

**WISCONSIN**

# **Economic Outlook**

**August 2010**

**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. IHS Global Insight, Inc. prepared the national forecast on June 3, 2010.

# WISCONSIN

## Economic Outlook

August  
2010

### Executive Summary

***Wisconsin started to add jobs in 2010 and will continue doing so***

***State personal income grew in the first quarter of 2010 and growth will continue in 2010***

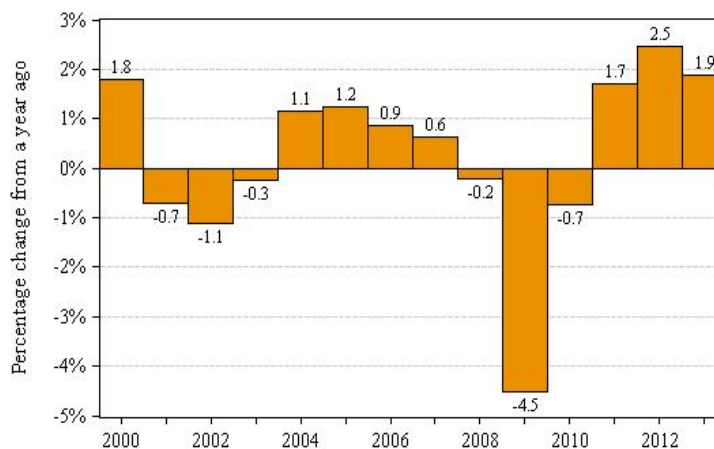
***Inventories are the main driver of national growth in the last quarters***

***Wisconsin's exports analyzed in a special report***

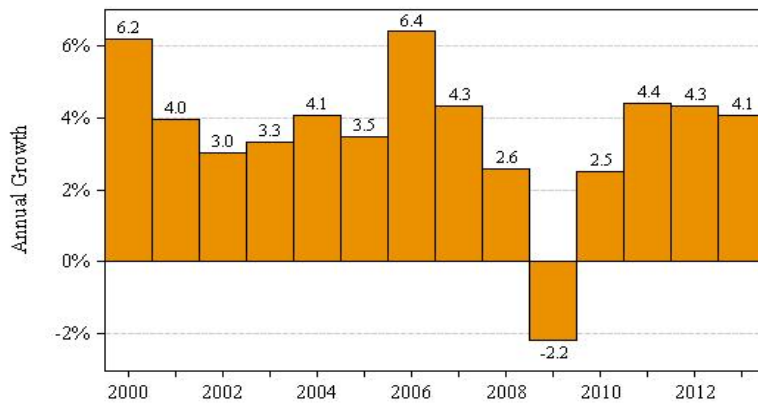
A recovery is underway in 2010. Wisconsin has already added more than 25,400 jobs since December and manufacturing jobs are up 10,900, leading the recovery. Although the pace of the recovery is anticipated to slow and will not return to pre-recession levels until 2013, this job growth signals that the economy has reached its employment low point. More jobs should slowly be added in the coming months. The forecast calls for 1.7% and 2.5% employment growth during 2011 and 2012, respectively.

The national forecast expects a subdued recovery as credit conditions remain tight and consumer spending continues to be sluggish. The financial stress from the Eurozone's sovereign debt crises is expected to have modest negative effect on the U.S. recovery mainly through weaker exports. The inventory draw down that explained a large part of the real GDP growth in the last two quarters is expected to moderate.

**Wisconsin Employment Starts to Recover in 2010**



## Wisconsin Personal Income Will Grow 2.5% in 2010



## U.S. Outlook

The economy still had plenty of momentum entering the second quarter, but growth should downshift below 3% in the second half of the year. GDP growth will average 3.4% in 2010, but will slow to 2.8% in 2011.

Financial market volatility returned with a vengeance in May, as shock waves from the Eurozone's sovereign debt crisis crossed the Atlantic. IHS Global Insight expects limited fallout from the Eurozone crisis for the United States, although it has increased the downside risks.

Consumer spending is coming to life, but cannot lead as strongly as in previous recoveries. Consumption should rebound 2.7% this year.

Core inflation is weakening and wage inflation is very low. The fall in the euro has diminished any inflation threat still further.

IHS Global Insight does not expect that the U.S. economy can maintain its early-recovery growth pace. The inventory-driven manufacturing rebound remains powerful, and the second quarter is likely to see the strongest quarterly gain in manufacturing production of the recovery so far, but the turn in the inventory cycle will gradually lose steam.

## WI Employment Outlook

Wisconsin began adding jobs in the first months of 2010 and is expected to continue doing so. However, it will take until mid 2013 to reach the pre-recessionary level of employment.

Most of the economic decline in the recent recession happened during 2009. The Wisconsin economy will return to moderate year-over-year growth rates during the second half of 2010.

Wisconsin employment fell 4.5% in 2009. Total job losses during the recent recession and its aftermath represent 6.3% of the peak employment level for Wisconsin and 6.0% for the U.S.

On average, Wisconsin employment will decline 0.7% in 2010 with year-over-year growth returning in the second half. The forecast calls for 1.7% and 2.5% employment growth during 2011 and 2012, respectively.

## WI Personal Income Outlook

Wisconsin personal income growth resumed in the first quarter of 2010 after declining each quarter in 2009. It is expected to increase 2.5% this year.

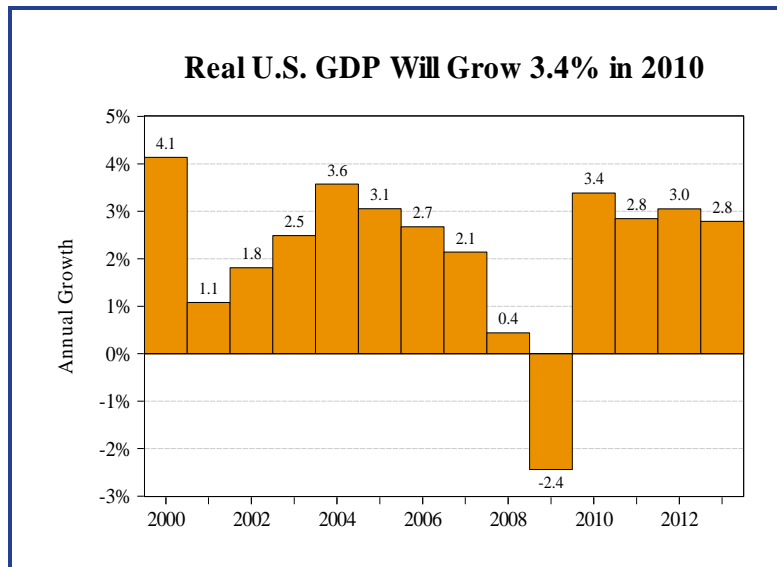
Income should increase 4.4% in 2011, below the 4.7% nationwide, and 4.2% on average in 2012 and 2013, somewhat below the forecasted growth of national personal income (4.8%).

Wisconsin wages and salaries will increase 1.2% in 2010 after falling 4.5% in 2009.

The recession kept inflation low in 2009 due to the severe contraction in demand and to excess capacity in product and labor markets. Prices will pick up some speed but will remain below 2%.

Wisconsin disposable personal income will increase 2.7% in 2010. The 2009 decline in personal income was held to just 0.2% due to the personal tax provisions under the federal fiscal recovery package.

## U.S. Outlook Continued



Foreign trade flows have bounced back sharply. The pace of the trade expansion did slow in the first quarter, but surveys in both the manufacturing and service sectors indicate that there is still plenty of momentum behind exports.

Business equipment and software spending surged 12.7% in the first quarter, on the heels of a 19.0% jump in the fourth quarter. Businesses are flush with cash, and replacement spending should pull equipment purchases 11.8% higher in 2010.

The outlook for business investment in buildings remains poor, although the steepest declines should now be behind us.

### Special Report: Wisconsin Exports

2009 was a difficult year for exports on both a state and national level, but 2010 has already shown improvement. Through April of this year, Wisconsin exports increased 10.7% over the same period in 2009. Nationally, exports are expected to increase 15.9% in 2010 and 9.0% in 2011.

Canada remains the largest recipient of Wisconsin exports, receiving 28.9% of the total. Mexico was the second largest destination of Wisconsin exports (9.5%). The next largest destination was China (6.6%), followed by Japan and Germany.

### Key U.S. Forecast Assumptions

- “Making Work Pay” Tax Cuts Extended For One Year
- Top Marginal Rates Of Income Tax Increase In January 2011
- Fed Holds Rates Near Zero Until March 2011
- Oil Prices Hold Around \$75/Barrel In 2010 And Climb To \$89 By 2012
- Global Growth Better This Year Than Next
- Dollar Helped By Increase Risk Aversion
- Defense Spending Now Peaking

Executive Summary based on the *Wisconsin Economic Outlook*, a quarterly publication of the Wisconsin Department of Revenue - Division of Research & Policy.

Read the [full report](#)  
Read the [press release](#)

### Questions?

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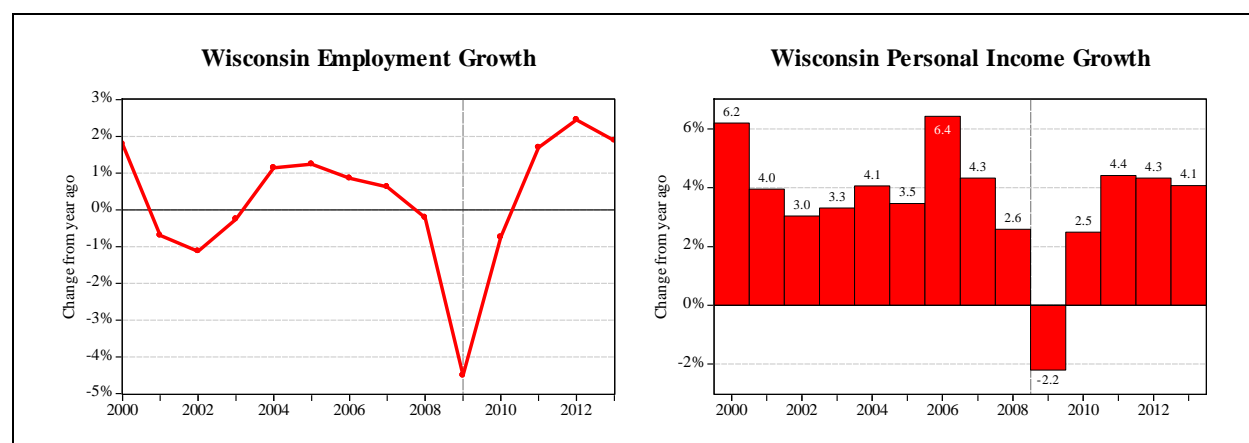
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## WISCONSIN ECONOMIC OUTLOOK

A recovery is underway in 2010. The labor market has stopped shedding jobs. This signals that the economy has reached its employment trough and should continue adding jobs in the coming months. The first months of 2010 show job gains in Wisconsin and the U.S. Since December, the US has added 882,000 jobs led by gains in federal employment, largely temporary jobs created by the Census. Since December, Wisconsin added 25,400 jobs led by gains in manufacturing employment, up 10,900 jobs. Most of the economic decline in the recent recession happened during 2009.

The Wisconsin forecast is based on the June national outlook from IHS Global Insight. It forecasts an increase of 3.4% of real GDP in 2010, after a decline of 2.4% in 2009. The real GDP growth of 5.6% in the fourth quarter of 2009 was mainly driven by the rate of inventory decumulation that added 3.8 percentage points, which also explained 70% of the 2.7% growth in the first quarter of 2010. IHS Global Insight anticipates the U.S. labor market to add almost 1.5 million jobs in 2010. Despite job gains, the U.S. unemployment rate is expected to stay above 9% through the end of 2011 as workers return to the labor force when prospects improve. Inflation continues to be very moderate. IHS Global Insight lowered its already modest inflation outlook. Inflation is expected to return in 2010 with just a 1.5% increase in CPI after the 0.3% decline in 2009. Given the extent of underutilized resources and negligible wage inflation, price inflation will remain a non-issue, with CPI growing at 1.6% in 2011.

Chart I.1



As shown in the left panel of Chart I.1, Wisconsin employment declined 0.2% in 2008 and 4.5% in 2009. Wisconsin started to modestly add jobs in January and is expected to add 30,600 jobs during 2010. The year-over-year decline in employment in 2010 will average 0.7%. Job growth will return in 2011, with total employment advancing 1.7% in 2011 and 2.5% in 2012.

Employment growth in 2010 will be led by growth in Professional and Business Services and continued growth in Education and Health Services. Furthermore, Manufacturing is expected to post only a small decline (0.9%) after the 11.7% fall in 2009 and return to growth during the following years of the forecast period, posting significant employment gains. Finally, the largest employment sector, Trade, Transportation and Utilities, will move sideways until mid 2011.

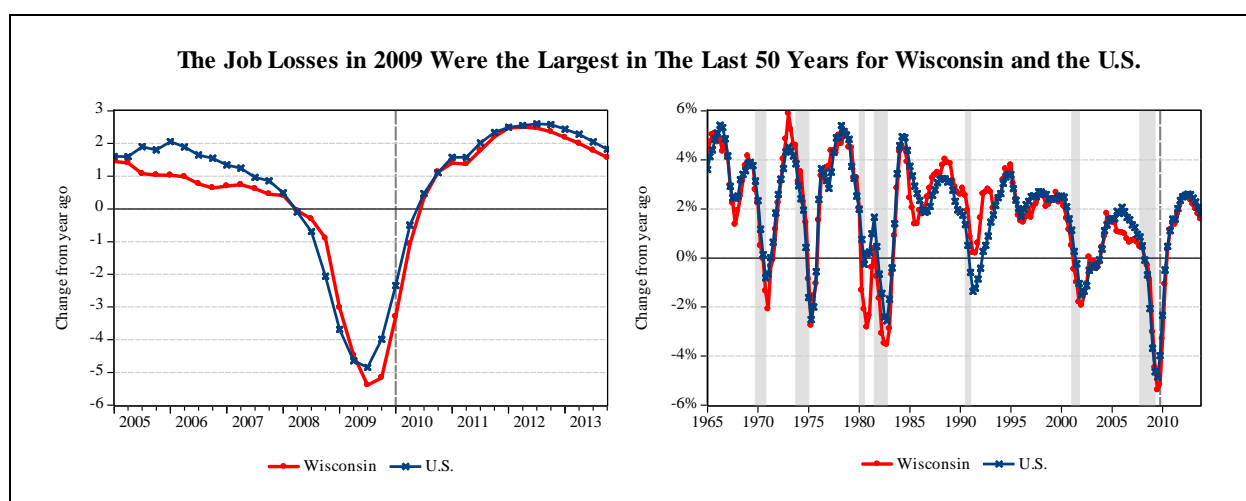
Wisconsin personal income rose 2.6% in 2008 and declined 2.2% in 2009. The forecast anticipates an increase of 2.5% in 2010, 4.4% in 2011 and growth of 4.2%, on average, in 2012 and 2013.

## Employment Outlook

Wisconsin started adding jobs in the first months of 2010 and will continue doing so. The recovery is expected to be slow, so year-over-year comparison will still decline in the first half and return to moderate year-over-year growth rates in the second half of the year. It will take until mid 2013 to reach the pre-recessionary level of employment.

The left panel of Chart I.2 shows total nonfarm employment growth for the U.S. and Wisconsin. The vertical line at the first quarter of 2010 separates history from forecast. Wisconsin employment fell 4.5% in 2009 with 85% of the total losses concentrated in the Manufacturing, Trade, Transportation and Utilities, and Professional and Business Services sectors. The forecast calls for a 0.7% employment decline in 2010 and 1.7% and 2.5% employment growth in 2011 and 2012.

**Chart I.2**



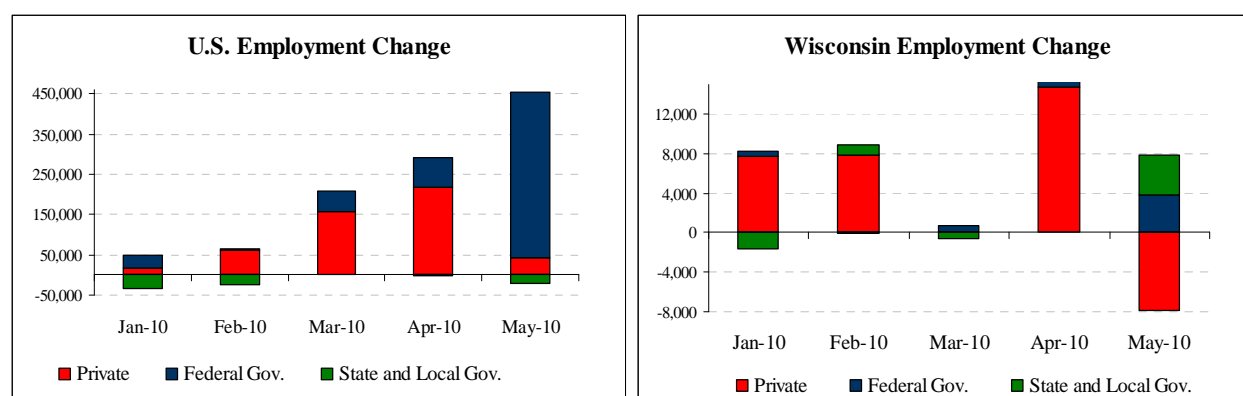
The private sector started adding jobs in 2010. Employment in the Wisconsin private sector will average a decline of 0.8% in 2010 and return to show year-over-year growth rates in 2011 (2.2%). However, the Government sector will be a drag to employment growth in the first two years of the recovery, posting year-over-year declines in 2010 and 2011.

The right panel of Chart I.2 shows total nonfarm employment growth for the U.S. and Wisconsin back to 1965. The shaded areas mark the national recessions as dated by the National Bureau of Economic Research (NBER). Both national and Wisconsin employment declined for seven straight quarters from its peak in the first quarter of 2008 through its trough in the fourth quarter of 2009. National employment fell 6.0%, while Wisconsin employment declined 6.3%. In both cases, the loss of jobs during this recession surpassed any single recession in the last 50 years, as shown in Chart I.2.

Both the U.S. and Wisconsin employment bottomed in December of 2009 and saw moderate monthly job gains since January 2010. However, a significant part of those job gains came from the federal government employment sectors. At the national level, the private sector added 495,000 jobs through May, less than half of the total number of jobs created nationwide in the first five months of the year, while the federal government sector added 571,000 jobs. The State and Local Government sector shed 84,000 jobs nationwide. As shown of the left panel of Chart I.3, the May increase in federal government employment, driven by the Census 2010 jobs, accounts for most of the May job gains and half of the total job gains since the beginning of the year.

The Wisconsin private sector added 65% of the jobs created through May, but at a very uneven monthly pace as shown on the right panel of Chart I.3. After not adding jobs in March, Wisconsin's private sector added 14,800 jobs in April but lost half of those in May. Federal and State and Local Government job gains in May offset the loss in the private sector, but this is not sustainable and may be washed out by future data revisions. The forecast expects the private sector to consolidate and start adding jobs at a more consistent pace in the second half of the year.

Chart I.3



## Employment Sectors

Wisconsin employment peaked in the first quarter of 2008 during the recent recession and lost 180,900 jobs through its trough in the fourth quarter of 2009. The two largest sectors of the Wisconsin economy in terms of employment, Manufacturing and Trade, Transportation and Utilities, accounted for more than 65% of the job loss in that period.

Manufacturing was the largest private employer for Wisconsin, but the declining trend in manufacturing since 1999 has eroded manufacturing jobs as shown in Chart I.4. In 2002, Manufacturing moved to its current second place behind Trade, Transportation and Utilities as the largest private employer in Wisconsin. The significance of the Manufacturing sector for the state is still a distinctive characteristic of the Wisconsin economy, accounting for 15.5% of total employment. This contrasts with the smaller relevance of the sector in national employment, where Manufacturing is in sixth place accounting for just 8.9% of total employment nationwide.

The decline of U.S. Manufacturing employment started in the eighties. The sector never recovered its pre-eighties level and has been falling every year since 1999. In contrast, Wisconsin manufacturing employment was hardest hit during the early 1980s recessions, but the recovery during the 1990s brought manufacturing employment back to pre-1980s levels.

The early 1980s recession hit the Midwest the hardest, and Wisconsin in particular, because of its large share of durable manufacturing, almost 20% of total employment versus less than 14% for the U.S. as a whole. Durable Goods industries are pro-cyclical as the demand for their products shrink dramatically during a recession. Since the 2001 recession, the share of Durable manufacturing for Wisconsin stayed at around 11% of total employment but fell to 9.2% during the recent recession. However, since January the subsector has been adding jobs, regaining its share and leading the employment recovery in the Manufacturing sector.



Chart I.4

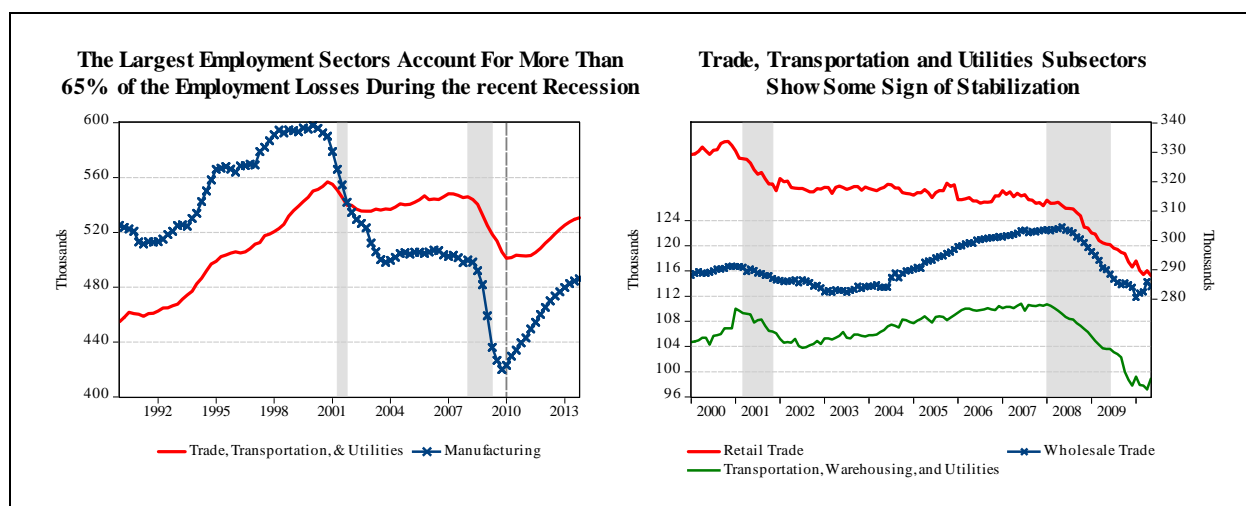
Manufacturing Employment	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>WI Manufacturing</b>														
(Thousands)	594.15	560.33	528.37	504.1	502.8	504.9	505.7	501.3	492.9	435.4	431.6	451.7	471.4	483.3
(year ch.)	-0.1%	-5.7%	-5.7%	-4.6%	-0.3%	0.4%	0.2%	-0.9%	-1.7%	-11.7%	-0.9%	4.7%	4.3%	2.5%
<b>US Manufacturing</b>														
(Millions)	17.265	16.44	15.257	14.5	14.3	14.2	14.2	13.9	13.4	11.9	11.8	12.3	12.8	13.1
(year ch.)	-0.3%	-4.8%	-7.2%	-4.9%	-1.3%	-0.6%	-0.5%	-2.0%	-3.4%	-11.3%	-1.0%	4.4%	4.0%	2.3%

During the last several years, Wisconsin Manufacturing employment outperformed the U.S., and it is expected to continue this trend, as shown in Chart I.4. Manufacturing employment nationwide never recovered from the last recession and continued losing jobs every year during the last recovery. Wisconsin added some jobs during the recovery years (2005 and 2006), but started to lose manufacturing jobs in 2007, declining 0.9% and 1.7% in 2007 and 2008, compared to the U. S. Manufacturing employment declines of 2.0% and 3.3%, respectively.

Employment in the Manufacturing sector fell 11.7% and 11.3% in 2009 in Wisconsin and the U.S. respectively. However, since January 2010, the sector posted jobs increases in Wisconsin and nationwide, helped by the job gains in the Durable Goods subsector.

The Wisconsin forecast signals the trough of Manufacturing employment in the last quarter of 2009, as shown in the left panel of Chart I.5 and expects the sector to steadily add jobs during 2010 and the following years through 2013. The slow pace of the recovery still yields a year-over-year decline of 0.9% in 2010, but toward 2011 the acceleration of the recovery yields a 4.7% increase in 2011 and 4.3% growth in 2012. The expected recovery in the manufacturing sector is fueled by the inventory cycle in the short-term and a recovery of domestic and foreign demand in the medium-term.

Chart I.5



The recent recession will leave the Manufacturing share of total employment almost equal to the share of Education and Health Services sector by the third quarter of 2010. The Education and Health Services sector was the only private sector not to contract during the recession. However, as the Manufacturing employment recovers, it will retain its second place as largest employer.

The Trade, Transportation and Utilities sector posted very weak growth during the last business cycle expansion, adding just 10,700 jobs in four years between 2003 and 2007. As shown of the left panel of Chart I.5, the sector never reached its previous peak level reached in the year 2000. During the recent recession, the sector peaked in the first quarter of 2007 at 548,100 jobs, still 1.6%, or 8,600 jobs lower than the previous peak in 2000. This behavior was mainly driven by the Retail subsector. The severe deterioration of the domestic demand drastically impacted employment in the Trade, Transportation and Utilities sector, which shed 44,900 from its peak in the first quarter of 2008 (see left panel of Chart I.5).

The right panel of Chart I.5 shows the evolution of employment in the three subsectors of the Trade, Transportation and Utilities sector. The largest subsector is Retail Trade and accounts for almost 60% of employment in the sector. Retail employment fell in the 2001 recession and stayed almost flat during the following expansionary years, not recovering its previous employment level. In the recent recession, the sector lost 22,600 jobs through the first quarter of 2010 and in the last couple of months has been moving sideways, showing some signs of stabilization. The other two subsectors account for about 20% each of employment in the Trade, Transportation and Utilities sector. The Wholesale Trade subsector lost 10,400 jobs, or 8.5% of employment, from its peak in the second quarter of 2008. As shown in the chart above, the subsector has been posting small job gains in recent months. The Transportation, Warehouse and Utilities subsector lost 12,200 jobs, or 11.0% of its peak employment, in the first quarter of 2008, and is also showing some signs of stabilization.

In 2010, employment in the Trade, Transportation and Utilities will be the same as 15 years ago (1995). The forecast calls for a decline of 2.6% in 2010 and moderate growth of 0.5% in 2011. Toward the second half of 2011 the recovery will finally arrive to this sector, posting 2.4% growth in 2012 and 2.2% in 2013. The Trade, Transportation and Utilities sector will not recover its pre-recession employment level during the forecast period, but it will retain its place as the largest private employment sector in Wisconsin and nationwide.

**Chart I.6**  
**Sector's Employment Share Of Total Employment In The First Quarter Of 2001**

US Rank	Sector	US Share	WI Rank	Sector	WI Share
1	Trade, Transportation & Utilities	19.0%	1	Trade, Transportation & Utilities	18.5%
2	Government	17.3%	2	Government	15.7%
3	Education & Health Services	15.0%	3	Manufacturing	15.6%
4	Professional & Business Services	12.8%	4	Education & Health Services	15.4%
5	Leisure & Hospitality	10.0%	5	Leisure & Hospitality	9.3%
6	Manufacturing	8.9%	6	Professional & Business Services	9.3%
7	Financial Activities	5.9%	7	Financial Activities	5.8%
8	Construction	4.3%	8	Other Services	5.0%
9	Other Services	4.1%	9	Construction	3.6%
10	Information	2.1%	10	Information	1.7%
11	Natural Resources & Mining	0.5%	11	Natural Resources & Mining	0.1%

The chart I.6 shows the ranking of sectors in terms of employment share for the US and Wisconsin. Government is the second sector in terms of share of total employment in both rankings, but it accounts for a larger share at the national level. Government employment in Wisconsin accounted for 15.7% of total employment, while at the national level Government jobs explain 17.3% of total employment. Also, looking individually at the Federal, State and Local government employment, Wisconsin shows a lower share of total employment for each of the three subsectors.

The Wisconsin Government sector grew 0.7% in 2009, but the outlook calls for a 0.3% decline in 2010 despite the 4.5% growth in Federal Government employment from the Census. The weak fiscal position of state and local governments will reduce State and Local Government employment in 2010 and 2011. Total Government will decline 1.1% in 2011 and return to moderate growth towards 2012.

The fourth sector in terms of employment share for Wisconsin is Education and Health Services. This sector includes only private education and was one of the only two sectors that grew in 2009, advancing 1.8%. The outlook calls for a 1.4% increase in 2010 and an average strong growth of 2.1 between 2011 and 2013.

The Leisure and Hospitality sector ranks fifth for both Wisconsin and the U.S. Employment in the Leisure and Hospitality sector fell 2.9% in 2009 due to the decline in consumers' discretionary spending, and it's expected to decline 0.2% in 2010. The forecast calls for growth of 0.6% in 2011 and double that rate in the next two years.

The Professional and Business Services sector accounts for 9.3% of total Wisconsin employment, which put it in sixth place. However, this was the third sector posting the largest job losses in the recent recession; it lost 36,000 jobs from the first quarter of 2008 to the fourth quarter of 2009. Professional and Business Services is the only sector that is expected to join the Education and Health Services and Government sectors posting employment growth in 2010. This extraordinary growth is explained by the strong increase in temporary jobs in the initial phase of the recovery. As the economy starts to recover, companies are more willing to hire temporary workers to help with the initial growing demand and wait until the recovery firms over time to replace temporary jobs with permanent hires. The forecast calls for growth in the sector of 1.2% in 2010 and 6.9% in 2011.

Financial Activities ranks seventh in Wisconsin and nationwide in terms of share of total employment, accounting for 5.8% and 5.9% respectively. However, the impact from the recent financial crises was more disruptive at the national level. Nationwide, the Financial sector lost 8.6% of its peak employment in the first quarter of 2007, more than double Wisconsin's loss of 3.9%. Financial Activities employment in Wisconsin will fall 2.1% in 2010 and 0.9% in 2011. The forecast expects the sector to start adding jobs in mid 2011, returning to positive but modest growth by 2012. The Other Services sector represents 5.0% of Wisconsin employment and 4.1% of U.S. employment. Wisconsin Other Services employment was the least affected sector in the recent recession, posting the smallest decline in 2009 (0.9%). The forecast calls for another decline of 0.6% in 2010 and an increase of 0.8% in 2011. The Information and Natural Resources and Mining sectors are the smallest sectors for Wisconsin and the US. Wisconsin employment in the Information sector declined 4.4% in 2009 and is expected to fall again in 2010 (1.7%) before returning to strong growth in 2011. Employment in the Natural Resources and Mining sector has declined every year since 2006 and is expected to fall through 2012.

As shown on the right panel of Chart I.7, Wisconsin employment in the Construction sector stagnated in 2004 as housing permits started to fall. Wisconsin Construction employment started to post negative year-over-year growth in the third quarter of 2006 and declined 1.2% in 2007, 6.0% in 2008 and, 13.8% in 2009. Construction employment peaked in the first quarter of 2006 at 129,100 jobs and lost 32,100 jobs through the first quarter of 2010 or 24.9% (see Chart I.7). This means that almost one out of four Construction workers lost their job in the past four years. Recent monthly data show signs of stabilization, but the end of the home buyers' tax credit is expected to have some negative impact for the rest of the year. The outlook for Wisconsin Construction employment calls for one more year of job losses, reaching its trough in early 2011. The forecasted quarter-over-quarter gains in 2011 will not be enough to post an annual increase. Construction employment is expected to decline another 5.0% in 2010 and 1.4% in 2011. After the mild start, the recovering Construction employment will post strong growth of 2.5% and 3.5% in 2012 and 2013 respectively.

The Wisconsin seasonally adjusted unemployment rate rose from 4.3% in the first quarter of 2008 to 8.8% in mid 2009, but retreated to 8.7% in the first quarter of 2010. The Wisconsin unemployment rate stayed below the national unemployment rate through the current recession and is expected to continue doing so. The forecast calls for an unemployment rate of 8.4% in 2010 and 8.3% in 2011. Unemployment will recede slowly as improving employment prospects bring more workers to the labor force. By the end of the forecast period, Wisconsin unemployment rate will be 6.3%, still double its pre-recession level, but lower than the 7.7% at the national level.

The BLS releases new alternative measures of labor underutilization for states. The more inclusive of these measures is the so called U-6 rate, which measures the total unemployed, plus all marginally attached workers<sup>1</sup> and workers working part-time for economic reasons, as a percent of the civilian labor force plus all marginally attached workers. This measure accounts, in part, for the distortion of a decline of the unemployment rate due to people leaving the labor force. BLS publishes this alternative measure for the states on annual averages. The latest released data was for the period second quarter of 2009 through the first quarter of 2010, in which both the U.S. and Wisconsin U-6 rate continue to increase. Wisconsin U-6 rate was 15.1%; this is 0.5 percentage points higher than the 14.6% rate registered for the annual period ending the fourth quarter of 2009 and 6 percentage points higher than the 8.6% registered in 2008. However, the Wisconsin U-6 rate is still below the national rate of 16.7%.

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

## Housing

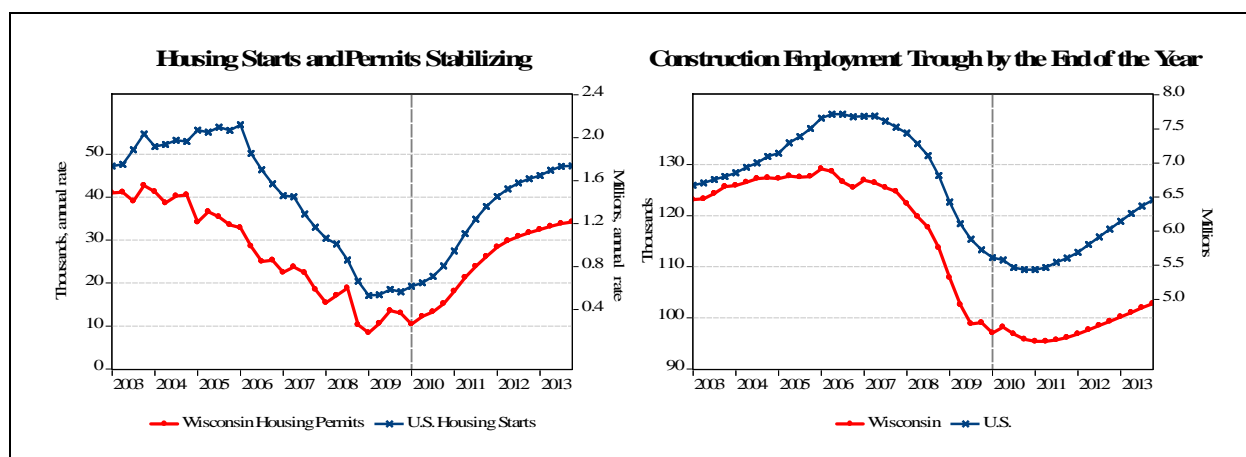
The Housing sector is showing mixed signals at the national and state level and seems to be at or near its bottom. The federal home buyers' tax credit and its extension through April has shown its impact in housing starts and sales, but this has mainly served to shift sales from the second half of 2010 into the second quarter of 2010. The Housing sector is expected to show a moderate performance for the rest of the year. National sales of existing homes reached an annual rate of almost six million in the last quarter of 2009 in response to the first-time homebuyer tax credit, but fell to just above five million in the first quarter of 2010. Wisconsin housing indicators are also showing mixed signals. While sales, building permits, starts and prices show some recent improvement, it is unclear how much of that improvement is due to the effects of the home buyer credit.

Wisconsin building permits fell 20.1% in the first quarter of 2010 to 10,400 permits from the last quarter of 2009 but are expected to start a recovery by the second quarter of 2010 (see left panel of Chart I.7). Year-over-year Wisconsin permits increased 23.4% in the first quarter of 2010. This follows a 26.1% increase in the last quarter of 2009, the first positive increase since late 2004. Wisconsin permits have been declining since its peak at 42,700 in the last quarter of 2003. The forecast still signals a trough for permits in early 2009 with an uneven recovery in the short term. The forecast does not expect the level of permits to return to the 2003 peak levels, but Wisconsin permits will surpass the 30,000 level by the second half of 2012.

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<sup>1</sup> Marginally attached workers (Current Population Survey): Persons not in the labor force who want and are available for work, and who have looked for a job sometime in the prior 12 months (or since the end of their last job if they held one within the past 12 months), but were not counted as unemployed because they had not searched for work in the 4 weeks preceding the survey. Discouraged workers are a subset of the marginally attached.

Chart I.7



According to the Wisconsin Realtors Association, Wisconsin existing home sales increased 16.8% in the first quarter of 2010, year-over-year, outperforming the nation (11.4%) and the Midwest (10.8%). This is the third quarter in a row showing year-over-year increases of Wisconsin existing home sales, and the second quarter to post double digit growth rates. The median home price statewide was almost flat, increasing less than 0.1% to \$135,000 from a year ago. Median prices fell at the national and regional levels. Median prices in the nation fell 0.7% to \$166,000 in the first quarter of 2010 from a year ago. The Midwest region saw prices fall 0.8% to \$130,600 during the same period.

The Federal Housing Finance Agency (FHFA) releases a different measure of home prices. The last release of its Purchase-Only House Price Index shows a significant decline in prices from the previous quarter and from a year ago. According to their Purchase-Only House Price Index, home prices in Wisconsin started to fall in early 2008, though not as hard as in other parts of the country. The Wisconsin Purchase-Only House Price Index posted its largest drop in the first quarter of 2010 falling 5.8% year-over-year, while the nation posted a decline of 3.1%. Wisconsin prices in the first quarter of 2010 declined 2.6% from the fourth quarter of 2009, while the nation posted a smaller decline of 1.9% from the previous quarter.

The real estate transfer fee collections are another key housing indicator that reflects the pulse of the Wisconsin housing sector. The fee is imposed on all real estate conveyances at a rate of \$0.30 per \$100 of value. Collections peaked in 2005 at \$80.2 million and have been declining since. Collections fell 24.8% in 2008 and 22.7% in 2009 to \$40.0 million in 2009. However, the last two quarters show signs of an improving housing market. After 13 consecutive quarters posting year-over-year declines (2006Q3-2009Q3), collections increased for three quarters in a row (2009Q4-2010Q2).

High foreclosure and delinquency rates and a mild employment recovery are posing risks to the recovery of the housing sector at the national and state levels. Foreclosures and mortgage delinquencies are still high, though RealtyTrac foreclosure data show some signs of stabilization. While the number of foreclosure filing on properties nationwide increased 7.0% in the first quarter of 2010, April and May posted declines of 9% and 3% respectively. State data are only available on a quarterly basis, with the first quarter of 2010 being the latest estimates available. Ten states account for more than 70% of nation's first quarter total foreclosures. Wisconsin continues to rank 20th in the nation, with one out of 221 households in foreclosure in the first quarter of 2010, compared with one out of every 138 households in foreclosure nationwide and one out of every 33 households in foreclosure in Nevada, which leads the ranking. Foreclosure homes accounted for 31% of all residential sales in the first quarter of 2010, and the average sales price of properties that sold while in some stage of foreclosure was nearly 27 percent below the average sales price of properties not in the foreclosure process.

The Mortgage Bankers Association of America reported an increase of 10.1% in delinquencies nationwide during the first quarter of 2010. The percentage of loans in the foreclosure process at the end of the first quarter was 4.6%. This represents another record high.

The Office of the Comptroller of the Currency and the Office of Thrift Supervision released the Mortgage Metrics Report for the first quarter of 2010. The report states that “Delinquency rates dropped in the first quarter of 2010, with improvement in all categories of mortgages—prime, Alt-A, and subprime.” The percentage of current and performing mortgages increased for the first time since the agencies began publishing the report in June 2008. But the number of foreclosures increased substantially. Newly initiated foreclosures increased 18.6% to 370,536 from the previous quarter. Re-default rates for modified mortgages remain high. At 12 months following modification, more than half of all modified mortgages were 60 or more days past due.

The commercial real estate sector also represents a risk to the economic recovery in general and to the recovery of the construction and financial sectors in particular. IHS Global Insight still expects nonresidential construction to decline over the next year, but the rate of decline will get progressively smaller.

### Income Revisions

Since the last Outlook, the Bureau of Economic Analysis (BEA) released revised 2009 quarterly and first quarter of 2010 state personal income estimates.

The Wisconsin personal income decline in 2009 was revised from -2.0% to -2.2%. The downward revision to personal income was mainly driven by downward revisions to personal current transfer receipts<sup>2</sup> during the second half of 2009. On a quarterly basis, the revisions to total personal income were minor for the first three quarters of 2009. However, the total personal income decline in the last quarter of 2009 was revised from -1.8% to -2.3%, as shown in the left panel of Chart I.8.

The wage and salary disbursements component accounts for more than half of total personal income. The decline in Wisconsin wages and salaries was revised from -4.4% to -4.5% in 2009 with the larger year-over-year declines during the second half of 2009, posting revised -5.4% and -6.0% in the third and fourth quarters of 2009 respectively.

As shown in the left panel of Chart I.8, total personal income returned to year-over-year growth in the first quarter of 2010, posting a 1.5% increase year-over-year. On the other hand, wages and salaries posted the fifth straight year-over-year decline in the first quarter of 2010, falling 1.2% from the same quarter of 2009.

Wisconsin personal income grew 0.8% in the first quarter of 2010 from the last quarter of 2009, the same as the Great Lakes region and slightly below the 0.9% increase nationwide. Within the Great Lakes region, personal income increased in all states, but Illinois grew 0.4%, half the average growth of the region. The other states posted personal income growth above the average of the region: Michigan (0.9%), Indiana (1.2%) and Ohio (1.1%).

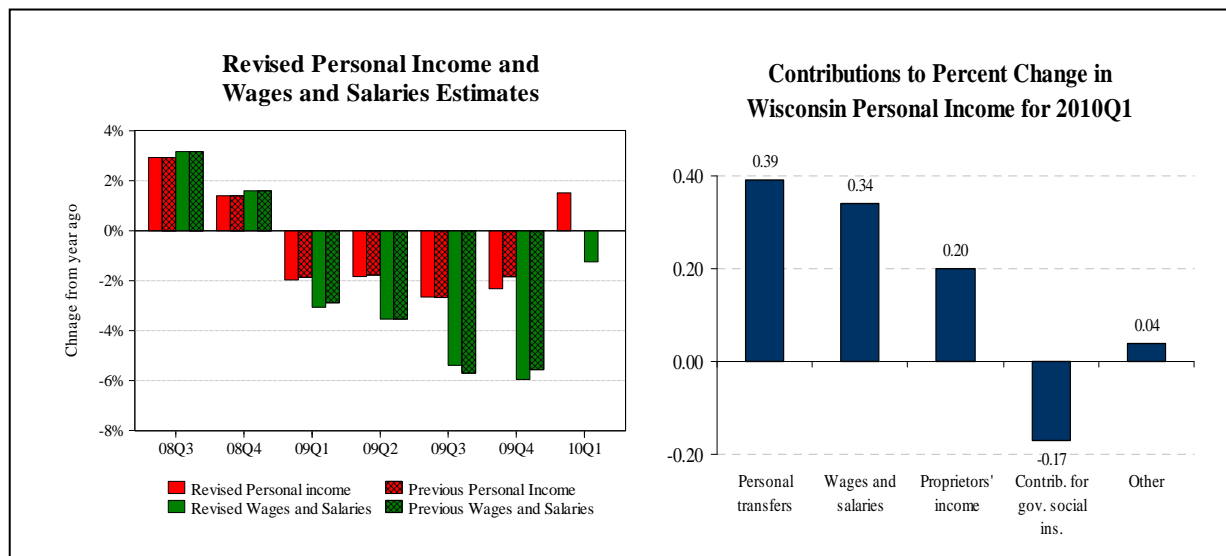
The right panel of Chart I.8 shows each income components' contribution to the 0.8% personal income growth in the first quarter of 2010. Almost half of personal income growth in the first quarter of 2010 came from personal current transfer receipts, while the second contributor was wages and salaries. The 0.2 percentage points contributed from proprietor's income was almost offset by the 0.17 percentage points decline in the contributions for government social insurance component.

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<sup>2</sup> Personal current transfer receipts: consists of income payments to persons for which no current services are performed and net insurance settlements. It is the sum of government social benefits and net current transfer receipts from business.



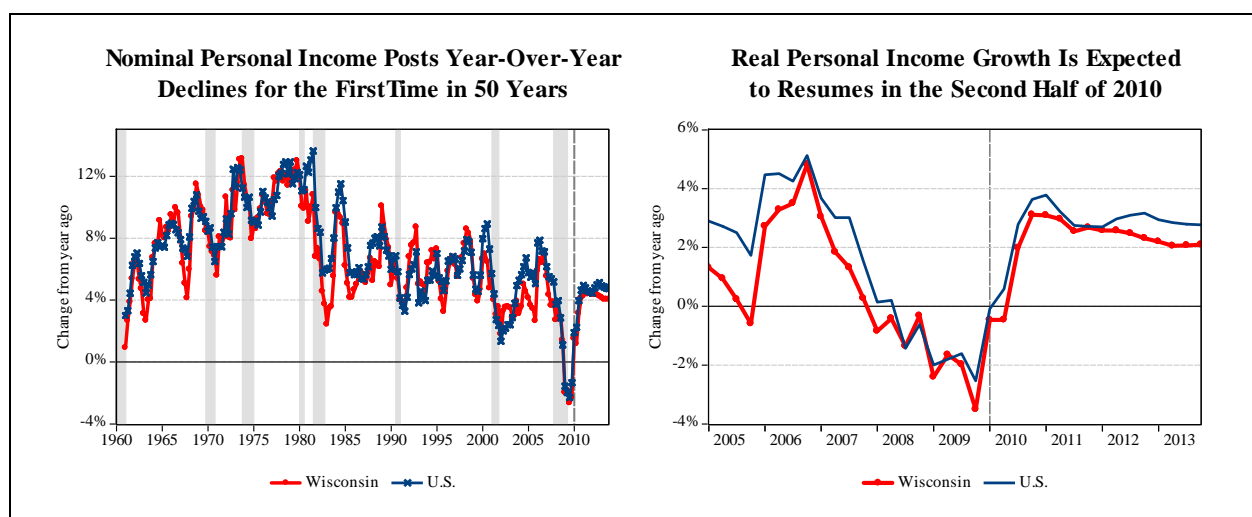
Chart I.8



## Income Outlook

Quarterly personal income data shows Wisconsin and U.S. personal income posting year-over-year declines for the first time in 50 years (see left panel of Chart I.9). Wisconsin personal income declined each quarter of 2009, but growth resumed in the first quarter of 2010 and is expected to increase 2.5% this year. The forecast then expects annual increases of 4.4% in 2011, below the 4.7% nationwide, and 4.2% on average in 2012 and 2013, somewhat below the forecasted growth of national personal income (4.8%).

Chart I.9



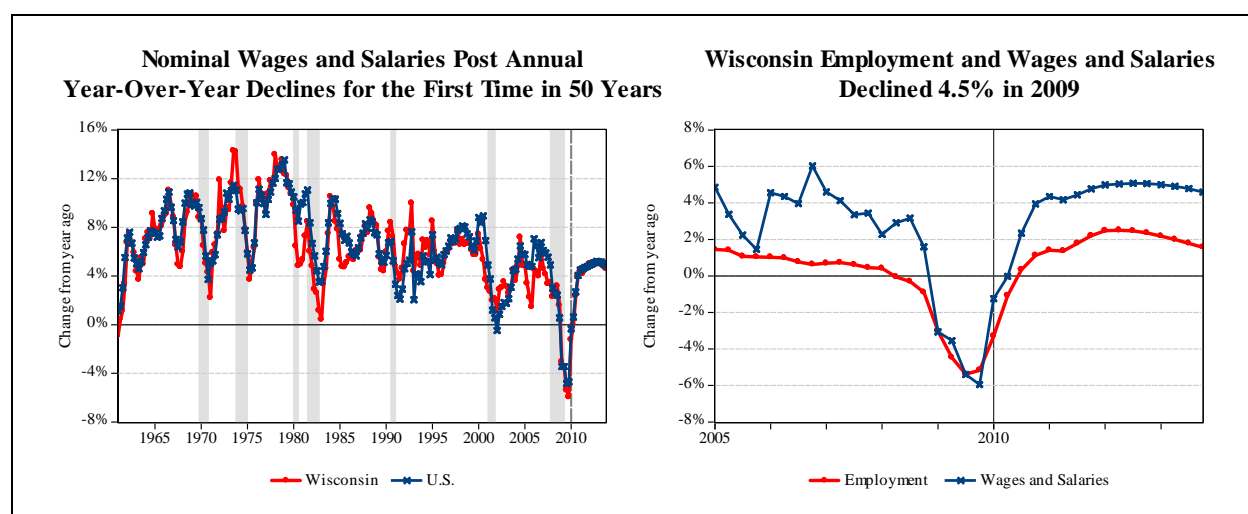
When considering the impact of inflation, real personal income also fell in 2008 and 2009 (see Chart I.9). As a result of the 3.3% increase in the personal consumption expenditures price index, real Wisconsin personal income declined 0.7% in 2008. The recession kept inflation low in 2009 due to the severe contraction in demand and to excess capacity in product and labor markets. Inflation slowed to 0.2% in 2009, and real personal income posted a 2.4% decline for Wisconsin and a 2.0% decline for the U.S.

Inflation will pick up some speed as the economy recovers, but increases will remain below 2% for the next three years due to the slow pace of the recovery. IHS Global Insight expects prices to increase just 1.4% in 2010 and 1.6% in 2011, helping the growth in real personal income. The forecast calls for real Wisconsin personal income to grow 1.0% in 2010 and 2.8% in 2011. As the economy recovers steam, prices will increase 1.8% and 1.9% in 2012 and 2013, just below the Federal Reserve's 1-2% comfort zone, yielding a 2.5% and 2.1% increase of real personal income in 2012 and 2013.

### Personal Income Components

As shown on the left panel of Chart I.10, Wisconsin and U.S. nominal wages and salaries declined in 2009, also for the first time in 50 years. Wisconsin wages and salaries fell 4.5% in 2009, slightly faster than the U.S. decline of 4.1%. Wisconsin wages and salaries declined 1.2% during the first quarter of 2010, but the forecast calls for a flat second quarter and moderate growth in the second half of the year, posting a final annual increase of 1.2% in 2010. With employment back on a growth path, wages and salaries are expected to grow an average of 4.3% between 2011 and 2013. Adjusting for inflation, real wages and salaries declined 4.7% in 2009 and will decline another 0.2% in 2010.

Chart I.10



The drastic employment declines, combined with the lowest employment cost index increase of the last 50 years, yield a decline of 4.5% in wages and salaries in 2009. As shown on the right panel of Chart I.10, wages and salaries declined more than 5.0% year-over-year in the last two quarters of 2009. The first quarter of 2010 showed a smaller decline and after a flat second quarter, the forecast expects a moderate but steady recovery. Wages and salaries, being the largest component of personal income, accounted for 53.2% of Wisconsin total personal income in 2009, down from around 63% in the 60's and 56.0% in 2004 at its peak in the last recovery.

Supplements to wages and salaries<sup>3</sup> fell 1.0% in 2009 and are expected to grow just 1.6% in 2010. The forecast calls for strong growth of supplements to wages and salaries income in the next three years, posting an average of 5.1% between 2011 and 2013.

<sup>3</sup> This component of personal income consists of employer contributions for employee pension and insurance funds and employer contributions for government social insurance.



Proprietors' income declined 1.3% in 2008 and 14.8% in 2009. Proprietors' income will return to growth toward 2010, posting strong growth rates of 12.2% and 7.4% in 2010 and 2011 respectively. It will return to normal growth rates the next two years, posting 3.8% in 2012 and 2.9% in 2013.

Rental income climbed 48.6% in 2008 and the forecast calls for another large increase of 36.5% in 2009<sup>4</sup> after three years of declines. It is now expected to grow 8.4% in 2010, after which it will decline again throughout 2013. Dividend income fell 10.2% in 2008, and the forecast expects it to fall another 17.3% in 2009. The forecast calls for dividend income to grow 3.6% in 2010 and a strong 20.3% in 2011. It will then return to moderate growth below 5.0% the following years. Interest income grew 3.2% in 2008, but the forecast calls for a decline of 4.2% in 2009 and 0.1% in 2010. The decline of interest income is mainly a consequence of the Fed's policy of easing interest rates in response to the economic crisis. Personal interest income is expected to resume growth in 2011 (2.5%), posting a strong growth above 7.0% in 2012 and 2013.

Personal current transfer receipts jumped in 2009 as expected considering the magnitude of the current recession and the significant increase in unemployment. This component of personal income includes payments to persons for which no current services are performed. It consists of payments to individuals and to nonprofit institutions by federal, state, and local governments and by businesses. Social security payments and Medicare accounts for more than 60% of total Wisconsin personal current transfer receipts. Following the national trend, Wisconsin personal current transfer receipts increased 14.3% in 2009, from \$31.8 to \$36.3 billion, but will post moderate growth rates throughout the forecasted period as the economy recovers.

### **Related Income Measures**

Wisconsin disposable personal income (total after-tax income received by persons available for spending or saving) declined just 0.2% in 2009, better than personal income. This was due to the 18.0% decline in personal tax under the federal fiscal recovery package. Personal tax payments will stay low in 2010 and return to growth in 2011. Thus, disposable income will return to show lower growth than total personal income, as usual. The forecast expects Wisconsin disposable personal income to grow 2.7% in 2010 and return to a steady growth of an average of 3.2% between 2011 and 2013.

State GDP data is released on an annual basis. The latest data show that real Wisconsin GDP grew 0.9% in 2008, higher than the 0.4% growth of national real GDP. The forecast expects a 3.2% decline of real Wisconsin GDP in 2009 and a return to growth at 3.1% in 2010.

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

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<sup>4</sup> Actual rental, personal dividend and personal interest income components for 2009 will be available from BEA by September 2010. Until that time, these components must be forecast for 2009.



# U.S. EXECUTIVE SUMMARY

JUNE 2010

## Volatility Returns

### Forecast Highlights

- The economy still had plenty of momentum entering the second quarter, but growth should downshift below 3% in the second half of the year. GDP growth averages 3.4% in 2010, but slows to 2.8% in 2011.
- We expect limited fallout from the Eurozone crisis for the United States, although it has increased the downside risks.
- Consumer spending is coming to life, but cannot lead as strongly as in previous recoveries.
- Core inflation is weakening and wage inflation is very low. The fall in the euro has diminished any inflation threat still further.
- We now expect the Federal Reserve to begin to raise interest rates only in the first quarter of 2011.

### The Forecast in Brief

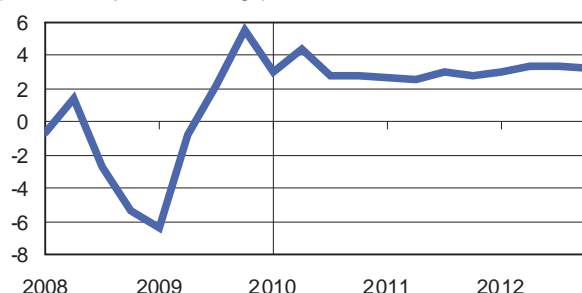
Financial market volatility returned with a vengeance in May, as shock waves from the Eurozone's sovereign debt crisis crossed the Atlantic. **We continue to believe that**

**the effect of the Eurozone crisis on the U.S. recovery will be modest**, coming mostly through the implications for exports of weak European demand growth and a weaker euro. This is based on the assumption that Eurozone policy-makers will prevent messy defaults or restructuring—or at least postpone any debt restructuring until the financial system and the global economy are much less fragile. But downside risks have risen.

**And we do not expect that the U.S. economy can maintain its early-recovery growth pace.** The inventory-driven manufacturing rebound remains powerful, and the second quarter is likely to see the strongest quarterly gain in manufacturing production of the recovery so far, but the turn in the inventory cycle will gradually lose steam. And consumer spending flattened out in April and May (after two very strong months), while the May jobs report (just 41,000 private jobs added) revealed that the April report (218,000 jobs added) had overstated the strength of the pickup in labor demand. The true picture probably lies somewhere in between. In addition, housing activity is due a payback after the homebuyers' tax credit finally expires at the end of June.

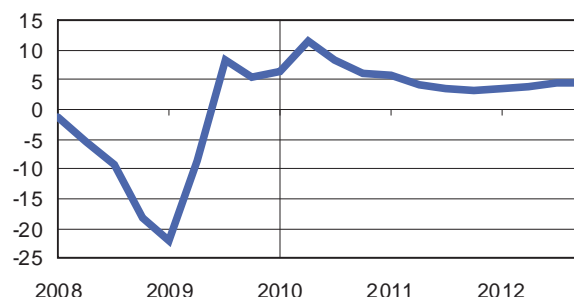
### GDP Growth to Slow After a Q2 Bounce...

(Annualized percent change)



### ...Same Story for Manufacturing Production

(Annualized percent change)



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The second-quarter GDP picture looks very strong, enhanced by a weather bounce after the first quarter; **we expect 4.4% GDP growth in the second quarter**, up from 3.0% in the first. And growth will tilt towards final sales, from inventories. **But growth will likely ease below 3% during the second half**, with slower export growth, continuing declines in nonresidential construction, and a setback for housing the key reasons. We have edged down our calendar-year growth forecasts by 0.1 percentage point for both 2010 (from 3.5% to 3.4%) and 2011 (from 2.9% to 2.8%). This remains a subdued recovery by historical standards due to credit and balance-sheet constraints.

The 3.5% **consumption** increase in the first quarter (the best in three years) was helped by a lower saving rate, but rising employment and hours worked are starting to move incomes higher. Even in May, when private employment growth was weak, increased hours worked and increased hourly earnings raised aggregate private payrolls by 0.7%, boosting purchasing power for those in work. And gasoline prices are helping, too, with the normal seasonal bounce absent. Still, consumers are hamstrung by high debt burdens, depleted wealth, and tight credit—and not in a position to lead the recovery. Consumption fell 0.6% in 2009, but should rebound 2.7% this year. Vehicle sales are also trending higher; our **light-vehicle sales** forecast for 2010 remains at 11.8-million units.

Rising employment is also a key to a revival in **housing** activity. Tax incentives have filled in a hole by pulling some activity forward, but they are not the basis for a sustained housing revival. We are now seeing a second surge in home sales in response to the extended homebuyers' tax credit. But a sharp payback is on the way, and we expect housing activity to be a small drag on third-quarter growth, after being a big plus in the second quarter. As employment revives, though, housing sales and starts should begin to turn up on a sustained basis. House prices have also been propped up by the homebuyers' tax credit, and although we believe that they are close to the bottom, we expect the FHFA house price index (purchase-only) to fall another 5.0% year-over-year by the fourth quarter of 2010.

The picture is still gloomy in the **multi-family housing** market, where credit restrictions are biting (and where

some renters are becoming first-time buyers). Multi-family housing starts have fallen so far, though, that there is literally very little further room for decline.

**Business equipment and software** spending surged 12.7% in the first quarter, on the heels of a 19.0% jump in the fourth quarter. High-tech equipment, software, and vehicles were once again the big gainers. Orders for capital goods are still trending higher, and we see double-digit gains continuing for the rest of the year. Businesses are flush with cash, and replacement spending should pull equipment purchases 11.8% higher in 2010.

On the **business structures** side, the outlook remains poor, although the steepest declines should now be behind us. Private nonresidential construction spending rose in April for the first month in more than a year. But the trend for commercial construction such as retail developments, offices, and hotels is still downward. Spending on buildings fell at a 32% annualized rate in the first quarter, the third consecutive quarter of 30%-plus declines. We foresee further declines (but of much less severity) through the first half of 2011. Drilling activity in the energy sector rose sharply in the first quarter, and should do so again in the second quarter; but we expect lower activity over the second half of the year, as the six-month moratorium on deep-water drilling takes effect.

In the **state and local government sector**, tax revenues are down sharply, while financing has become more expensive, and federal support for current spending is due to expire at the end of the year. Federal support for capital spending, in contrast, is being spread over several years. Real state and local government purchases have now fallen for three straight quarters, as job cuts have intensified. We believe that overall spending will move sideways in coming quarters; employment will fall further, but capital spending should be bolstered by federal support.

The ARRA stimulus package, financial bailout costs, and the recession took the **federal budget deficit** to \$1.4 trillion in 2009. The 2010 deficit should be slightly lower, at \$1.3 trillion, helped by lower estimates of TARP losses. Beyond the recession, President Obama will face tough choices about his spending priorities, and taxes must eventually rise. Failure to act on the deficit does not necessarily

mean that inflation would surge—but would guarantee that interest rates go much higher.

**Foreign trade** flows have bounced back sharply. The pace of the trade expansion did slow in the first quarter, but surveys in both the manufacturing and service sectors indicate that there is still plenty of momentum behind exports. Double-digit trade gains in export volumes should return in the second quarter, before moderating to 7.6% average growth during the second half of the year. Competition from the weakening euro, still-sluggish Eurozone growth, and cooler growth in Asia and Canada will dampen, but not shut off, the export revival.

The **dollar** has strengthened so far this year, as the U.S. recovery appears more robust than those in Europe and Japan, while budget woes have undermined the euro and sterling. The loss of confidence in the Eurozone and the need for a more aggressive ECB monetary policy to offset severe fiscal tightening suggests that the euro has further to fall. The **current-account deficit** improved about 40% in 2009, to \$420 billion, mostly because of a \$200-billion plunge in the bill for imported oil. The deficit may be smaller, but it has not gone away, and will likely begin to widen again in 2010, to \$465 billion.

**Inflation** is not an issue. Recent indications continue to show core inflation near zero, pressured by the excess capacity in product markets and, especially, the labor market. The rise in the dollar due to the Eurozone's woes will dampen the (already small) near-term inflation risks still further. Oil and commodity prices have fallen. In May, the headline CPI should show a month-on-month decline for the second consecutive month. Core PCE price inflation is heading towards the bottom of the Fed's 1-2% comfort zone, and could slip below it by the end of the year.

It seems a distant memory now, but **bond yields** bumped up to briefly touch 4.0% for 10-year Treasuries in early April. They have since backed down around 3.2%, on a flight to safety amid the Eurozone crisis and fears for economic growth. Although we do see bond yields heading substantially higher over the long term, recent events underline that it is too early for a major bear market to begin, since the recovery is too tentative and inflation too distant a threat. Inflation is a valid long-term threat, though, and will require "exit strategies" from both monetary and

fiscal stimuli. But there is sufficient time available to plan a way out.

Some voices at the **Federal Reserve** are beginning to suggest that a tightening of policy is becoming more likely. We doubt that Chairman Bernanke sees things that way. With inflation so quiet, and growth likely to slow in the second half, we now assume that the Fed will delay any interest rate hike until March 2011, rather than moving in November 2010. The more difficult problem will be for the federal government to deal with the budget deficit; health-care reform has made that problem even harder to handle.

### Has the Risk of a Double-Dip Downturn Increased?

Market anxiety has risen and investor exuberance has evaporated. Equity and commodity prices have fallen by double digits (in percentage terms). Risk spreads have widened. There has been a flight to safety. U.S. Treasury yields have fallen and the dollar has appreciated (mostly against the European currencies). Sound familiar? Shades of 2008?

Already, some analysts are drawing parallels between the current euro crisis and the subprime crisis of two years ago, and some are even suggesting that the nascent global recovery is under threat. While there are some similarities between the two crises, there are also some important differences. Notwithstanding the rise in downside risks to European growth outlook, the impact on the United States and Asia is likely to be small. Even for Europe, the risk of a protracted period of very weak growth is greater than the risk of another recession—at least for most of the economies.

**Similarities Between 2008 and Now.** Financial crises (unfortunately) share a number of common characteristics. In this way, the euro and subprime crises do have some similarities. Here are a few:

- **Negative Debt Surprises.** Much like the subprime crisis, financial investors have been surprised by the size of the Eurozone sovereign debt problem. In the former crisis, the complexity of new debt instruments and lack of transparency were major issues. This time around, attempts by governments (in particular Greece) to hide the magnitude of the fiscal problems contributed to market jitters.

- **Worries About Bank Exposure.** As the extent of the “toxic” assets becomes apparent, investors turn away from banks, which also find it increasingly expensive to borrow funds in the inter-bank market. During the subprime crisis, American and European banks were the worst hit. Now, the exposure of European banks to the sovereign debt of Greece, Ireland, Portugal, Spain, and Italy is much greater than of U.S. and Asian banks. As in 2008, we have seen measures of banking and financial stress rise.
- **Concerns About the Strength of the Recovery.** As in 2008, some of the recent market jitters can be attributed to worries about economic growth. With Eurozone growth predicted to be only 1% before the euro crisis hit, it will not take much to push the region back into negative territory. In the United States, a housing market that is still bouncing along the bottom, along with the drag from nonresidential construction and worries about what a strong dollar will do to export growth, has many investors and analysts concerned. Even in Asia, where growth is strong, attempts by the Chinese government to cool down the economy are adding to market fears.
- **Anxiety Over Incoherent and Chaotic Policy Responses.** There is little doubt that the initial policy response of the U.S. government to the subprime crisis (e.g., letting Lehman Brothers collapse) contributed to depth of the crisis and the subsequent recession. Similarly, the initial response of the Eurozone governments to the euro (Greek) crisis was too small and too incoherent (and accompanied by much inter-govern-

mental bickering). This only made matters worse. The worsening crisis of confidence did eventually produce a bigger and (somewhat) more credible rescue package. Nevertheless, Eurozone governments continue to rattle markets with anti-market rhetoric and unilateral moves, such as Germany’s ban on naked short selling.

**Why It Will Probably Be Different This Time.** The good news is that there are significant differences between the euro and subprime crises, including the following:

- **The Euro Crisis Is Smaller Than the Subprime Crisis—So Far.** By most measures, the extent of the financial crunch now is considerably smaller than two years ago. While risk spreads have risen, they are much smaller than the post-Lehman spike during the fall of 2008. Also, the fall in equity and commodity prices is a fraction of the plunge during the earlier crisis.
- **The Momentum of Growth in the United States and Asia Is Much Stronger.** Two years ago, the United States was already in recession and growth in some other parts of the world was slowing. This time around, the momentum of growth in the United States (even allowing for the weak May employment report) and much of the emerging world, especially Asia, is quite strong. This means that, outside of Europe, the world economy’s ability to withstand this shock—at least in its current incarnation—is quite good.
- **The Contagion from This Crisis Is Likely to Be More Limited.** Not only is bank exposure to Eurozone sovereign debt much smaller in the United States and Asia, but lower interest rates, lower oil prices, and lower

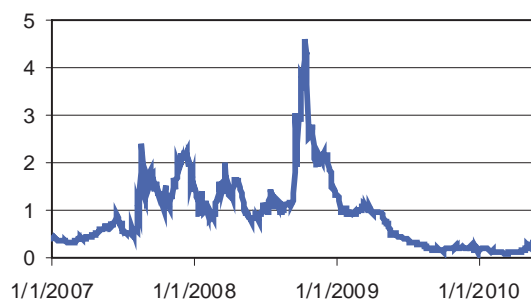
### The Stock Market Takes a Hit

(S&P 500 index)



### TED Spread Widens, But Still Far Short of 2008

(3-month LIBOR less federal funds rate, percentage points)





inflation will help to offset the negative hit to growth (see last month's U.S. Executive Summary for a more detailed discussion of this topic).

- **Central Banks Are Already in Crisis Mode.** Having pulled out all the stops during the subprime crisis, the world's central banks are better prepared for this crisis and are ready to use their mighty arsenal of anti-crisis, anti-recession weapons, if necessary. The current IHS Global Insight baseline forecast now assumes that the Federal Reserve will delay any interest rate hikes until the first quarter of 2011, and that the European Central Bank will keep rates low until the end of 2011.

**The Risks of Secular Stagnation Are Greater Than Those of a Double Dip.** Assuming that the euro crisis does not evolve into something much worse, the impact on economic growth will be small—a few tenths of percentage point, at most. This is even true for Europe, where a much weaker euro will help export growth and cushion the blow. The bigger threat, especially to Europe, is that fiscal consolidation—if not accompanied by productivity-boosting structural reforms—will doom the region to a protracted period of stagnation. For the United States, the euro crisis is a small threat, compared with the bigger challenge of cleaning up the mess from the last crisis, including getting its fiscal house in order.

**The Bottom Line.** The risks of a double-dip downturn have risen, but only by a little. IHS Global Insight has increased the probability of such a scenario from 15% to 20%.

### Key Forecast Assumptions

**Fiscal Policy: ARRA and Further Stimulus.** We assume that Washington will not allow ARRA's emergency unemployment benefits programs to expire in 2010. We also assume that its "Making Work Pay" income tax cuts are extended for one year, to expire at the end of 2011. We have incorporated the \$13 billion jobs tax credit for hiring unemployed workers, but believe that its impact will be small. We have not assumed further stimulus.

**Fiscal Policy: Tax Increases.** We assume that the top marginal rates of income tax, including the top marginal rates on capital gains and dividends, increase in January 2011, and that the value of tax deductions to upper-income tax-

payers is reduced at the same time. We leave the rest of the Bush tax cuts in place at that time. Beyond 2011, we assume a further gradual increase in the income tax burden, not confined to the top brackets.

**Oil Prices Down Then Up.** We assume that the recent correction in oil prices extends further and pushes the West Texas Intermediate price just below \$70/barrel in the third quarter, followed by an increase to \$77 by year-end. We assume prices average \$75/barrel in 2010 (less than the \$78 average in our May forecast) and then climb to \$89 by 2012 as global growth drives demand higher.

**Federal Reserve to Hold Rates Near Zero Until March 2011.** The Fed has kept its federal funds target in 0.0-0.25% range since December 2008. We assume that the Fed begins to tighten only in March 2011, not November 2010 as previously assumed.

**Dollar Helped by Increased Risk Aversion.** The dollar has rallied based on increased risk aversion. The euro probably has further to fall, and we assume a year-end 2010 value of US\$1.10/euro. For other key currencies, we assume year-end values of C\$1.02/U.S. dollar and 90 yen/dollar. We still see the dollar's long-run trend as downwards, but more against emerging-market currencies than against major currencies. China appears to be preparing to resume a gradual renminbi appreciation. We assume that the recent market volatility and euro depreciation will delay any move until the end of the third quarter, and that the renminbi rises just 0.7% against the dollar over the course of 2010.

**Global Growth Better This Year Than Next.** We project GDP in the United States' major-currency trading partners to grow 2.4% in 2010, then easing to 2.3% in 2011. GDP for other important trading partners is projected to rebound 6.0% in 2010, led by China, then moderate to 4.9% growth in 2011.

**Defense Spending Now Peaking.** After a 5.4% increase in real federal defense purchases during calendar 2009, we expect a 2.9% increase in 2010, before a 2.9% decline in 2011 as overseas contingency operations begin to wind down.

*by Nariman Behraves and Nigel Gault*

## Risks to the Forecast

The U.S. expansion looks resilient, but is not immune to the Eurozone fallout. The second-quarter GDP picture should show strong growth of 4.4%, with support from business equipment/software spending, government spending, and housing. During the second half of the year, a setback in housing (payback for the two successive homebuyers' tax credits), weak construction data, and slower export growth will pull U.S. growth below 3%.

Indeed, the latter half of 2010 will witness a tug of war between two opposing forces. On the one hand, pent-up demand should help revive employment, consumer spending, and business equipment/software spending. On the other, headwinds from anemic nonresidential construction, weak homes sales, and constrained credit access will continue to weigh down on domestic growth, while slower foreign growth and a stronger dollar restrain export growth. How strongly can growth be sustained once the inventory boost fades and government stimulus winds down? Is the upturn in growth the precursor of a V-shaped recovery, or a "false dawn" in a double-dip recession?

In the optimistic scenario, Federal Reserve and Treasury policies stimulate a sustained, strong rebound. With credit once again flowing, domestic consumer and business demands are rekindled, along with global demand. The U.S. economy recovers strongly from the recession, bringing the unemployment rate down further and faster than in the baseline.

In the pessimistic scenario, the inventory cycle gives the economy a temporary boost, but then a number of problems combine to derail it again. This scenario assumes lower consumer spending constrained by tight credit, lower incomes, and depleted wealth, weaker business investment, much slower foreign growth, and weak underlying productivity growth. Financial market instability persists, exacerbated by the fallout from the Eurozone's sovereign debt crisis.

**A V-Shaped Recovery (20% Probability):** In the optimistic scenario, the Federal Reserve's arsenal of emergency measures, the Treasury's "rescue" plan, Congress's \$787-billion stimulus package, and help from central banks abroad fuel a robust recovery. Fears of a collapse following the removal of these supports prove unfounded, thanks to

robust and self-sustaining private-sector growth. The economy grows rapidly, achieving an annualized growth rate of more than 4.0% through the first half of 2011.

In addition, the standard optimistic scenario assumption of stronger total factor productivity growth is also in place. Total factor productivity, a measure of how technological progress augments economic growth, is enhanced by reinvigorated innovation in the technology sector. Higher productivity supports lower inflation and stronger income growth over the long term—but in the short term, a stronger economy means price gains accelerate faster than in the baseline (particularly in commodities). CPI inflation runs at 1.8% during 2010 in this scenario, as opposed to 1.5% in the baseline.

The stronger sales pace in the optimistic scenario requires less of an inventory reduction than in the baseline, as surging demand trims inventories back to desirable levels. Final sales of domestic product advance 2.6% in 2010, as opposed to the 2.1% in the baseline.

With credit channels functioning more normally, business fixed investment rebounds 5.1% in 2010, after contracting 17.8% in 2009. This compares with a smaller 3.3% gain in the baseline. The recovery in residential investment is also stronger in the optimistic scenario, with housing starts rising to 738,000 units in 2010 (compared with 695,000 in the baseline).

The optimistic scenario also assumes a faster growth rate for global GDP, along with a dollar that is initially weaker than its baseline value due to lower risk aversion. The lower dollar helps GDP early in the forecast period, as U.S. businesses take advantage of growing domestic demand in emerging markets. Exports increase 13.1% in 2010 and 11.0% in 2011, as opposed to 12.0% and 6.7%, respectively, in the baseline. In the longer term, continuing robust U.S. growth boosts the value of the dollar.

Finally, the simulation assumes higher energy prices in the near term due to stronger global demand, but lower prices in the longer term due to a more optimistic assumption about supply.

On net, these assumptions produce a much brighter economic outlook. After growing 3.0% in the first quarter of 2010, real GDP advances 5.3% in the second quarter,

before settling to a 4.9% pace in the third quarter. Real GDP grows 4.5% in 2011, besting this year's 3.9% pace. The unemployment rate quickly falls below 9.0% by the end of 2010, and then slips beneath 7.0% by mid-2012.

Inflation implications of the stronger growth in the optimistic scenario are modest. Initially, consumer prices rebound more sharply than in the baseline, but lower oil prices and improved productivity growth bring the CPI's year-on-year growth rate below its baseline pace in mid-2011. In short, the optimistic alternative sees a quicker turn in the cycle than the baseline, but without adverse consequences for the long-term inflation outlook.

**Double-Dip Recession (20% Probability):** In the pessimistic scenario, the economy looks like it is on track for a strong recovery. By the end of second-quarter 2010, though, the recovery loses steam as unresolved worries from the financial crisis come back to haunt it. Credit constraints prevent the economy from building momentum and the labor market improvement stalls. As the boosts to growth from the inventory cycle and fiscal stimulus fade, the private sector is unable to sustain an expansion. In addition, as the effects of the Greek debt crisis ripple across the world, stock markets fall further, and the euro drops to parity with the dollar. This reduces the competitiveness of U.S. exports and acts as an additional drag on growth. The recession is "W-shaped," with the economy peaking at 5.6% growth in the fourth quarter of 2009, but then slowing thereafter. By the end of 2010, the recovery comes to a grinding halt, with GDP shrinking as the credit markets remain clogged, both domestically and globally.

The pessimistic scenario assumes that financial markets suffer new reverses in 2010. The spread between 30-year fixed mortgage rates and the 10-year Treasury note yield widens again, reflecting an adverse response to the Federal Reserve winding down its mortgage purchases.

The housing recession drags on. The median price of existing homes falls 7.1% below the baseline in 2011. Home sales are also much lower. Housing starts slump to a low 597,000 in 2010, before rebounding only to 845,000 in 2011 (compared with 1.16 million in the baseline). 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 con-

sumers to retrench sharply. Hit especially hard are light-vehicle sales, which remain at 11.2-million units in both 2010 and 2011 (versus 11.8 million and 13.6 million, respectively, in the baseline).

Capital spending is also weaker, as firms respond to a bleaker outlook by scuttling long-term projects. Business fixed investment follows the overall "W" pattern, although the second dip is not as severe as the first one.

The effects of sovereign debt crisis in Greece spread across the world, and investors seek refuge in U.S. Treasury securities. Confidence in the euro quickly evaporates as it falls to parity with the dollar. In combination with lower oil prices due to weaker world demand, the stronger dollar creates deflationary pressure in the United States.

As a result, bottom-line inflation is lower—at first. Short-run core inflation is a shade lower than in the baseline because demand is so weak. The low inflation readings, combined with a high unemployment rate, give the Federal Reserve leeway to keep interest rates in the 0.0-0.25% target range until 2012. However, when the economy begins to get off the mat, inflation starts creeping up more rapidly than in the baseline because of rising energy prices, a slowdown in productivity, and a weaker dollar. The Fed reacts to rising prices by rapidly raising interest rates. But its response is too late, and inflation continues to climb. By 2012, core inflation is nearly one percentage point above the baseline rate.

Real GDP grows only 2.6% in 2010 (compared with a 3.4% gain in the baseline). After a brief recovery in the first half of 2010, real GDP growth falls to 0.4% in the third quarter of 2010, and turns negative during the following three quarters.

Over the longer term, GDP growth remains slower than in the baseline, mainly because productivity advances only 1.4% on average over the next 10 years, compared with 1.8% in the baseline. Inflation is higher because of the slower productivity gains and a weaker dollar, and because the Fed, after allowing inflation to creep back up, decides to stabilize it at that higher level rather than risk another recession by bringing it down.

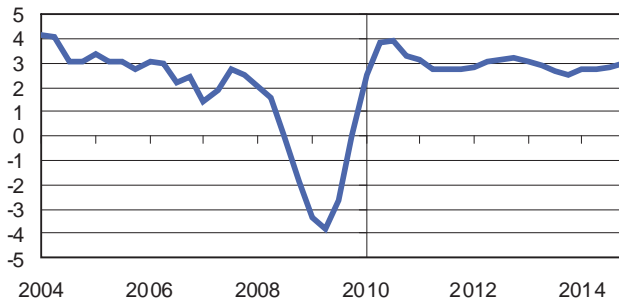
*by Gregory Daco and Hilary Wolfendale*



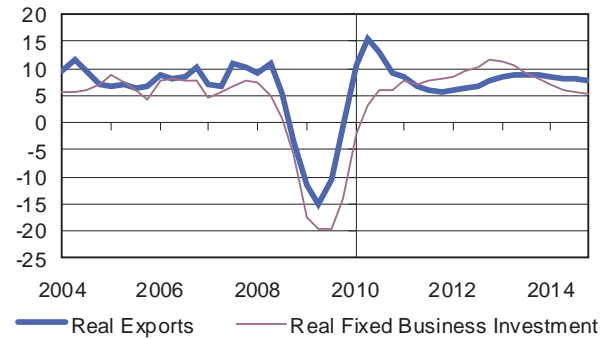
## Forecast at a Glance

**Growth Is Reviving**

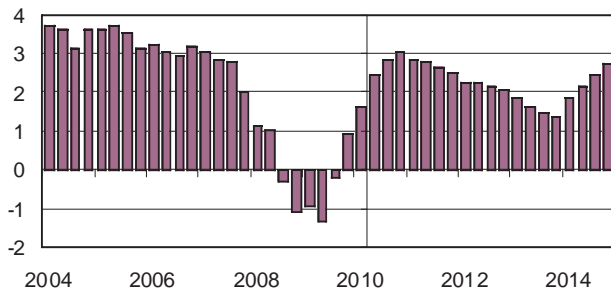
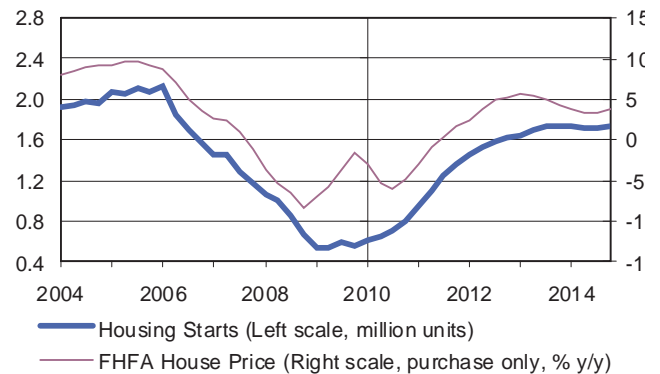
(Real GDP, percent change from a year earlier)

**Exports Turn Quickly; Investment Lags**

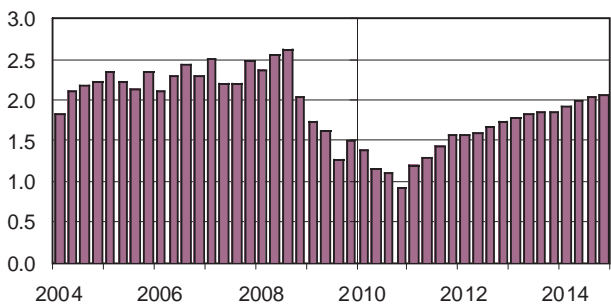
(Percent change from a year earlier)

**Consumer Spending Turning Higher**

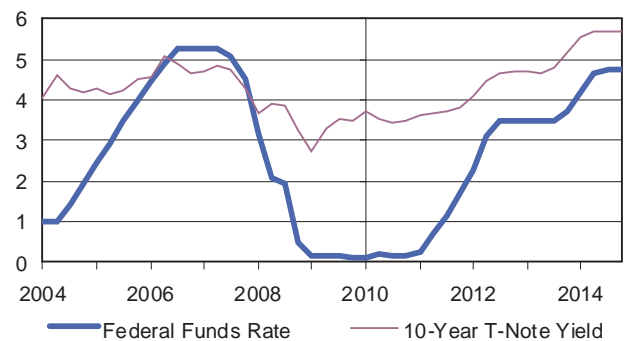
(Real consumer spending, percent change from a year earlier)

**Housing Starts Bottoming Out****Core Inflation Easing**

(Core consumption price index, percent change from a year earlier)

**Fed Holds Rates Near 0%**

(Percent)



## APPENDIX 1

WISCONSIN EMPLOYMENT FORECAST: INDUSTRY DETAIL  
(THOUSANDS OF WORKERS)

	History				Forecast			
	2006	2007	2008	2009	2010	2011	2012	2013
Total Nonfarm	2,866.2	2,884.2	2,878.1	2,748.3	2,727.8	2,774.0	2,842.0	2,895.6
% Change	0.9	0.6	-0.2	-4.5	-0.7	1.7	2.5	1.9
Private Nonfarm	2,451.0	2,468.2	2,456.2	2,323.7	2,304.2	2,355.0	2,420.1	2,468.9
% Change	1.0	0.7	-0.5	-5.4	-0.8	2.2	2.8	2.0
Natural Resources & Mining	3.9	3.6	3.4	3.0	3.0	2.9	2.9	2.9
% Change	-0.8	-7.2	-7.1	-11.4	-0.6	-3.9	-0.1	0.6
Construction	127.5	125.9	118.4	102.1	97.0	95.7	98.1	101.5
% Change	0.0	-1.2	-6.0	-13.8	-5.0	-1.4	2.5	3.5
Manufacturing	505.7	501.3	492.9	435.4	431.6	451.7	471.4	483.3
% Change	0.2	-0.9	-1.7	-11.7	-0.9	4.7	4.3	2.5
Trade, Transportation & Utilities	544.5	547.1	540.8	515.7	502.2	504.9	517.2	528.3
% Change	0.2	0.5	-1.1	-4.6	-2.6	0.5	2.4	2.2
Information	49.3	50.2	50.2	48.0	47.2	48.5	49.4	49.8
% Change	-0.9	1.9	-0.1	-4.4	-1.7	2.9	1.8	0.8
Financial Activities	161.8	163.1	164.1	160.1	156.8	155.4	156.1	156.6
% Change	1.3	0.8	0.6	-2.4	-2.1	-0.9	0.5	0.3
Professional & Business Services	270.7	278.8	281.4	255.4	258.3	276.2	288.1	297.4
% Change	3.0	3.0	0.9	-9.2	1.2	6.9	4.3	3.2
Education & Health Services	392.0	398.7	406.6	414.1	419.7	428.7	440.4	447.4
% Change	2.3	1.7	2.0	1.8	1.4	2.1	2.7	1.6
Leisure & Hospitality	259.5	262.0	259.4	252.0	251.5	253.0	256.2	259.6
% Change	1.7	1.0	-1.0	-2.9	-0.2	0.6	1.2	1.3
Other Services	136.0	137.6	139.0	137.8	137.0	138.0	140.5	142.2
% Change	0.0	1.2	1.0	-0.9	-0.6	0.8	1.8	1.2
Government	415.2	416.0	421.9	424.7	423.6	419.0	422.0	426.7
% Change	0.0	0.2	1.4	0.7	-0.3	-1.1	0.7	1.1
Federal Government	29.2	29.2	29.6	30.1	31.4	28.6	28.0	27.8
% Change	-0.1	0.0	1.5	1.5	4.5	-8.8	-2.1	-0.9
State & Local Government	386.0	386.8	392.2	394.6	392.2	390.4	393.9	398.9
% Change	0.0	0.2	1.4	0.6	-0.6	-0.5	0.9	1.3

## Household Survey Employment Measures

Labor Force	3,073.7	3,094.3	3,081.9	3,081.6	3,056.9	3,082.0	3,107.7	3,128.5
% Change	1.3	0.7	-0.4	0.0	-0.8	0.8	0.8	0.7
Employment	2,929.2	2,947.4	2,932.7	2,820.5	2,800.8	2,842.5	2,889.1	2,930.1
% Change	1.3	0.6	-0.5	-3.8	-0.7	1.5	1.6	1.4
Unemployment Rate (%)	4.7	4.7	4.9	8.5	8.4	7.8	7.0	6.3

## APPENDIX 2

WISCONSIN EMPLOYMENT FORECAST: INDUSTRY DETAIL  
(THOUSANDS OF WORKERS)

Quarterly Data (Seasonally Adjusted, % Change at an Annual Rate)

	History				Forecast			
	2009:2	2009:3	2009:4	2010:1	2010:2	2010:3	2010:4	2011:1
Total Nonfarm	2,757.7	2,722.5	2,709.7	2,711.0	2,728.0	2,731.8	2,740.3	2,749.1
% Change	-6.3	-5.0	-1.9	0.2	2.5	0.6	1.2	1.3
Private Nonfarm	2,330.6	2,302.8	2,282.5	2,285.0	2,300.0	2,311.4	2,320.4	2,330.4
% Change	-7.9	-4.7	-3.5	0.4	2.6	2.0	1.6	1.7
Natural Resources & Mining	3.0	2.9	3.0	3.1	3.0	2.9	2.9	2.9
% Change	-19.6	-8.7	9.5	14.2	-9.4	-6.5	-6.3	-2.9
Construction	102.6	98.8	99.0	97.0	98.2	96.9	95.8	95.4
% Change	-18.3	-13.8	0.8	-7.8	5.0	-5.4	-4.2	-1.7
Manufacturing	436.0	426.7	419.9	423.0	429.7	434.1	439.5	442.9
% Change	-18.6	-8.3	-6.2	2.9	6.5	4.1	5.0	3.2
Trade, Transportation & Utilities	518.5	513.7	505.7	501.0	501.6	503.3	502.9	502.8
% Change	-4.8	-3.7	-6.1	-3.6	0.4	1.3	-0.3	-0.1
Information	48.1	47.6	47.1	47.0	46.9	47.2	47.5	48.0
% Change	-6.6	-4.1	-4.1	-1.1	-0.8	2.3	3.1	4.1
Financial Activities	160.8	159.5	157.6	156.6	157.5	157.1	156.1	155.6
% Change	-4.3	-3.3	-4.6	-2.6	2.3	-1.0	-2.5	-1.3
Professional & Business Services	256.2	252.2	248.7	251.8	255.4	260.4	265.8	270.0
% Change	-12.0	-6.1	-5.5	5.1	5.9	8.1	8.5	6.5
Education & Health Services	413.1	413.1	415.8	417.7	419.6	420.4	421.2	423.2
% Change	-1.4	0.0	2.7	1.8	1.9	0.8	0.7	2.0
Leisure & Hospitality	254.0	250.6	249.1	251.4	250.9	252.0	251.7	252.4
% Change	-0.4	-5.3	-2.3	3.7	-0.8	1.8	-0.6	1.1
Other Services	138.2	137.6	136.5	136.5	137.2	137.2	137.1	137.2
% Change	-1.8	-1.6	-3.2	-0.2	2.2	-0.1	-0.4	0.4
Government	427.2	419.7	427.2	426.0	428.1	420.4	419.9	418.7
% Change	2.4	-6.8	7.4	-1.1	1.9	-7.0	-0.4	-1.1
Federal Government	31.2	29.5	29.6	30.2	34.6	31.5	29.5	29.0
% Change	18.0	-20.1	0.9	7.9	72.9	-31.5	-23.3	-5.6
State & Local Government	395.9	390.1	397.6	395.8	393.5	388.9	390.5	389.7
% Change	1.3	-5.7	7.9	-1.8	-2.4	-4.5	1.6	-0.8

## Household Survey Employment Measures

Labor Force	3,108.8	3,073.2	3,035.9	3,038.9	3,058.5	3,062.1	3,068.1	3,070.7
% Change	0.0	-4.5	-4.8	0.4	2.6	0.5	0.8	0.3
Employment	2,835.1	2,801.4	2,775.0	2,773.5	2,802.0	2,809.1	2,818.7	2,824.6
% Change	-4.8	-4.7	-3.7	-0.2	4.2	1.0	1.4	0.8
Unemployment Rate (%)	8.8	8.8	8.6	8.7	8.4	8.3	8.1	8.0

## APPENDIX 3

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

	History				Forecast			
	2006	2007	2008	2009	2010	2011	2012	2013
Total Personal Income	198.599	207.201	212.553	207.881	213.054	222.471	232.103	241.559
% Change	6.4	4.3	2.6	-2.2	2.5	4.4	4.3	4.1
Wages and Salaries	108.900	113.130	115.940	110.728	112.100	117.076	122.987	128.923
% Change	4.7	3.9	2.5	-4.5	1.2	4.4	5.0	4.8
Supplements to Wages and Salaries	26.171	26.737	27.536	27.267	27.701	29.044	30.605	32.132
% Change	2.8	2.2	3.0	-1.0	1.6	4.9	5.4	5.0
Proprietor's Income	15.658	15.458	15.258	13.001	14.583	15.662	16.253	16.721
% Change	4.8	-1.3	-1.3	-14.8	12.2	7.4	3.8	2.9
Rental Income	2.567	2.480	3.684	5.03*	5.450	5.138	4.361	3.364
% Change	-18.1	-3.4	48.6	36.5	8.4	-5.7	-15.1	-22.9
Personal Dividend Income	12.388	12.857	11.547	9.545*	9.893	11.900	12.472	12.784
% Change	25.8	3.8	-10.2	-17.3	3.6	20.3	4.8	2.5
Personal Interest Income	19.091	20.736	21.397	20.5*	20.515	21.019	22.609	24.387
% Change	17.8	8.6	3.2	-4.2	0.1	2.5	7.6	7.9
Personal Current Transfer Receipts	27.755	29.861	31.791	36.058	37.230	37.864	38.996	40.747
% Change	5.9	7.6	6.5	13.4	3.2	1.7	3.0	4.5
Residence Adjustment	3.436	3.739	3.798	3.598	3.706	3.942	4.202	4.465
% Change	4.7	8.8	1.6	-5.3	3	6.4	6.6	6.3
Contributions to Government Social Ins.	17.366	17.796	18.398	17.850	18.124	19.173	20.382	21.963
% Change	5.5	2.5	3.4	-3	1.5	5.8	6.3	7.8
Personal Tax & Nontax Payments	23.396	24.850	24.412	20.025	20.102	22.783	25.816	29.776
% Change	11.1	6.2	-1.8	-18.0	0.4	13.3	13.3	15.3
Disposable Personal Income	175.203	182.351	188.141	187.856	192.951	199.689	206.287	211.783
% Change	5.8	4.1	3.2	-0.2	2.7	3.5	3.3	2.7

## Related Income Measures

Personal Income (2005 \$) (\$ Billions)	193.282	196.396	194.953	190.302	192.269	197.685	202.600	206.864
% Change	3.6	1.6	-0.7	-2.4	1.0	2.8	2.5	2.1
Per Capita Income (2005 \$)	34,690	35,061	34,642	33,613	33,761	34,514	35,175	35,723
% Change	3.0	1.1	-1.2	-3.0	0.4	2.2	1.9	1.6
Per Capita Income (\$)	35,644	36,990	37,770	36,718	37,411	38,841	40,298	41,714
% Change	5.9	3.8	2.1	-2.8	1.9	3.8	3.7	3.5
Per Capita Income as a Percent of U.S.	94.6	94.0	94.1	94.0	93.8	93.9	93.8	93.5
GDP (Current Dollars)	224.918	233.406	240.429	235.498^	245.277	256.828	268.399	279.978
% Change	4.7	3.8	3.0	-2.1	4.2	4.7	4.5	4.3
GDP (2005 \$) (\$ Billions)	217.811	219.736	221.631	214.585^	221.336	228.417	234.723	240.270
% Change	1.4	0.9	0.9	-3.2	3.1	3.2	2.8	2.4

\* 2009 Rental, Personal Dividend, and Personal Interest Income are forecast. BEA's estimate for 2009 will be release in September, 2010.

^ 2009 State GDP is forecast. BEA's estimate for 2009 will be release in November, 2010.

## APPENDIX 4

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

	History				Forecast			
	2009:2	2009:3	2009:4	2010:1	2010:2	2010:3	2010:4	2011:1
Total Personal Income	209.136	207.765	208.038	209.704	211.591	214.316	216.604	218.628
% Change	5.0	-2.6	0.5	3.2	3.6	5.3	4.3	3.8
Wages and Salaries	111.717	110.139	109.480	110.185	111.689	112.723	113.803	114.983
% Change	0.5	-5.5	-2.4	2.6	5.6	3.8	3.9	4.2
Supplements to Wages and Salaries	27.425	27.241	27.181	27.474	27.681	27.736	27.911	28.551
% Change	3.1	-2.7	-0.9	4.4	3.1	0.8	2.5	9.5
Proprietor's Income	12.821	12.937	13.301	13.726	14.604	14.909	15.094	15.309
% Change	-3.7	3.7	11.7	13.4	28.1	8.6	5.1	5.8
Property Income	34.710	34.858	35.359	35.278	35.275	36.136	36.740	37.245
% Change	-7.4	1.7	5.9	-0.9	0.0	10.1	6.9	5.6
Personal Current Transfer Receipts	36.864	36.803	36.789	37.433	36.835	37.187	37.465	37.595
% Change	41.9	-0.7	-0.2	7.2	-6.2	3.9	3	1.4
Residence Adjustment	3.601	3.559	3.590	3.620	3.677	3.736	3.792	3.848
% Change	-4.5	-4.6	3.5	3.4	6.5	6.5	6.2	6.0
Contributions to Government Social Ins.	18.003	17.773	17.664	18.012	18.171	18.112	18.202	18.902
% Change	1.0	-5.0	-2.4	8.1	3.6	-1.3	2.0	16.3

## Related Income Measures

Personal Income (2005 \$) (\$ Billions)	192.196	189.722	188.799	189.602	191.304	193.483	194.688	195.458
% Change	3.6	-5.0	-1.9	1.7	3.6	4.6	2.5	1.6

## APPENDIX 5

U.S. ECONOMIC FORECAST  
IHS GLOBAL INSIGHT (JUNE 2010)

	2006	2007	2008	2009	2010	2011	2012	2013
<b>Real GDP and its Components (Billions of Chain Weighted 2000 Dollars)</b>								
Gross Domestic Product	12,976.3	13,254.1	13,312.2	12,987.4	13,426.8	13,809.1	14,230.2	14,626.8
% Change	2.7	2.1	0.4	-2.4	3.4	2.8	3.0	2.8
Consumption	9,073.5	9,313.9	9,290.9	9,235.1	9,484.3	9,764.2	10,000.9	10,156.3
% Change	2.9	2.6	-0.2	-0.6	2.7	3.0	2.4	1.6
Investment (Incl. Inventory)	2,230.4	2,146.2	1,989.5	1,527.7	1,752.3	1,947.8	2,187.6	2,383.2
% Change	2.7	-3.8	-7.3	-23.2	14.7	11.2	12.3	8.9
Nonresidential Structures	384.0	441.4	486.8	390.3	339.7	316.9	348.3	401.3
% Change	9.2	14.9	10.3	-19.8	-13.0	-6.7	9.9	15.2
Business Equipment	1069.6	1097.0	1068.6	890.7	995.4	1130.0	1244.0	1341.6
% Change	7.4	2.6	-2.6	-16.6	11.8	13.5	10.1	7.8
Residential Fixed	718.2	585.0	451.1	358.7	369.8	455.3	563.4	606.2
% Change	-7.3	-18.5	-22.9	-20.5	3.1	23.1	23.7	7.6
Inventory Change	59.4	19.5	-25.9	-108.3	52.5	61.0	50.8	50.9
Exports	1,422.1	1,546.2	1,629.2	1,472.4	1,648.7	1,758.8	1,878.4	2,042.0
% Change	9.0	8.7	5.4	-9.6	12.0	6.7	6.8	8.7
Imports	2,151.2	2,193.8	2,123.5	1,828.0	2,047.8	2,221.5	2,344.8	2,448.8
% Change	6.1	2.0	-3.2	-13.9	12.0	8.5	5.5	4.4
Federal Government	894.9	906.4	975.9	1026.6	1063.6	1040.7	1001.5	983.4
% Change	2.1	1.3	7.7	5.2	3.6	-2.2	-3.8	-1.8
State and Local Government	1,507.2	1,536.7	1,543.7	1,541.0	1,528.4	1,535.9	1,542.8	1,562.3
% Change	0.9	2.0	0.5	-0.2	-0.8	0.5	0.4	1.3
GDP (Current Dollars)	13,398.9	14,077.7	14,441.4	14,256.3	14,880.5	15,527.2	16,272.6	17,044.6
% Change	6.0	5.1	2.6	-1.3	4.4	4.3	4.8	4.7
<b>Employment, Unemployment, Wages and Prices</b>								
Nonfarm Employment (Millions)	136.1	137.6	136.8	130.9	130.5	132.9	136.3	139.3
% Change	1.8	1.1	-0.6	-4.3	-0.3	1.9	2.6	2.1
Unemployment Rate (%)	4.6	4.6	5.8	9.3	9.7	9.2	8.4	7.7
Compensation per Hour (% Change)	3.8	4.2	3.1	1.9	1.5	2.8	3.0	3.3
Consumer Price Index (% Change)	3.2	2.9	3.8	-0.3	1.5	1.6	2.1	2.2
Personal Cons. Expenditure Index (% Change)	2.7	2.7	3.3	0.2	1.4	1.6	1.8	1.9
Producer Price Index (% Change)	4.7	4.8	9.8	-8.7	5.2	1.4	3.1	2.8
GDP Price Deflator (% Change)	3.3	2.9	2.1	1.2	1.0	1.5	1.7	1.9
Industrial Production (% Change)	2.3	1.5	-2.2	-9.7	5.8	4.5	3.1	3.6
Price of WTI Crude Oil (\$ Per Barrel)	66.1	72.2	99.8	61.8	74.8	82.6	89.2	93.0
<b>Financial Markets</b>								
Money Supply (M2) (\$ Billions)	6,866.2	7,299.7	7,817.4	8,424.3	8,549.3	8,981.0	9,474.2	9,917.6
% Change	5.3	6.3	7.1	7.8	1.5	5.0	5.5	4.7
Prime Commercial Rate (%)	8.0	8.1	5.1	3.3	3.2	4.0	6.1	6.6
Three Month Treasury Bills (%)	4.7	4.4	1.4	0.2	0.2	1.3	3.1	3.6
Ten-Year Treasury Note Yield (%)	4.8	4.6	3.7	3.3	3.5	3.7	4.5	4.8
General Obligation AAA Municipals (%)	4.2	4.1	4.6	4.3	3.7	4.1	4.7	5.0
Thirty-Year Mortgage Rate (%)	6.4	6.3	6.0	5.0	4.9	5.1	5.9	6.3
S&P 500 Stock Index	1,310.7	1,476.7	1,220.9	946.7	1,147.3	1,249.3	1,341.5	1,415.6
<b>Income, Profits and Savings</b>								
Personal Income (\$ Billions)	11,268.1	11,894.0	12,238.8	12,019.0	12,402.2	12,987.3	13,615.9	14,272.3
% Change	7.5	5.6	2.9	-1.8	3.2	4.7	4.8	4.8
Personal Income (\$ 2005) (\$ Billions)	10,966.4	11,273.4	11,225.4	11,002.6	11,192.3	11,540.4	11,885.0	12,222.3
% Change	4.6	2.8	-0.4	-2.0	1.7	3.1	3.0	2.8
Personal Tax & Nontax Payments	1,352.4	1,490.9	1,432.4	1,101.7	1,107.4	1,288.1	1,486.5	1,732.8
% Change	11.9	10.2	-3.9	-23.1	0.5	16.3	15.4	16.6
Disposable Personal Income	9,915.7	10,403.1	10,806.4	10,917.3	11,294.8	11,699.2	12,129.3	12,539.5
% Change	6.9	4.9	3.9	1.0	3.5	3.6	3.7	3.4
Savings Rate (%)	2.4	1.7	2.7	4.2	3.8	2.9	2.3	2.0
Corporate Profits Before Tax (\$ Billions)	1,608.3	1,541.7	1,360.4	1,308.9	1,614.4	1,667.0	1,719.3	1,754.6
% Change	10.5	-4.1	-11.8	-3.8	23.3	3.3	3.1	2.1

## SPECIAL REPORT

### WISCONSIN'S EXPORTS IN 2009

Although 2009 was a difficult year for exports on both a state and national level, 2010 has already shown improvement over last year. Through April of this year, Wisconsin's exports increased 10.7% over the same period in 2009. Nationally, exports are expected to increase 15.9% in 2010 and 9.0% in 2011.<sup>1</sup> According to the June 2010 Beige Book from the Federal Reserve, manufacturers in the Chicago District, which includes the southern half of Wisconsin, "... indicated that the pipeline for the export of capital equipment abroad, particularly to Asia and South America, remains robust."

By comparison, in 2009, Wisconsin exports fell 18.7% to \$16.7 billion, down from \$20.6 billion in 2008, according to export data from the International Trade Administration of the U.S. Department of Commerce. This is the first year to see a decline in exports since 2001 and reflects the economic crisis felt world-wide. Exports from the U.S. as a whole declined 17.9%, from \$1.3 trillion in 2008 to \$1.1 trillion in 2009.

Canada remains the largest recipient of Wisconsin exports, receiving \$4.8 billion, or 28.9% of the total. Mexico was the second largest destination of Wisconsin exports, equaling \$1.6 billion, or 9.5% of the total. The next largest destination was China (\$1.1 billion), followed by Japan (\$685 million) and Germany (\$641.1 million).

Wisconsin's exports made up 1.6% of the nation's total exports in 2009. The state ranks 18<sup>th</sup> among the 50 states in exports, same as in 2008.

### ECONOMIC IMPACT

In 2008, exports accounted for 8.6% of state gross domestic product (GDP), according to estimates released from the U.S. Bureau of Economic Analysis. Nationally, exports were 9.0% of U.S. GDP. As a share of manufactured goods, Wisconsin exported 19.7% in 2008.<sup>2</sup> This compares to a share of 21.7% of total manufactured goods in the United States that were sold abroad.

Exports as a share of manufactured goods in Wisconsin have increased throughout much of the decade. In 2002, the first year which comparable data is available, 13.5% of manufactured goods were exported from Wisconsin. This dropped slightly in 2003, to 13.0%, then rose to 16.9% in 2005, to 18.3% in 2006, and reached its highest level on record last year, 19.7%, an increase of 6.2 percentage points since 2002.

In terms of employment, a total of 198,000 Wisconsin workers were involved in the export of goods in 2008. Nearly half of these (96,100, or 48.5%) were employed in manufacturing establishments. The remaining 51.5% were employed in support of manufactured goods, and were split between business services (21,900, or 11.1%), transportation (15,300, or 7.7%), trade (36,200, or 18.3%), and forestry, agriculture, and other business services (28,600, or 14.4%).

These workers accounted for 6.8% of total Wisconsin employment in 2008, or 8.0% of private sector employment. This is a higher share than in the U.S. In the United States as a whole, 4.9% of employment, or 5.9% of private sector employment, is dedicated to exports. In the manufacturing sector, export-related jobs accounted for 20.2% of total manufacturing employment in Wisconsin, versus 22.1% in the U.S. See Table II.1 below for comparison to Wisconsin's neighboring states.

<sup>1</sup> IHS Global Insight's June 2010 national baseline forecast.

<sup>2</sup> U.S. Census Bureau, "Exports from Manufacturing Establishments: Preliminary Estimates for 2008."

It should be noted that the estimates of employment related to exports only take into consideration manufactured exports. Therefore, workers related to non-manufactured exports such as unprocessed minerals or agricultural items are not considered in this section. The non-manufacturing employment in Tables II.1 and II.2 below refer to employment which supports manufactured exports, either in their transport, packaging, management, etc.

**Table II.1**  
**Employment Related to Manufactured Exports in 2008:**  
**U.S. Wisconsin and Neighboring States**

State	Employment Related to Manufactured Exports (thousands)			Manufactured Export Employment as a Percent of	
	Total	Manufacturing Employment	Non-Manufacturing Employment	Private Sector Employment	All Manufacturing Employment
<b>United States</b>	<b>6,814.0</b>	<b>2,826.4</b>	<b>3,987.6</b>	<b>5.9%</b>	<b>22.1%</b>
Wisconsin	198.0	96.1	101.9	8.0	20.2
Illinois	360.2	158.2	202.0	7.1	24.7
Iowa	138.3	48.5	89.8	10.7	22.0
Michigan	269.9	151.6	118.3	7.6	27.8
Minnesota	145.8	64.8	81.0	6.2	19.5

Source: U.S. Census Bureau, "Exports from Manufacturing Establishments: Preliminary Estimates for 2008."

The number of export-related workers has increased in Wisconsin in past years. In 2002, the first year of the data series, 134,200 Wisconsin workers were related to exports, equal to 5.4% of private sector employment. More than half of these, 72,700 worked in manufacturing, and the remaining 61,500 in other industries.

By 2008, the number of workers related to exports had increased by 47.5% to 198,000, an increase of 63,800. Export-related employment in 2008 accounted for 8.0% of private sector employment, an increase of 2.6 percentage points since 2002. This increase was concentrated in non-manufacturing employment (40,400 workers).

**Table II.2**  
**Employment Related to Manufactured Exports for Wisconsin: 2002-2008**

Year	Employment Related to Manufactured exports (thousands)			Manufactured Export Employment as a Percent of Private Sector Employment
	Total	Manufacturing Employment	Non- Manufacturing Employment	
2002	134.2	72.7	61.5	5.4%
2003	131.2	69.0	62.2	5.3
2004	*	*	*	*
2005	164.1	82.1	82.0	6.5
2006	174.6	86.6	88.0	6.8
2007	*	*	*	*
2008	198.0	96.1	101.9	8.0

Source: U.S. Census Bureau, "Exports from Manufacturing Establishments, Estimates for 2002-2008."



## TOP EXPORT INDUSTRIES

### Machinery

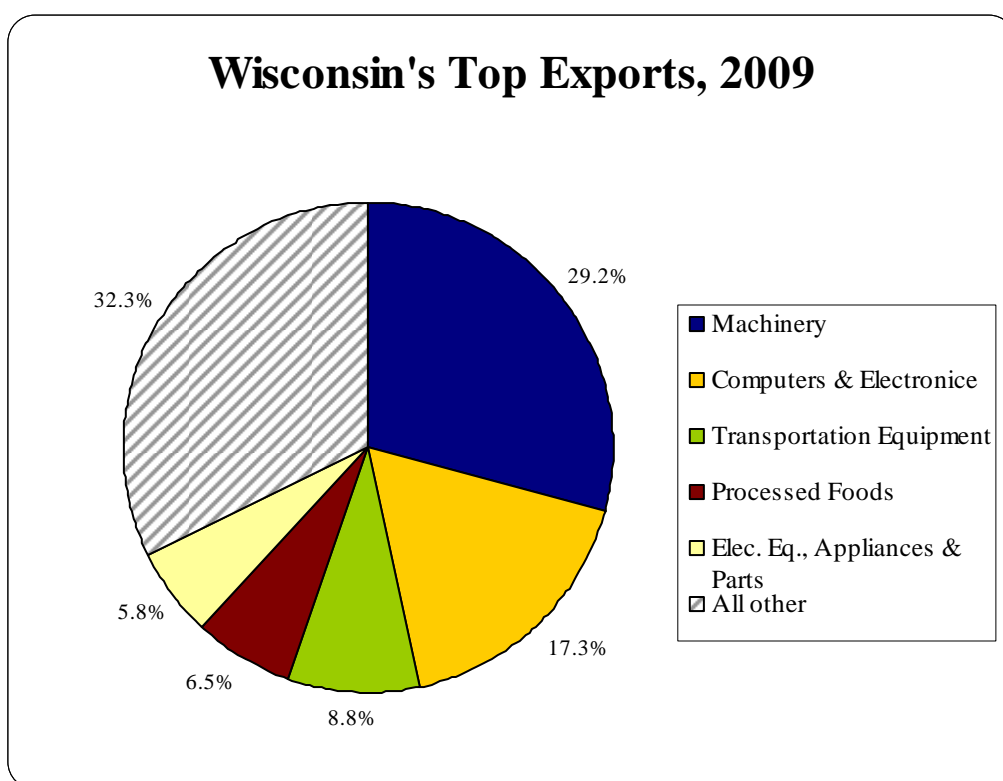
Machinery remains Wisconsin's largest export category. In 2009, machinery made up 29.2% of total exports from Wisconsin, down slightly from 30.3% in 2008. Machinery exports totaled \$4.9 billion in 2009, a decrease of 21.6% from \$6.2 billion in 2008.

Nationally, machinery exports decreased 21.4%, almost identical to Wisconsin's decline in this category. Wisconsin exports 4.3% of the nation's machinery, seventh among the 50 states. The largest state exporters of machinery in 2009 were Texas (\$23.8 billion), California (\$10.7 billion), and Illinois (\$9.6 billion). Each of the top ten states of machinery exports saw double-digit declines in 2009.

The largest destinations for machinery made in Wisconsin were Canada, at \$1.1 billion, or 21.9% of the total, China at \$334.1 million, or 6.8% of the total, and Chile, at \$311.1 million, or 6.4% of the total. Exports of machinery to Canada and China both decreased in 2009 (35.0% and 23.0%, respectively), while exports of machinery to Chile increased 25.9%.

There were 60,300 Wisconsin workers employed in machinery manufacturing in 2009. The largest group of workers, 13,500, or nearly a quarter of the total, were employed by facilities making pumps and compressors, material handling equipment, and a variety of other miscellaneous manufactured products. Another 11,950 workers were employed at facilities making agricultural, construction, and mining equipment. In 2008 35.5% of the workers in machinery manufacturing were related to exported products.<sup>3</sup>

Chart II.1



<sup>3</sup> U.S. Census Bureau, "Exports from Manufacturing Establishments: Preliminary Estimates for 2008."

## Computers and Electronic Products

Wisconsin's second largest category of exports is computers and electronic products. Wisconsin exported \$2.9 billion worth of computers and electronics in 2009, 17.3% of total exports. This was an increase in the export share, up from 15.0% in 2008. However, the total amount of computers and electronics exports decreased 6.3% in 2009 from \$3.1 billion in 2008.

Nationally, exports of computers and electronics also decreased, down 15.6% from \$190.3 billion in 2008 to \$160.6 billion in 2009. Wisconsin's exports in this category are 1.8% of the nation's total, ranking the state 13<sup>th</sup>. California is the largest state exporter of computers and electronics, at \$35.2 billion, or 21.9% of the total, followed by Texas (\$32.1 billion, or 20.0%) and Florida (\$11.8 billion, or 7.3%).

The largest destinations for Wisconsin's exports of computers and electronics in 2009 were Japan, receiving \$290.0 million worth (10% of the total); China, with \$260.8 million worth of computers and electronics (9.0% of the total), and Canada, at \$253.2 million (8.7% of the total). Shipments to Japan fell 2.5% from the previous year, and were down 11.4% to Canada, while the shipments to China rose 21.1%. Canada had been the largest purchaser of Wisconsin's computer and electronics as recently as 2007.

In Wisconsin, there were 19,900 workers employed in computer and electronics manufacturing in 2009. Slightly more than half of these (10,100) produced instruments such as measuring and control instruments, search and guidance systems, laboratory instruments, and more. As of 2008, 25.5% of the employees in computer and electronics manufacturing were related to exports.<sup>4</sup>

## Transportation Equipment

Transportation equipment was the third largest category of exports from Wisconsin, totaling \$1.5 billion in 2009. This was a decrease of 43.9% from 2008. Transportation equipment was 8.8% of total Wisconsin exports in 2009, down from 12.8% of the total in 2008.

Nationally, exports of transportation equipment decreased 19.8% in 2009, to \$165.3 billion from \$206.1 billion in 2008. Transportation equipment is 15.6% of the nation's total exports. Wisconsin ranks 26<sup>th</sup> among the 50 states, at 0.9% of the nation's exports of transportation equipment. The largest state exporters are Washington with 16.2% of the nation's total; Texas, at 8.7% of the total; and Michigan, with 8.5% of the total. Washington's 2009 exports of transportation equipment actually increased 20% over 2008, while Texas saw a 15.0% decrease. Michigan saw the largest decline of 33.1%. As recently as 2008 Michigan was the second-largest exporter of transportation equipment, before the auto manufacturing sector was affected during the past recession.

Canada received the largest portion of transportation equipment shipped from Wisconsin. At \$571.5 million, 38.7% of transportation equipment went north. Mexico was the second largest destination for Wisconsin's transportation equipment, receiving \$219.7 million worth, or 14.9% of the total. The next largest recipient of transportation equipment was China, at \$89.9 million, or 6.1% of the total. All three destinations saw a decrease in 2009, with the largest decrease seen in shipments to Canada (-45.5%).

In Wisconsin, there were 26,300 workers employed in transportation equipment manufacturing in 2009. They were concentrated in motor vehicle parts manufacturing (8,000 workers), other transportation equipment manufacturing, such as motorcycles, bicycles, and military vehicles, (5,600 workers) and motor vehicle body and trailer manufacturing (5,100 workers). In 2008 37.9% of the workers in transportation equipment were related to exported products.<sup>5</sup>

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<sup>4, 5</sup> U.S. Census Bureau, "Exports from Manufacturing Establishments: Preliminary Estimates for 2008."

## Processed Foods

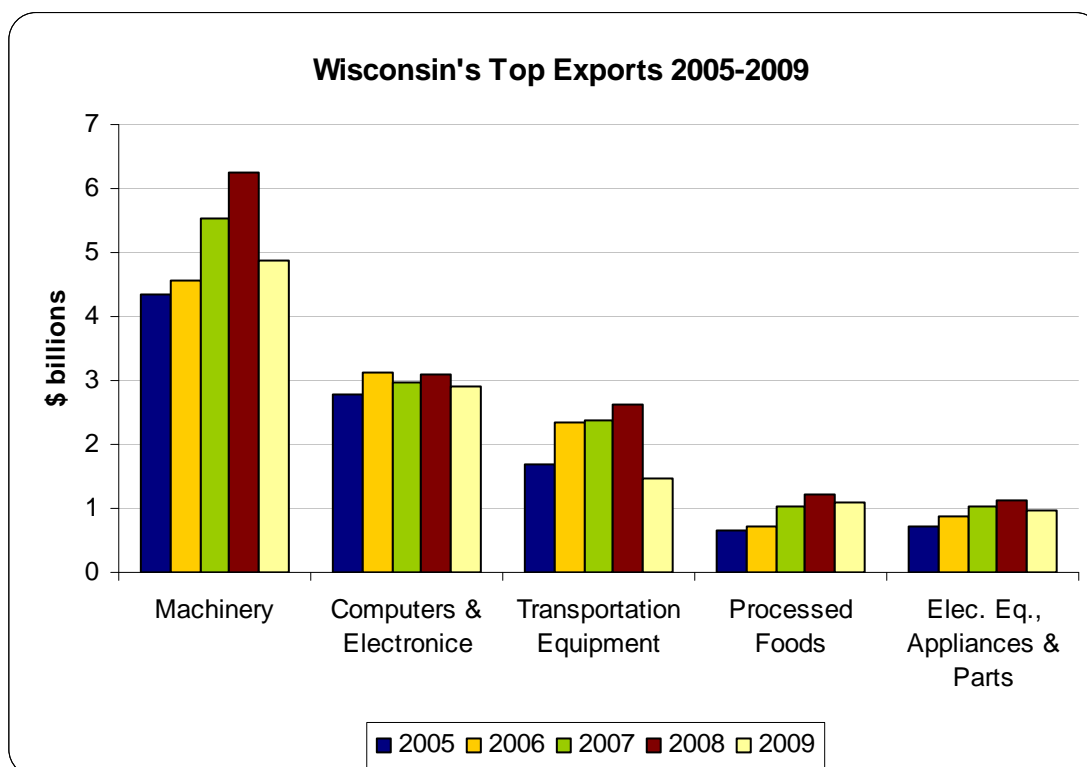
Processed Foods has been the fourth-largest category of exports from Wisconsin the past two years. However, as recently as 2005 it was the seventh-largest category. This category made up 6.5% of the state's total exports, up from 5.9% in 2008 and from 4.5% in 2005. In 2009, exports of processed foods decreased 10.2%, to \$1.1 billion.

Processed foods exported from the US as a whole decreased 9.4% in 2009. Processed foods are 4.2% of the nation's total exports. Of the \$44.7 billion worth of processed food exported from the US, 2.4% came from Wisconsin, ranking the state 15<sup>th</sup>. The largest state exporters of processed food are California (14.4% of the total), Texas (8.0%) and Louisiana (7.5%). All three states saw a double-digit decrease in exports of processed foods in 2009.

Nearly half (48.9%) of Wisconsin's exports of processed foods went to Canada, worth \$534.2 million. Mexico was the next largest destination for Wisconsin's processed foods, at \$119.8 million (11.0%), followed by Japan, at \$62.9 million (5.8%). Exports to Canada were flat last year, while exports to Mexico increased 16.2% and to Japan decreased 3.1%.

In 2009, 59,800 workers in Wisconsin were employed in food processing. They were concentrated in animal slaughtering & processing (17,400 workers), dairy product manufacturing (16,100 workers) and fruit & vegetable preserving (10,300 workers). In 2008, 5.0% of the workers in food processing were related to exported products.<sup>6</sup>

Chart II.2



<sup>6</sup> U.S. Census Bureau, "Exports from Manufacturing Establishments: Preliminary Estimates for 2008."

## Electrical Equipment

The fifth-largest category of exports from Wisconsin in 2009 is electrical equipment and appliances. This group of goods accounted for 5.8% of total exports, up slightly from 5.4% of exports in 2008. At \$977.5 million, exports of electrical equipment decreased 12.4% in 2009.

Exports of electrical equipment and parts from the US decreased 17.9% in 2009, to \$31.4 million. This group of exports was 3.0% of the national total, the same as in 2008. Wisconsin exports were 3.1% of the nation's, ranking the state eighth in this category. The largest state exporters were Texas (\$5.5 billion, 17.7% of the total), California (\$3.4 billion, 10.9 % of the total), and Illinois (\$2.2 billion, 7.1% of the total). All three states saw a double-digit decrease in exports of electrical equipment in 2009.

The largest recipient of Wisconsin's electrical equipment and appliances was Canada, importing 25.8% of the total, valued at \$252.5 million. Mexico was the second-largest importer, with 19.1% of the total, at \$186.6 million. China was the next largest, importing a much smaller share, 5.4% of the total, or \$53.2 million. In 2009, exports of electrical equipment and parts decreased to Canada and China, but increased to Mexico.

In Wisconsin, 21,700 workers were employed in electrical equipment and appliances. The largest group of workers (13,700) was in electrical equipment manufacturing, while the remaining workers were employed in lighting, household appliance, and other electrical equipment manufacturing. As of 2008, 23.7% of the employees in electrical equipment and appliances were related to exports.<sup>7</sup>

## Agriculture

While not one of the top exports from Wisconsin, agricultural products are an important piece of Wisconsin's economy. Using a different coding schema than the categories above, total agricultural products, including processed foods, accounted for 10.6% of the state's total exports in 2009. This data is from a report issued from the Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP).<sup>8</sup>

Exports accounted for 21% of Wisconsin farm cash receipts in 2009. Top agricultural exports in 2009 include un-milled cereals, such as wheat, rye, oats, and corn (\$242 million), bakery related items (\$184 million), miscellaneous edible preparations (\$172 million), and dairy, eggs, and honey (\$167 million). Wisconsin was the second largest exporter of cheese (\$96 million), and led the nation in the export of flax seed, hides and skins, ginseng, livestock genetics, canned sweet corn, mustard flour, and mixes and dough used by the baking industry.

Canada was the largest importer of Wisconsin's agricultural exports, receiving \$771 million in 2009. The next largest importer was Mexico (\$170 million), followed by Japan (\$84 million), Italy (\$70 million), and China (\$62 million).

Details of Wisconsin's exports by product are presented in Table II.4.

<sup>7</sup> U.S. Census Bureau, "Exports from Manufacturing Establishments: Preliminary Estimates for 2008."

<sup>8</sup> The DATCP report uses a different coding system which is not comparable with the NAICS codes. The agricultural data in the DATCP report is defined by the Harmonized Commodity Description and Coding System (HS).

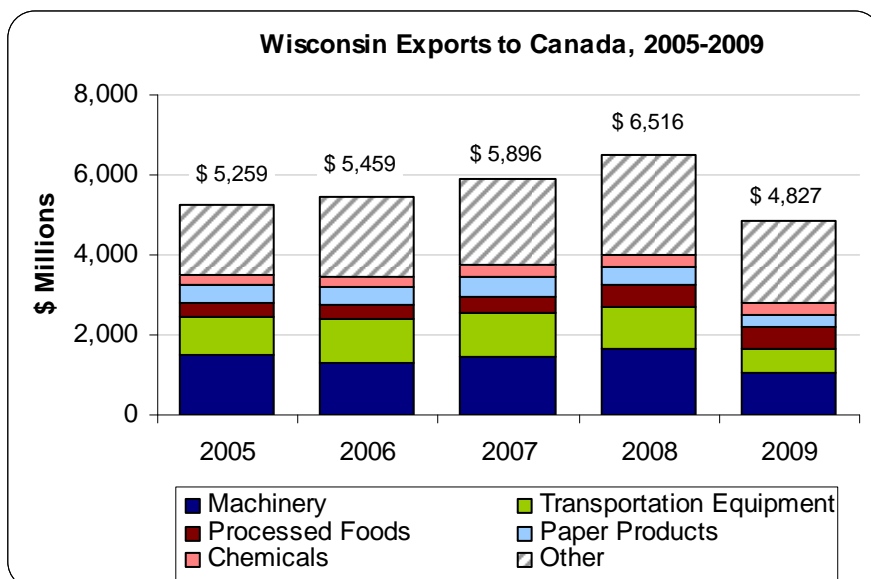
Chart II.3



## TOP EXPORT MARKETS

### Canada

Canada is consistently the largest importer of Wisconsin's exports. In 2009, \$4.83 billion worth of goods were shipped to the state's northern neighbor, equaling 28.9% of total exports. This is a 25.9% decrease compared to exports to Canada in 2008 and lower than exports to Canada in 2005.

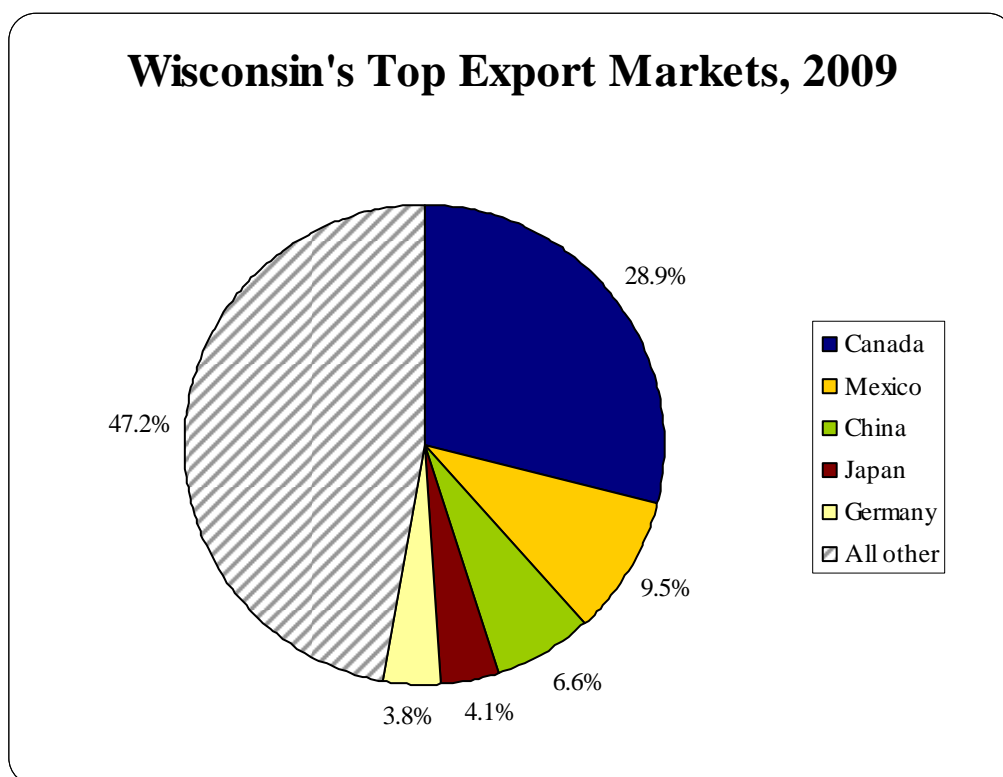


The most common export to Canada from Wisconsin is machinery. At \$1.0 billion worth of goods, this category makes up 22.2% of the total exported to Canada. Transportation equipment is the second largest type of shipment, worth \$571.5 million (11.8% of the total). The next three largest products shipped to Canada were processed foods at \$534.2 million (11.1% of the total), paper products at \$343.1 million (7.1%), and chemicals at

\$265.4 million (5.5%). Most of the top five export products to Canada saw a double-digit decline in 2009. The exception was processed foods, which saw an increase of 0.7%. See the chart above for the mix of Canada's largest imports over the past five years.

The outlook for exports to Canada is good. While Canada's economy contracted 3.1% in 2009, it is expected to grow 3.1% in 2010 and 3.2% in 2011. This growth will support growth for Wisconsin's exports. Indeed, through the first three months of 2010, exports to Canada have increased 15.5% over the same period last year.

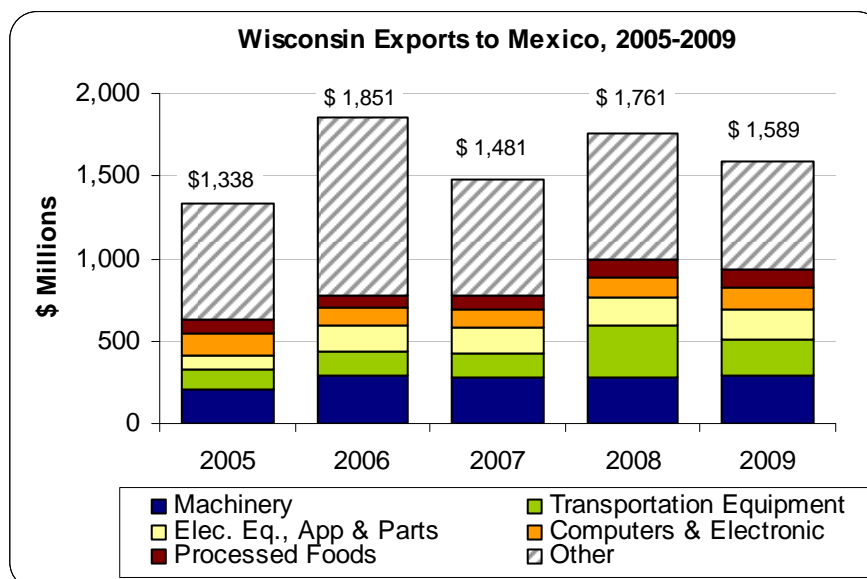
Chart II.4



## Mexico

Mexico is the second-largest importer of Wisconsin's products. In 2009, \$1.6 billion worth of Wisconsin's exports went to Mexico, 9.5% of the total. This was a decrease of 9.8% from 2008.

The largest category of goods exported to Mexico was machinery, at \$288.9 million, or 18.2% of the total. The next largest category was transportation equipment, at \$219.7 million (13.8% of the

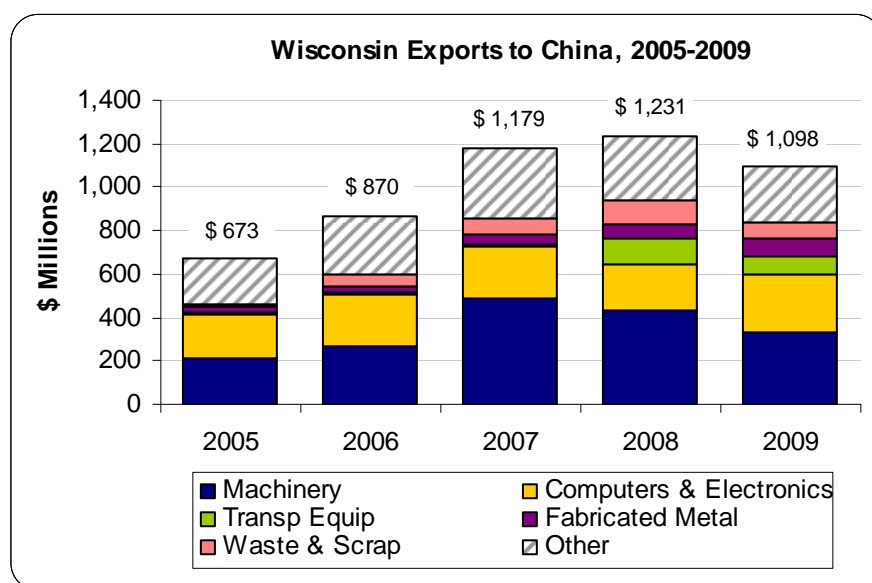


total), followed by electrical equipment, appliances, and parts (\$186.6 million, 11.7% of the total), computer and electronics (\$124.2 million, 7.8% of the total), and processed foods (\$119.8 million, 7.5% of the total). Despite the decline of total exports to Mexico, only one of the top five export categories (transportation equipment) saw a decline from the previous year. Waste and scrap, which was the third-largest export to Mexico in 2008, saw a decrease of 66.3% in 2009 and dropped to tenth. The chart above gives an illustration to the mix of Mexico's largest imports from Wisconsin over the past five years.

Despite decreasing in 2009, the outlook for exports to Mexico is good. Through the first three months of 2010, exports to Mexico have increased 30.2% over the same period last year. In addition, while Mexico's economy contracted 6.5% in 2009, it is expected to rebound 4.2% in 2010 and expand 4.5% in 2011.

## China

A decade ago, 1.4% of the exports from Wisconsin made it to China. However, China has been the third-largest destination for Wisconsin goods since 2006. In 2009, 6.6% of Wisconsin's exports traveled to China, up from 6.0% in 2008. Valued at \$1.1 billion, exports to China declined 9.8% from \$1.2 billion in 2008.



The most common export to China from Wisconsin in 2009 was machinery. Valued at \$334.1 million, machinery was 30.4% of total exports. The second largest category of exports to China was computers and electronics, valued at \$260.8 million, or 23.7% of the total. Transportation equipment, valued at \$89.9 million, was the third-largest export to China (8.2% of the total), followed by fabricated metal (\$75.7 million, or 6.9% of the total) and waste

& scrap (\$73.4 million, or 6.7% of the total). Exports of machinery, transportation equipment, and waste and scrap all saw double-digit declines in 2009, while exports of computers and electronics and fabricated metal products both increased over 20%. The chart above shows the mix of China's largest imports from Wisconsin over the past five years. Transportation equipment (in green) was not a significant export until 2008.

The outlook for growth in exports to China is good. So far in 2010, exports are up 29.5% compared to the same period last year. China's economy is expected to see accelerating growth in the next two years, increasing from 8.7% growth in 2009 to 10.0% in 2010 and 9.9% in 2011. The strong growth will help support China's demand for outside goods. In addition, as China's currency begins to appreciate, foreign goods will be more competitive with domestic products.

## Japan

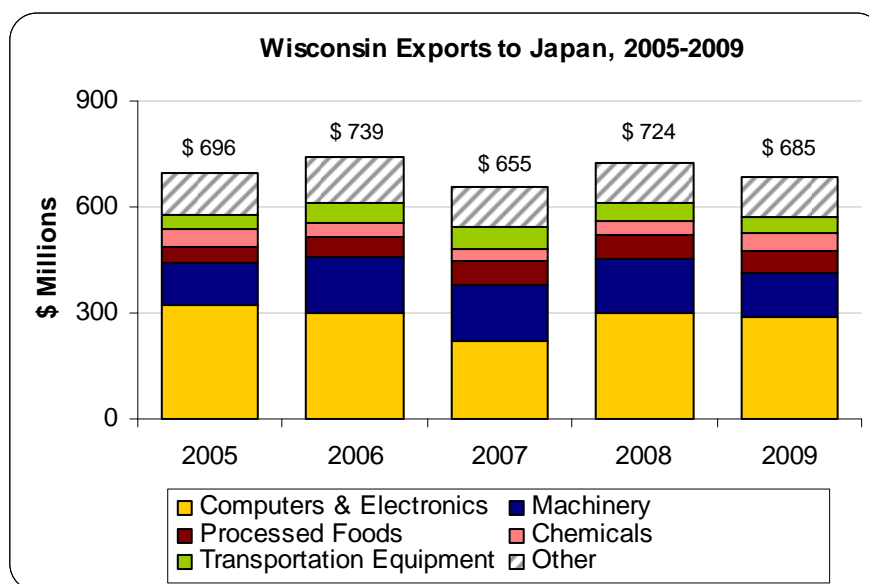
Japan was the third-largest destination for Wisconsin's exports in 2005. Since then, China has been the third-largest, and Japan has moved between the number four and number six spot. In 2009, Japan was the



fourth-largest export destination for Wisconsin's products. Equaling \$685.0 million, exports to Japan decreased 5.4% in 2009. However, its share of exports increased, from 3.5% in 2008 to 4.1% in 2009.

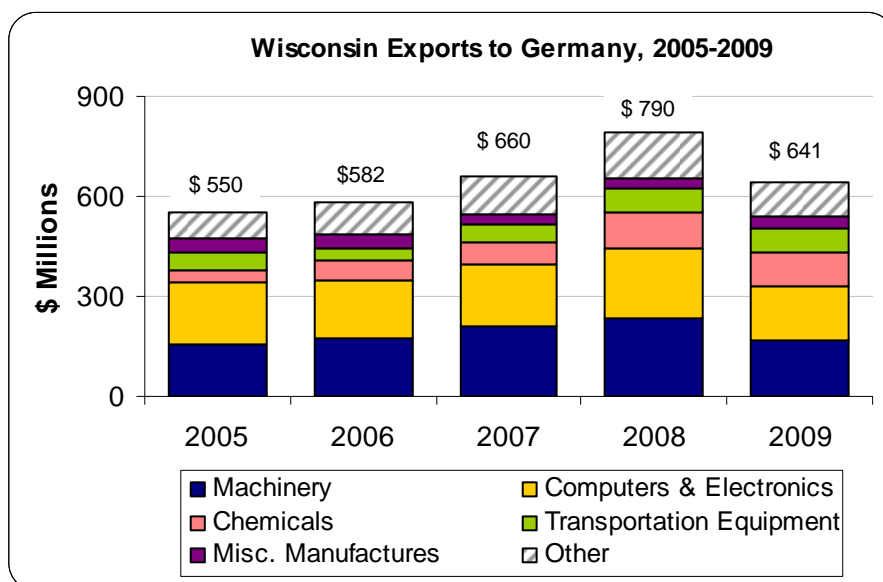
Computers and electronic products were the most commonly exported item to Japan, at 42.3% of total exports, or \$290.0 million. The next largest category of exports from Wisconsin to Japan was machinery, at \$121.5 million, or 17.7% of the total. Processed food, at \$62.9 million (9.2% of the total) was the third-largest category, followed by chemicals (\$54.3 million, or 7.9% of the total) and transportation equipment (\$54.6 million, or 6.7% of the total). In 2009, four of the top five products exported to Japan decreased from the previous year. Only chemicals saw an increase (+38.5%). The chart below shows the mix of Japan's largest imports from Wisconsin since 2005.

Japan's economy was not immune to the economic turmoil that stretched around the globe in 2009. Its economy shrank 5.2% last year, following a decrease of 1.2% in 2008. However, growth is expected to return in 2010 and 2011, at the rate of 1.9% and 2.0%, respectively. With growth returning, demand for Wisconsin's exports will also resume. Indeed, in the first three months of 2010, exports to Japan from Wisconsin have increased 4.0% over the same period last year.



## Germany

Germany has been one of Wisconsin's top five export destinations for the past three years. In 2008, Germany moved past both the United Kingdom and Japan to become the fourth-largest importer of Wisconsin's goods. With a decline of 18.9% in 2009, Germany dropped into the number five spot. Totaling \$641.1 million, exports to Germany were 3.8% of Wisconsin's total, the same as in 2008.



The largest category of exports to Germany in 2009 was machinery, valued at \$167.8 million. This was equal to 26.2% of total shipments from Wisconsin. Computers and electronics were just under that, at \$164.1 million, or 25.6% of Wisconsin exports to Germany. The next largest group of exports was chemicals, at \$99.7 million



(15.6% of the total), followed by transportation equipment, at \$71.2 million (11.1% of the total) and miscellaneous manufactures, at \$37.6 million (5.9% of the total). The three largest export categories saw a decrease in 2009, while exports of transportation equipment and miscellaneous manufactures increased. The chart above illustrates the mix of imports from Wisconsin over the past five years.

Germany's economy shrank 5.0% in 2009, so it is no surprise that Wisconsin's exports to the country decreased. However, economic growth is expected to return, at a rate 1.2% in 2010 and 1.7% in 2011. With exports to Germany already up 11.1% in the first three months of 2010, the outlook for Wisconsin's exports to Germany in 2010 is good.

Details of Wisconsin's Top Export Partners are presented in Table II.3.

TABLE II.3

WISCONSIN EXPORTS: DESTINATION DETAIL  
(THOUSANDS OF DOLLARS)

	2005	2006	2007	2008	2009
World Total	14,961,410	17,173,628	18,825,489	20,569,622	16,729,045
% change	17.8%	14.8%	9.6%	9.3%	-18.7%
Canada	5,259,367	5,459,259	5,896,125	6,515,852	4,826,655
% change	7.6%	3.8%	8.0%	10.5%	-25.9%
Mexico	1,337,781	1,850,791	1,481,389	1,761,455	1,588,753
% change	26.0%	38.3%	-20.0%	18.9%	-9.8%
China	673,256	870,111	1,178,915	1,230,797	1,098,066
% change	16.0%	29.2%	35.5%	4.4%	-10.8%
Japan	695,737	738,752	655,118	724,430	685,020
% change	11.4%	6.2%	-11.3%	10.6%	-5.4%
Germany	550,040	582,051	659,769	790,345	641,146
% change	19.7%	5.8%	13.4%	19.8%	-18.9%
United Kingdom	643,893	686,410	722,753	683,094	531,629
% change	24.9%	6.6%	5.3%	-5.5%	-22.2%
Australia	425,078	466,637	563,672	583,465	510,070
% change	30.8%	9.8%	20.8%	3.5%	-12.6%
France	414,783	467,820	441,907	517,870	476,999
% change	13.7%	12.8%	-5.5%	17.2%	-7.9%
Brazil	247,198	248,437	326,535	420,055	391,447
% change	56.1%	0.5%	31.4%	28.6%	-6.8%
Chile	120,892	120,791	188,252	307,663	371,857
% change	0.1%	-0.1%	55.8%	63.4%	20.9%
All Other	4,593,385	5,682,569	6,711,054	7,034,596	5,607,403
% change	27.3%	23.7%	18.1%	4.8%	-20.3%

Source: Origin of Movement (OM) series from the Foreign Trade Division of the U.S. Census Bureau

TABLE II.4

WISCONSIN EXPORTS: PRODUCT DETAIL  
(THOUSANDS OF DOLLARS)

	2005	2006	2007	2008	2009
Total, all Exports	14,961,410	17,173,628	18,825,489	20,569,622	16,729,045
% change	17.8%	14.8%	9.6%	9.3%	-18.7%
Machinery Manufactures	4,331,601	4,554,903	5,517,770	6,236,655	4,889,562
% change	17.5%	5.2%	21.1%	13.0%	-21.6%
Computers & Electronic Prod.	2,791,145	3,129,219	2,983,022	3,090,185	2,895,055
% change	28.5%	12.1%	-4.7%	3.6%	-6.3%
Transportation Equipment	1,696,018	2,329,025	2,369,899	2,631,702	1,475,354
% change	11.4%	37.3%	1.8%	11.0%	-43.9%
Processed Foods	669,945	717,424	1,021,106	1,216,559	1,092,695
% change	19.4%	7.1%	42.3%	19.1%	-10.2%
Elec. Eq., Appliances & Parts	713,812	887,017	1,029,648	1,115,400	977,520
% change	9.2%	24.3%	16.1%	8.3%	-12.4%
Chemical Manufactures	708,835	738,301	827,260	1,010,674	976,568
% change	10.5%	4.2%	12.0%	22.2%	-3.4%
Paper Products	775,039	777,852	809,248	754,507	610,931
% change	16.1%	0.4%	4.0%	-6.8%	-19.0%
Fabricated Metal Products	478,458	532,474	559,622	614,862	585,357
% change	13.0%	11.3%	5.1%	9.9%	-4.8%
Misc. Manufactures	448,188	490,597	555,755	566,687	510,653
% change	14.8%	9.5%	13.3%	2.0%	-9.9%
Plastic & Rubber Products	388,670	459,027	474,046	525,590	478,415
% change	4.9%	18.1%	3.3%	10.9%	-9.0%
All Other	1,959,699	2,557,789	2,678,113	2,806,801	2,236,935
% change	21.3%	30.5%	4.7%	4.8%	-20.3%

Source: Origin of Movement (OM) series from the Foreign Trade Division of the U.S. Census Bureau