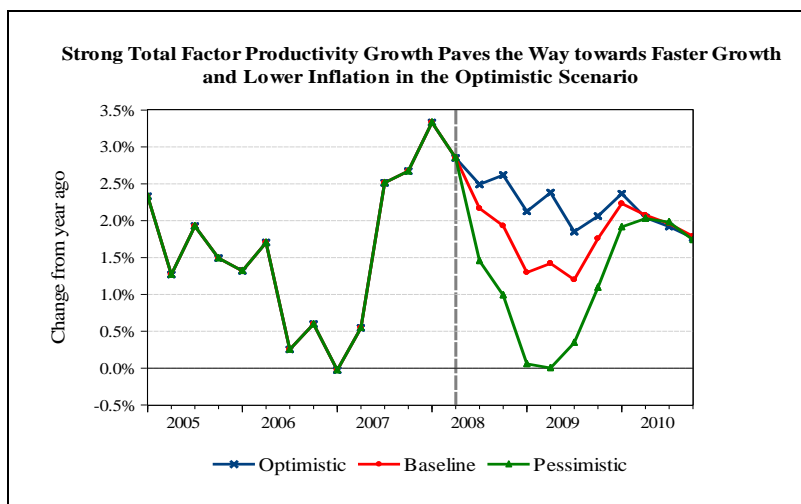
The pessimistic scenario incorporates an even steeper housing downturn than in the baseline. This, combined with another spike in oil prices, drags the whole economy into a downturn much deeper than the one seen in the baseline. For a while, the weak economy keeps core inflation at the upper limits of the Federal Reserve's tolerance. Then, as the economy turns up again, so does inflation, and the Fed starts tightening, but too late to prevent inflation from spiraling upward.

In the optimistic scenario, resurgent business spending and a less-dramatic collapse in the housing market provide the thrust necessary for the economy to avoid recession. Aided by the fiscal-stimulus package, the economy achieves near-trend growth during the third quarter, before slowing late this year and early next year. The economy carries enough momentum into 2009, however, to avert recession; robust growth resumes in the second quarter of 2009. Taking the long view, robust innovation in the high-tech sector dominates short-term cyclical concerns and fuels stronger productivity growth in concert with a lower inflation profile.

**Optimistic Scenario: (20% Probability):** Renewed strength in total factor productivity growth provides the key assumption distinguishing the optimistic scenario from the baseline forecast. Total factor productivity, a measure of how technological progress augments economic growth, is enhanced by reinvigorated innovation in the technology sector, like during the late 1990s. Stronger productivity gains facilitate vigorous business spending and a milder housing contraction. As in the baseline forecast, the fiscal-stimulus package props up consumer spending in the third quarter; however, it is even more effective in the optimistic scenario, with general business conditions also improving. Productivity growth remains higher than in the baseline throughout the 10-year forecast period, providing for stronger long-term growth, greater employment, and lower budget deficits. Combined with a stronger currency, the productivity gains also help to contain inflation.

Business fixed investment, although down a bit from 4.9% growth in 2007, registers a solid 4.4% gain in 2008, compared with a smaller 3.7% rise in the baseline forecast. It remains buoyant in 2009 and rises 3.2%, compared with a 1.5% contraction in the baseline. Additionally, the downturn in residential investment is less severe in the optimistic scenario, with housing starts beginning to recover during the fourth quarter of 2008 and averaging 1.17-million units in 2009, compared with the baseline's meager 0.99-million units.

Chart II.13



Business fixed investment, although down a bit from 4.9% growth in 2007, registers a solid 4.4% gain in 2008, compared with a smaller 3.7% rise in the baseline forecast. It remains buoyant in 2009 and rises 3.2%, compared with a 1.5% contraction in the baseline. Additionally, the downturn in residential investment is less severe in the optimistic scenario, with housing starts beginning to recover during the fourth quarter of 2008 and averaging 1.17-million units in 2009, compared with the baseline's meager 0.99-million units.

Foreign economic growth is also stronger, boosting U.S. exports and strengthening domestic manufacturing. As a result, real exports exhibit faster growth over the forecast period, despite the stronger dollar.

Finally, the optimistic scenario assumes that energy prices are lower than in the baseline. Oil prices run about \$5- \$10/barrel below baseline levels in the second half of 2008, and \$12-\$15/barrel lower thereafter; wellhead natural gas prices are also lower. Faster supply growth also produces a loosening in other tight commodity markets.

Under these assumptions, the economic outlook is much brighter. After posting a respectable 2.8% rate in the third quarter of 2008, real GDP growth decelerates during the following two quarters, but stays above 1.0% in each, unlike in the baseline forecast, which calls for back-to-back declines. Growth averages 1.8% in 2008 and 2.4% in 2009, compared with 1.6% and 1.0% in the baseline.

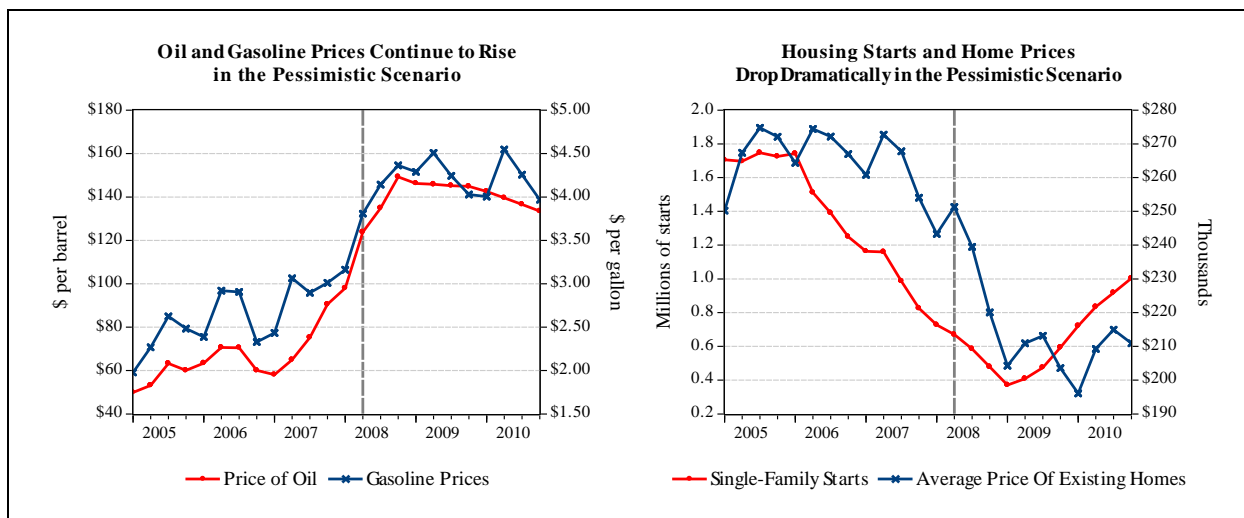
Although economic growth and labor markets are stronger in this scenario, inflation is lower, due mainly to the rapid productivity gains. Core personal consumption expenditure (PCE) inflation averages 2.2% in 2008, versus 2.3% in the baseline. The rate falls to 2.0% in 2009 and then remains comfortably within the Federal Reserve's 1-2% tolerance band throughout the forecast period. In the baseline, core PCE inflation swells to 2.4% in 2009, and hovers just above the 2.0% "comfort" threshold throughout the remainder of the forecast period. Low inflation means that interest rates are lower over the long term than in the baseline.

**Pessimistic Scenario (20% Probability):** The pessimistic scenario assumes that the housing recession deepens even more than in the baseline, and that oil prices jump \$15/barrel above the baseline in the near term. This fatal combination sends the economy into a full-blown recession. The full effects of the stimulus package occur in the third quarter, but real GDP tumbles, nonetheless. Then the impact of the stimulative monetary and fiscal policies wears off, and the economy contracts over two additional quarters. Peak to trough, real GDP drops 1.7% over three quarters, making this recession deeper than the 1991 and 2001 downturns.

Housing starts have never fallen under 1.0-million units in a calendar year since 1945, but in this scenario, they drop to 907,000 units in 2008 (compared with 940,000 in the baseline) and 669,000 in 2009 (compared

with 986,000 in baseline). The median price of existing homes falls 10% below the baseline in 2009. Home sales are also much lower. The weakness in housing undermines consumer confidence. This, along with the drop in wealth associated with falling home prices and a slowdown in job growth, causes consumers to retrench sharply. Hit especially hard are auto sales, which fall to 13.4-million units in 2008 and 12.5-million units in 2009 (versus 14.0 million for both years in the baseline), and "other" consumer durables (jewelry, sporting equipment, motorcycles and pleasure boats, and aircraft). In this alternative forecast, consumer spending contributes only 0.5 percentage point to real GDP growth in 2008 (compared with 0.7 percentage point in the baseline) and then contracts in 2009—for the first time since 1981—subtracting almost a full point from growth. Housing deducts 1.0 percentage point from growth in 2008 and 0.8 point in 2009.

Chart II.14



Capital spending is also weaker, as firms respond to a bleaker outlook by scuttling long-term projects. Business fixed investment drops during the second half of 2008 and over the first three quarters of 2009. Foreign economic growth is also lower, which cuts into export growth. As in the baseline, the Federal Reserve keeps interest rates low to prop up the economy. In the near term, core inflation is contained, but only because the economy is so weak. The productivity slowdown, high-energy prices, and a weakening dollar take their toll, and core prices soon start to creep up. Growth picks up in the second quarter of 2009. With inflation taking off, the Fed aggressively starts raising the federal funds rate. But its response is a bit too little, too late, and inflation continues to edge higher. Eventually, core inflation stabilizes, but at more than 3%, more than a full percentage point above the baseline rate.

Over the longer term, GDP growth remains slower than in the baseline. This is mainly because productivity advances only 1.6% on average over the next ten years, compared with 2.0% in the baseline. Inflation is higher because of the slower productivity gains and a weaker dollar. It is also because the Fed, after allowing inflation to creep above 3%, decides to stabilize it at that higher level, rather than risk another recession by bringing it down.

In this scenario, real GDP advances only 1.1% in 2008 and then contracts 1.0% in 2009, compared with growth of 1.6% and 1.0%, respectively, in the baseline. Employment drops for seven straight quarters (the economy loses 2.3 million jobs), manufacturing output also falls for seven straight quarters, and real GDP drops for three quarters, starting with the third quarter of 2008. Like the recessions of 1991 and 2001, the one in the pessimistic scenario is still mild compared with earlier postwar recessions. Unlike the last two recessions, however, the economy remains on the ropes longer and emerges from the downturn weaker, facing more troubles ahead.

A summary of the U.S. Forecast is contained in Appendices 5.

## APPENDIX 1

WISCONSIN EMPLOYMENT FORECAST: INDUSTRY DETAIL  
(THOUSANDS OF WORKERS)

	History				Forecast			
	2004	2005	2006	2007	2008	2009	2010	2011
Total Nonfam	2,807.0	2,842.0	2,866.4	2,881.7	2,867.4	2,854.8	2,880.1	2,927.2
% Change	1.1	1.2	0.9	0.5	-0.5	-0.4	0.9	1.6
Private Nonfam	2,394.9	2,426.7	2,451.2	2,466.0	2,450.2	2,434.9	2,456.3	2,501.5
% Change	1.4	1.3	1.0	0.6	-0.6	-0.6	0.9	1.8
Natural Resources & Mining	3.8	4.0	3.9	3.7	3.6	3.4	3.6	3.8
% Change	2.4	3.0	-0.6	-7.0	-2.9	-3.7	4.6	5.4
Construction	126.8	127.6	127.5	125.7	121.1	114.6	114.3	117.3
% Change	2.1	0.6	0.0	-1.4	-3.7	-5.3	-0.3	2.6
Manufacturing	502.8	504.9	505.8	500.7	488.0	474.0	469.9	477.9
% Change	-0.3	0.4	0.2	-1.0	-2.5	-2.9	-0.9	1.7
Trade, Transportation & Utilities	539.0	543.2	544.5	548.1	540.8	534.5	537.7	540.2
% Change	0.5	0.8	0.2	0.7	-1.3	-1.2	0.6	0.5
Information	49.9	49.7	49.3	50.2	49.4	48.1	47.8	48.4
% Change	-0.9	-0.3	-0.9	1.8	-1.6	-2.6	-0.6	1.2
Financial Activities	158.7	159.8	161.8	162.8	163.7	163.9	164.7	166.7
% Change	1.2	0.7	1.3	0.6	0.6	0.2	0.5	1.2
Professional & Business Services	253.0	263.0	270.8	277.2	277.9	279.8	290.7	304.3
% Change	3.5	4.0	3.0	2.4	0.2	0.7	3.9	4.7
Education & Health Services	374.9	383.3	392.0	398.7	408.5	417.0	425.4	435.7
% Change	2.8	2.2	2.3	1.7	2.4	2.1	2.0	2.4
Leisure & Hospitality	250.8	255.2	259.5	261.4	259.7	262.1	264.9	268.7
% Change	2.2	1.7	1.7	0.7	-0.6	0.9	1.1	1.5
Other Services	135.3	136.0	136.0	137.5	137.5	137.5	137.3	138.6
% Change	2.0	0.6	0.0	1.1	0.0	0.0	-0.1	1.0
Government	412.1	415.3	415.2	415.8	417.3	419.9	423.8	425.6
% Change	-0.2	0.8	0.0	0.1	0.4	0.6	0.9	0.4
Federal Government	29.6	29.2	29.2	29.2	28.8	28.9	29.6	28.6
% Change	-0.9	-1.2	-0.1	0.1	-1.3	0.1	2.4	-3.1
State & Local Government	382.6	386.1	386.0	386.6	388.4	391.1	394.2	397.0
% Change	-0.1	0.9	0.0	0.1	0.5	0.7	0.8	0.7

## Household Survey Employment Measures

Labor Force	3,019.5	3,031.0	3,068.9	3,089.3	3,093.3	3,092.5	3,108.5	3,136.6
% Change	-0.5	0.4	1.3	0.7	0.1	0.0	0.5	0.9
Employment	2,867.1	2,884.8	2,923.8	2,937.9	2,945.0	2,927.4	2,944.8	2,984.9
% Change	0.2	0.6	1.4	0.5	0.2	-0.6	0.6	1.4
Unemployment Rate (%)	5.0	4.8	4.7	4.9	4.8	5.3	5.3	4.8

## APPENDIX 2

WISCONSIN EMPLOYMENT FORECAST: INDUSTRY DETAIL  
(THOUSANDS OF WORKERS)  
Quarterly Data (Seasonally Adjusted, % Change at an Annual Rate)

	History				Forecast			
	2007:3	2007:4	2008:1	2008:2	2008:3	2008:4	2009:1	2009:2
Total Nonfarm	2,881.2	2,881.5	2,869.9	2,870.9	2,865.1	2,863.9	2,854.5	2,852.9
% Change	-0.4	0.0	-1.6	0.1	-0.8	-0.2	-1.3	-0.2
Private Nonfarm	2,466.7	2,463.0	2,452.5	2,453.3	2,448.5	2,446.3	2,435.9	2,433.4
% Change	-0.2	-0.6	-1.7	0.1	-0.8	-0.4	-1.7	-0.4
Natural Resources & Mining	3.6	3.6	3.6	3.6	3.6	3.5	3.4	3.4
% Change	-7.1	-3.7	3.8	-3.7	-0.2	-8.9	-8.9	-2.6
Construction	125.4	124.8	121.0	122.1	122.2	119.0	115.8	113.7
% Change	-1.1	-1.9	-11.5	3.8	0.1	-9.9	-10.3	-7.2
Manufacturing	499.8	497.8	493.3	492.1	484.8	481.9	480.3	476.5
% Change	-1.7	-1.6	-3.5	-0.9	-5.8	-2.4	-1.3	-3.1
Trade, Transportation & Utilities	548.1	547.0	545.0	540.6	539.5	538.3	533.9	533.6
% Change	-0.1	-0.8	-1.5	-3.2	-0.8	-0.9	-3.2	-0.3
Information	50.5	50.5	49.6	49.5	49.5	49.0	48.5	48.1
% Change	3.2	0.5	-7.2	-0.5	-0.6	-3.4	-4.3	-3.0
Financial Activities	162.3	162.7	162.7	163.8	164.0	164.2	163.9	163.9
% Change	-1.6	1.1	0.0	2.6	0.5	0.4	-0.7	0.0
Professional & Business Services	277.9	277.7	279.2	277.4	276.8	278.3	277.5	278.4
% Change	0.2	-0.3	2.2	-2.5	-0.9	2.1	-1.1	1.4
Education & Health Services	400.5	400.4	404.2	407.6	409.6	412.5	413.7	416.6
% Change	2.8	-0.1	3.8	3.4	2.0	2.8	1.2	2.9
Leisure & Hospitality	261.0	260.7	256.8	259.8	260.8	261.5	261.4	261.8
% Change	-1.4	-0.5	-5.9	4.7	1.6	1.1	-0.3	0.7
Other Services	137.6	137.8	137.2	136.8	137.7	138.2	137.6	137.4
% Change	-0.1	0.6	-1.7	-1.2	2.8	1.5	-1.8	-0.6
Government	414.5	418.5	417.4	417.6	416.6	417.6	418.5	419.5
% Change	-1.9	3.9	-1.1	0.2	-1.0	1.0	0.9	0.9
Federal Government	29.2	29.2	28.8	28.8	28.9	28.9	28.8	28.8
% Change	0.0	0.5	-4.9	-0.5	0.9	-0.2	-0.3	0.1
State & Local Government	385.3	389.3	388.6	388.8	387.7	388.7	389.7	390.6
% Change	-2.0	4.2	-0.8	0.2	-1.1	1.1	1.0	1.0

## Household Survey Employment Measures

Labor Force	3,089.2	3,089.1	3,096.4	3,088.3	3,092.9	3,095.6	3,091.6	3,091.5
% Change	-0.1	0.0	1.0	-1.0	0.6	0.4	-0.5	0.0
Employment	2,939.0	2,940.2	2,945.4	2,950.9	2,942.6	2,941.3	2,930.5	2,926.0
% Change	0.2	0.2	0.7	0.8	-1.1	-0.2	-1.5	-0.6
Unemployment Rate (%)	4.9	4.8	4.9	4.4	4.9	5.0	5.2	5.4

## APPENDIX 3

WISCONSIN INCOME SUMMARY  
PERSONAL INCOME BY MAJOR SOURCE  
(\$ Billions)

	History				Forecast			
	2004	2005	2006	2007	2008	2009	2010	2011
Total Personal Income	174.655	181.889	191.726	202.032	208.931	214.337	223.868	235.427
% Change	3.9	4.1	5.4	5.4	3.4	2.6	4.4	5.2
Wages and Salaries	99.141	102.039	106.749	111.375	115.409	118.812	123.938	130.250
% Change	5.0	2.9	4.6	4.3	3.6	2.9	4.3	5.1
Supplements to Wages and Salaries	23.622	24.780	25.645	26.561	27.610	28.606	29.847	31.351
% Change	1.7	4.9	3.5	3.6	3.9	3.6	4.3	5.0
Proprietor's Income	11.451	12.063	12.024	12.980	12.819	13.082	13.449	13.952
% Change	7.9	5.3	-0.3	8.0	-1.2	2.0	2.8	3.7
Rental Income	2.247	1.342	0.955	1.019	1.352	1.506	1.507	1.469
% Change	-6.6	-40.3	-28.9	6.8	32.6	11.4	0.1	-2.6
Personal Dividend Income	9.829	10.380	12.438	13.895	15.078	15.474	15.798	16.171
% Change	20.7	5.6	19.8	11.7	8.5	2.6	2.1	2.4
Personal Interest Income	16.162	17.917	19.454	20.413	19.789	19.467	21.316	23.829
% Change	-4.8	10.9	8.6	4.9	-3.1	-1.6	9.5	11.8
Current Transfer Receipts	24.232	25.853	27.466	29.231	30.681	31.844	32.971	34.099
% Change	2.0	6.7	6.2	6.4	5.0	3.8	3.5	3.4
Residence Adjustment	3.173	3.312	3.560	3.781	3.970	4.176	4.442	4.762
% Change	5.2	4.4	7.5	6.2	5	5.2	6.4	7.2
Contributions to Government Social Ins.	15.201	15.795	16.565	17.283	18.074	18.604	19.374	20.424
% Change	5.6	3.9	4.9	4.3	4.6	2.9	4.1	5.4
Personal Tax & Nontax Payments	19.037	21.136	23.093	25.249	25.006	25.874	27.053	28.723
% Change	1.4	11.0	9.3	9.3	-1	3.5	4.6	6.2
Disposable Personal Income	155.619	160.753	168.633	176.783	183.844	188.463	196.815	206.704
% Change	4.2	3.3	4.9	4.8	4.0	2.5	4.4	5.0

## Related Income Measures

Personal Income (2000 \$) (\$ Billions)	161.121	163.01	167.187	171.705	170.829	170.494	175.038	180.675
% Change	1.2	1.2	2.6	2.7	-0.5	-0.2	2.7	3.2
Per Capita Income (2000 \$)	29,323	29,508	30,108	30,734	30,388	30,146	30,767	31,576
% Change	0.6	0.6	2.0	2.1	-1.1	-0.8	2.1	2.6
Per Capita Income (\$)	31,786	32,926	34,527	36,162	37,166	37,898	39,351	41,145
% Change	3.3	3.6	4.9	4.7	2.8	2.0	3.8	4.6
Per Capita Income as a Percent of U.S.	96.2	95.3	94.3	93.9	93.3	92.9	92.8	92.8
GDP (Current Dollars)	205.916	214.090	223.394	232.293	239.672	247.172	258.640	271.956
% Change	5.1	4.0	4.3	4.0	3.2	3.1	4.6	5.1
GDP (2000 \$) (\$ Billions)	188.116	189.394	191.465	193.87	195.528	197.4	202.5	208.656
% Change	2.2	0.7	1.1	1.3	0.9	1.0	2.6	3.1

## APPENDIX 4

WISCONSIN INCOME SUMMARY  
 PERSONAL INCOME BY MAJOR SOURCE (\$ Billions)  
 Quarterly Data (Seasonally Adjusted, % Change at an Annual Rate)

	History				Forecast			
	2007:2	2007:3	2007:4	2008:1	2008:2	2008:3	2008:4	2009:1
Total Personal Income	200.438	202.750	205.723	206.925	208.563	209.598	210.686	211.749
% Change	2.5	4.7	6.0	2.4	3.2	2.0	2.1	2.0
Wages and Salaries	110.678	111.205	113.045	114.282	114.934	115.683	116.738	117.359
% Change	0.4	1.9	6.8	4.4	2.3	2.6	3.7	2.1
Supplements to Wages and Salaries	26.337	26.609	26.995	27.380	27.429	27.673	27.958	28.267
% Change	0.5	4.2	5.9	5.8	0.7	3.6	4.2	4.5
Proprietor's Income	12.731	13.145	13.345	12.699	12.627	12.935	13.015	12.897
% Change	1.0	13.7	6.2	-18.0	-2.2	10.1	2.5	-3.6
Rental Income	1.072	1.065	1.056	1.064	1.320	1.558	1.464	1.510
% Change	116.8	-2.5	-3.5	3.3	136.8	93.9	-22.0	13.1
Personal Dividend Income	13.691	14.027	14.424	14.723	14.976	15.231	15.382	15.446
% Change	7.7	10.2	11.8	8.6	7	7	4.0	1.7
Personal Interest Income	20.246	20.730	20.862	20.456	19.951	19.466	19.285	19.274
% Change	9	9.9	2.6	-7.6	-9.5	-9.4	-3.7	-0.2
Current Transfer Receipts	29.005	29.463	29.654	29.864	30.632	31.197	31.031	31.421
% Change	2.8	6.5	2.6	2.9	10.7	7.6	-2.1	5.1
Residence Adjustment	3.773	3.784	3.859	3.889	3.947	3.995	4.050	4.093
% Change	7.4	1.2	8.2	3.1	6.1	4.9	5.7	4.3
Contributions to Government Social Ins.	17.159	17.277	17.516	17.887	18.034	18.139	18.237	18.519
% Change	-0.5	2.8	5.6	8.7	3.3	2.3	2.2	6.3
Personal Tax & Nontax Payments	25.024	25.371	25.812	25.743	22.818	25.482	25.987	25.527
% Change	3.8	5.7	7.1	-1.1	-38.3	55.5	8.2	-6.9
Disposable Personal Income	175.414	177.379	179.911	181.182	185.420	184.116	184.699	186.222
% Change	2.3	4.6	5.8	2.9	9.7	-2.8	1.3	3.3
Related Income Measures								
Personal Income (2000 \$) (\$ Billions)	170.955	171.867	172.557	172.032	171.614	170.314	169.355	169.153
% Change	-1.1	2.2	1.6	-1.2	-1.0	-3.0	-2.2	-0.5
Per Capita Income (2000 \$)	30,624	30,738	30,813	30,672	30,551	30,273	30,057	29,976
% Change	-1.8	1.5	1.0	-1.8	-1.6	-3.6	-2.8	-1.1
Per Capita Income (\$)	35,905	36,261	36,735	36,893	37,128	37,252	37,389	37,521
% Change	1.8	4.0	5.3	1.7	2.6	1.3	1.5	1.4
Per Capita Income as Percent of U.S. (%)	93.8	93.7	94.0	93.8	92.9	93.3	93.3	93.0
GDP (Current Dollars)	231.219	233.393	235.542	236.622	238.572	239.804	243.692	243.798
% Change	3.9	3.8	3.7	1.8	3.3	2.1	6.6	0.2
GDP (2000 \$) (\$ Billions)	193.438	194.520	194.943	194.570	195.658	195.150	196.714	195.641
% Change	1.8	2.3	0.9	-0.8	2.3	-1	3.2	-2.2

APPENDIX 5  
U.S. ECONOMIC FORECAST  
GLOBAL INSIGHT (August 2008)

	2004	2005	2006	2007	2008	2009	2010	2011
<b>Real GDP and its Components (Billions of Chain Weighted 2000 Dollars)</b>								
Gross Domestic Product	10,675.7	10,989.5	11,294.9	11,523.9	11,703.1	11,815.7	12,159.5	12,538.6
% Change	3.6	2.9	2.8	2.0	1.6	1.0	2.9	3.1
Consumption	7,561.3	7,791.7	8,029.0	8,252.8	8,335.8	8,371.6	8,592.3	8,851.6
% Change	3.6	3.0	3.0	2.8	1.0	0.4	2.6	3.0
Investment (Incl. Inventory)	1,770.2	1,873.5	1,912.5	1,809.7	1,706.5	1,672.8	1,838.8	1,993.3
% Change	9.7	5.8	2.1	-5.4	-5.7	-2.0	9.9	8.4
Nonresidential Structures	246.7	249.8	270.3	304.6	334.8	310.2	295.7	300.6
% Change	1.3	1.3	8.2	12.7	9.9	-7.3	-4.7	1.7
Business Equipment	905.1	989.6	1061.0	1078.9	1086.8	1103.1	1168.8	1259.8
% Change	7.4	9.3	7.2	1.7	0.7	1.5	6.0	7.8
Residential Fixed	560.1	595.4	552.9	453.8	356.9	328.8	386.0	443.8
% Change	10.0	6.3	-7.1	-17.9	-21.3	-7.9	17.4	15.0
Inventory Change	54.3	38.9	42.3	-2.5	-36.3	-20.3	37.9	43.8
Exports	1,126.1	1,205.3	1,314.8	1,425.9	1,545.7	1,662.8	1,787.9	1,910.0
% Change	9.7	7.0	9.1	8.4	8.4	7.6	7.5	6.8
Imports	1,720.0	1,821.9	1,930.5	1,972.4	1,942.4	1,945.1	2,069.5	2,203.2
% Change	11.3	5.9	6.0	2.2	-1.5	0.1	6.4	6.5
Federal Government	715.9	724.5	741.0	752.9	785.6	799.7	794.1	787.6
% Change	4.2	1.2	2.3	1.6	4.3	1.8	-0.7	-0.8
State and Local Government	1,215.8	1,214.3	1,230.2	1,259.0	1,268.7	1,249.4	1,238.0	1,245.3
% Change	-0.2	-0.1	1.3	2.3	0.8	-1.5	-0.9	0.6
GDP (Current Dollars)	11,685.9	12,421.9	13,178.4	13,807.6	14,339.9	14,795.7	15,534.9	16,343.1
% Change	6.6	6.3	6.1	4.8	3.9	3.2	5.0	5.2
<b>Employment, Unemployment, Wages and Prices</b>								
Nonfarm Employment (Millions)	131.4	133.7	136.1	137.6	137.6	137.4	138.9	141.1
% Change	1.1	1.7	1.8	1.1	0.0	-0.2	1.1	1.6
Unemployment Rate (%)	5.5	5.1	4.6	4.6	5.4	6.1	5.9	5.5
Compensation per Hour (% Change)	3.6	4.0	3.8	4.1	4.2	3.8	3.5	3.6
Consumer Price Index (% Change)	2.7	3.4	3.2	2.9	4.8	3.0	1.6	1.9
Producer Price Index (% Change)	6.2	7.3	4.7	4.8	13.7	4.0	-0.1	0.8
GDP Price Deflator (% Change)	2.9	3.3	3.2	2.7	2.3	2.2	2.0	2.0
Industrial Production (% Change)	2.5	3.3	2.2	1.7	0.0	0.4	2.9	3.0
Price of WTI Crude Oil (\$ Per Barrel)	41.5	56.6	66.1	72.2	120.8	130.5	121.5	120.9
<b>Financial Markets</b>								
Money Supply (M2) (\$ Billions)	6,394.4	6,664.7	6,992.4	7,400.9	7,826.6	8,244.0	8,594.9	8,987.3
% Change	5.4	4.2	4.9	5.8	5.8	5.3	4.3	4.6
Prime Commercial Rate (%)	4.3	6.2	8.0	8.1	5.3	5.4	7.3	7.7
Three Month Treasury Bills (%)	1.4	3.1	4.7	4.4	1.8	2.4	4.2	4.6
Ten-Year Treasury Note Yield (%)	4.3	4.3	4.8	4.6	3.8	3.9	5.2	5.4
General Obligation AAA Municipals (%)	4.5	4.3	4.2	4.1	4.4	4.4	5.3	5.4
Thirty-Year Mortgage Rate (%)	5.8	5.9	6.4	6.3	6.1	6.0	6.9	7.1
S&P 500 Stock Index	1,130.6	1,207.1	1,310.7	1,476.7	1,320.6	1,399.0	1,530.7	1,623.4
<b>Income, Profits and Savings</b>								
Personal Income (\$ Billions)	9,727.2	10,269.8	10,993.9	11,663.3	12,165.2	12,567.9	13,179.4	13,899.2
% Change	6.2	5.6	7.1	6.1	4.3	3.3	4.9	5.5
Personal Income (\$ 2000) (\$ Billions)	8,973.3	9,203.1	9,586.6	9,912.4	9,946.5	9,997.1	10,304.7	10,666.7
% Change	3.4	2.6	4.2	3.4	0.3	0.5	3.1	3.5
Personal Tax & Nontax Payments	1,046.3	1,207.8	1,353.2	1,492.8	1,497.7	1,552.6	1,638.7	1,753.5
% Change	4.5	15.4	12.0	10.3	0.3	3.7	5.5	7.0
Disposable Personal Income	8,680.9	9,062.0	9,640.7	10,170.5	10,667.5	11,015.3	11,540.7	12,145.7
% Change	6.4	4.4	6.4	5.5	4.9	3.3	4.8	5.2
Savings Rate (%)	2.1	0.4	0.7	0.5	0.5	0.5	0.9	1.1
Corporate Profits Before Tax (\$ Billions)	1,231.2	1,448.0	1,668.5	1,642.4	1,604.3	1,581.1	1,654.5	1,717.3
% Change	24.0	17.6	15.2	-1.6	-2.3	-1.4	4.6	3.8