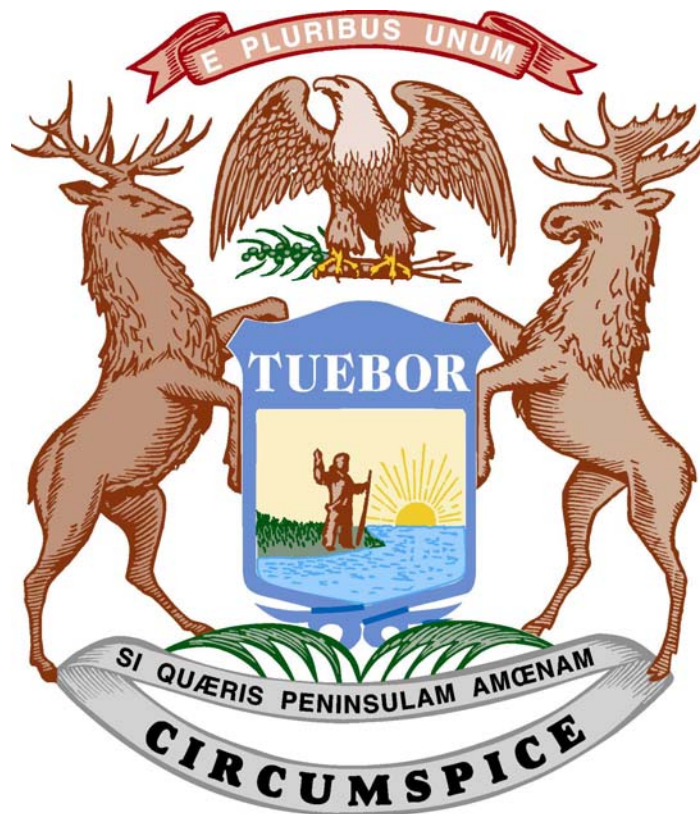


# Administration Estimates Michigan Economic and Revenue Outlook



**FY 2010-11 and FY 2011-12**

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**ADMINISTRATION ESTIMATES**  
**EXECUTIVE SUMMARY**  
**January 14, 2011**

**Revenue Review and Outlook**

- FY 2010 General Fund-General Purpose (GF-GP) revenue totaled \$6,785.2 million, a 7.9 percent decrease from 2009. FY 2010 School Aid Fund (SAF) revenue fell 1.0 percent to \$10,816.9 million.
- FY 2011 GF-GP revenue is forecast to increase 6.5 percent to \$7,226.0 million, up \$129.3 million from the May 2010 Consensus estimate. FY 2011 SAF revenue is forecast to increase 0.9 percent to \$10,917.8 million, which is \$84.9 million above the May 2010 Consensus estimate.
- FY 2012 GF-GP revenue is forecast to increase 1.9 percent to \$7,364.2 million. FY 2012 SAF revenue is forecast to increase 2.2 percent to \$11,154.3 million.

**2011 and 2012 U.S. Economic Outlook**

- After increasing an estimated 2.8 percent in 2010, real gross domestic product is forecast to rise 3.1 percent in 2011 and then grow 2.9 percent in 2012.
- Over the forecast horizon, wage and salary employment is projected to increase at an accelerating rate through the end of 2011. After slowing in 2012Q1, employment growth is expected to increase through the end of 2012. Over this period, the national labor market is expected to regain over 5 million jobs.
- The U.S. unemployment rate is forecast to decline each quarter over the forecast horizon. The U.S. unemployment rate is expected to average 9.5 percent in 2011 and 8.9 percent in 2012.
- In 2009, housing starts fell to a 50-year low (554,000 units) and then rose modestly in 2010 to an estimated 587,800 units. Starts are forecast to post strong growth in 2011 and 2012. However, at 894,700 units in 2012, starts remain below 1.0 million for the fourth straight year.
- Light vehicle sales are expected to post significant growth in 2011 and 2012. In 2011, sales are forecast to rise from 11.5 million units to 12.9 million units. Sales in 2012 are expected to increase to 14.9 million units.
- In 2009, consumer prices declined for the first time since 1955. Prices are estimated to rise 1.6 percent in 2010. Inflation is expected to remain at 1.6 percent in 2011 before accelerating to 1.9 percent in 2012.

## **2011 and 2012 Michigan Economic Outlook**

- In 2009, Michigan wage and salary employment plummeted 6.9 percent – the largest drop in over 50 years. Michigan employment declined an estimated 0.9 percent in 2010. In 2011, Michigan employment is forecast to rise 0.3 percent, marking the first annual employment gain since 2000. Employment growth is expected to accelerate to 1.3 percent in 2012.
- In 2011, the Michigan unemployment rate is forecast to drop to 12.3 percent from 13.4 percent in 2010. The rate is then expected to decline further to 11.4 percent in 2012.
- After dropping 8.3 percent in CY 2009, wages and salaries increased an estimated 0.3 percent in CY 2010. Wages and salaries growth is expected to accelerate sharply in 2011 to 3.3 percent before rising to 3.6 percent in 2012.
- Michigan personal income fell 3.1 percent in CY 2009 – marking the first Michigan income drop since 1958. In 2010, income increased an estimated 1.9 percent. Personal income growth is forecast to accelerate to 3.0 percent in 2011 and 4.0 percent in 2012.
- Disposable income is forecast to rise 2.0 percent in FY 2011 and 3.5 percent in FY 2012.

## **Forecast Risks**

- Major economic and financial market challenges remain. Many fiscal and monetary policies have wound down. New fiscal and monetary policies have recently been implemented. Uncertainty surrounds the impact of having ended older programs and beginning new ones.
- A weak labor market would hamper the recovery. Job growth remains key for regaining consumer confidence and spending.
- While firmer than they were in the recession, U.S. credit markets remain unsettled and European credit markets may be on the verge of another major crisis. As a result, the U.S. credit markets remain at risk.
- The recession and disappointing recovery may have impacted consumer and investor confidence more than assumed. Stubbornly low consumer confidence underlines this risk. Consequently, consumption and investment may be significantly lower than forecast.
- Michigan's greater reliance on the vehicle industry could lead to a weaker Michigan economy than forecast.
- Higher oil prices would depress economic activity by lowering consumer's discretionary income. Higher oil prices would also spur higher inflation, which could lead the Fed to implement anti-inflation measures that could dampen economic growth.
- A stronger (weaker) housing market would boost (depress) the economy more than forecast.
- Geopolitical factors, such as a domestic terrorist attack, would depress economic activity.

# ECONOMIC REVIEW AND OUTLOOK

## January 14, 2011

### Current U.S. Economic Situation

#### Summary

In June 2009 (2009Q2), the longest economic downturn (18 months/6 quarters) since the Great Depression ended – as determined by the National Bureau of Economic Research. Over the recession's six quarters, real GDP fell 4.1 percent – the greatest recessionary decline on record (dating back to 1948). During the recession's six quarters, residential investment fell 36.2 percent while non-residential investment declined 19.3 percent. Taken together, declines in these two types of investment accounted for most (89.8 percent) of real GDP's overall recessionary decline. Personal consumption fell by 2.4 percent with durable goods consumption declining 11.9 percent. The drop in durable consumption amounted to 26.1 percent of the overall real GDP decline. Increases in net exports (lower trade deficit) and higher federal government purchases lessened the overall GDP decline.

Real GDP has grown each quarter since the recession's end (2009Q3 – 2010Q3). After reporting modest growth in 2009Q3, the U.S. economy reported strong growth over the following two quarters with annualized growth averaging 4.4 percent. Growth slowed considerably in 2010Q2 (1.7 percent annual rate) and accelerated to only 2.6 percent in the following quarter. During the recovery to date, greater equipment investment and inventory accumulation taken together account for nearly the entire real GDP increase (99.0 percent of the overall net real GDP gain). Consumption increases equal 45.6 percent of the overall real GDP gain. At the same time, continued declines in investment in residential and non-residential structures (-15.5 percent) and a worsening trade deficit (-34.8 percent) have detracted from growth. Federal government spending has continued to add to real GDP growth (+13.9 percent) while state and local government spending has subtracted from growth (-4.7 percent).

Over the course of the recession, U.S. wage and salary employment shrank by 5.3 percent – the greatest recessionary employment decline since 1945. In addition, employment declined in five of the six months following the end of the recession. As a result, between December 2007 and December 2009, the U.S. lost a net 8.4 million jobs (-6.1 percent). In early 2010, partly boosted significantly by temporary Census worker hiring, wage and salary employment recorded substantial gains between March and May (averaging 318,000 jobs per month). However, in part depressed by the end of many temporary Census jobs, the economy lost a net 266,000 jobs between June and September. Employment rose in October and November. However, the gains averaged only 106,000 jobs per month. Through November, U.S. wage and salary employment has increased by 951,000 jobs over the course of 2010. The 2010 employment gain stands in sharp contrast to the economy's net loss of 4.63 million jobs in the first eleven months of 2009.

## Housing Market

The housing market remains little improved from the records lows to which the market recently fell. The market was buoyed by the homebuyer credit but worsened considerably directly following the credit's April 30, 2010 expiration. The market has regained some ground since its post-credit decline and shows some signs of stabilizing. However, housing shows little indication of having the strength to return anywhere close to its historic norms.

In calendar year 2008, housing starts fell below 1.0 million units (906,000 units) for the first time on record. However, the housing market then worsened considerably in 2009, falling 38.8 percent to only 554,000 units. This performance stands in sharp contrast to the 2.1 million units pace in 2005 and even the 1.8 million and 1.4 million units pace in 2006 and 2007, respectively. Housing starts reported significant year-ago increases in March and April 2010 with the impending end of the federal home buyer credit. In April, annualized starts were up 42.3 percent from the prior year's all-time record low – rising to their highest annual rate since late 2008 (679,000 unit rate). However, with the home buyer credit's expiration, starts have moderated considerably. As a result, since the May 2010 Consensus Conference (May through November), the starts rate has averaged 569,000 units -- little changed from the same period a year earlier (573,000 units). At a 555,000 unit annual rate, November 2010 starts were down 5.8 percent from November 2009 but up 16.4 percent from the April 2009 record low.

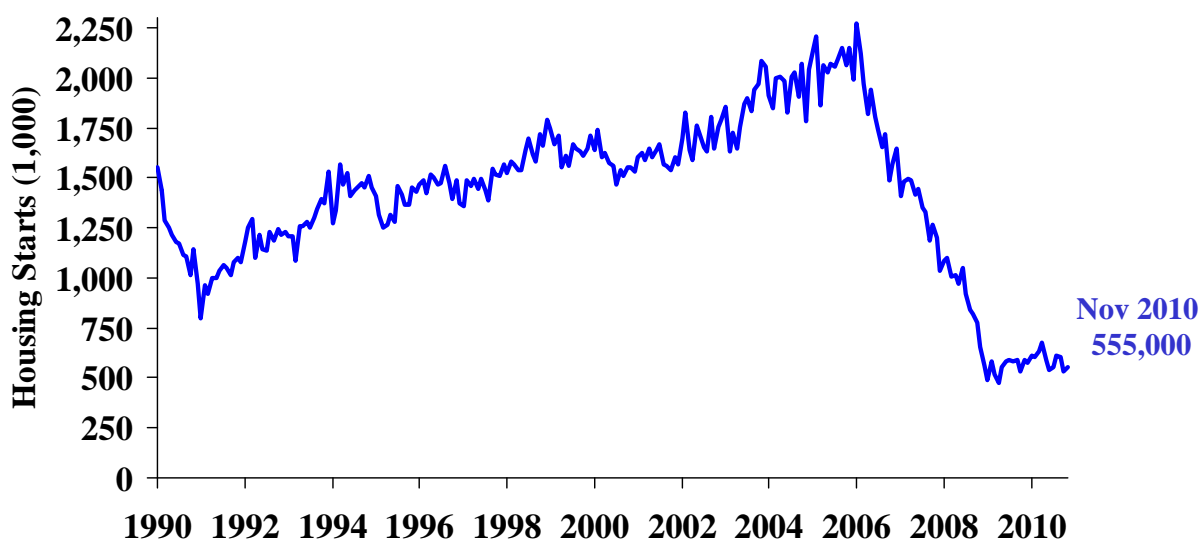
In mid-December, the Mortgage Bankers Association weekly market composite index was down sharply (-19.5 percent) from a year ago with the purchase index 8.4 percent lower and the refinancing index dropping 24 percent. The composite index has changed little since the May Consensus Conference with the index's four-week average up 2.0 percent. However, the purchase index average is down 19.0 percent compared to the May Conference.

After rising to 22 points the week of the May Conference, the National Association of Home Builders sentiment index weakened considerably in June – falling to 16. In August, the index fell to 13 where it remained in September. By November, the index returned to 16, where it held steady in December. The December 2010 index was also unchanged from December 2009.

Pending home sales rose significantly over the final three months of the home buyer credit (February 2010-April 2010) with the National Association of Realtors pending home index rising 22.9 percent over the three months. However, the index fell sharply in May (-29.9 percent) and dropped still lower in June to 75.5. Since June, the index has trended upward – increasing in four of the past five months. The November index (92.2) was up 22.1 percent from June. Nevertheless, the November reading was still 5.0 percent below a year ago and remains 16.9 percent less than its recent April high (110.9).

Directly prior to the May Consensus Conference, the thirty-year mortgage rate had fallen to 4.84 percent. The rate continued to trend downward until mid-October. After plateauing for a month, the rate dropped to a record low 4.17 percent the week of November 11. Since mid-November, the rate has risen significantly. In mid-December, the thirty-year rate stood at 4.83 percent. While the rate is significantly above November's record low, the late December rate remains at historically low levels and essentially unchanged from May.

## Housing Starts Remain Little Changed from Record Low



Source: U.S. Census Bureau. Seasonally adjusted annual rate.

### House Prices

Between May and October, the Federal Housing Finance Agency's (FHFA) purchase-only house price index (seasonally adjusted) declined 2.4 percent. The October 2010 index is down 3.4 percent from last year compared to a 1.3 percent year-ago drop in May 2010. The May to October decline in the Census Bureau's median new home sales price was even more dramatic with the median price falling 14.4 percent. However, the median price rose substantially in November. As a result, the May to November decline, while still substantial, was significantly smaller (-7.6 percent). Nevertheless, while the median price *rose* between May 2009 and May 2010 (+3.7 percent), the price *fell* 2.7 percent between November 2009 and November 2010. According to the National Association of Realtors, the median existing-house price was up slightly in November compared to a year ago (0.4 percent).

Between June 2009 and January 2010, the S&P/Case Shiller 20-city home price index (seasonally adjusted) reported month-to-month increases each month – marking the longest stretch of consistent gains in more than three years. The index fell slightly in February and in March. Home prices then rose substantially in April and May and increased slightly in June. However, between June and October, the index has fallen each month with substantial declines (-1.0 percent each month) in both September and October. Consequently, home prices are down 0.8 percent from a year ago – marking the first year-ago decline in 2010.

The Federal Reserve's November 2010 Beige Book paints a mixed picture for housing prices: "Price declines were observed in New York, Philadelphia, Atlanta, and Kansas City; prices were flat to up in Minneapolis, and prices edged up in Boston. The Dallas District reported that home prices increased on a year-over-year basis."



In 2009, the federal government launched the Home Affordable Modification Program (HAMP) to help homeowners struggling under the weight of their mortgages and, in many cases, facing the risk of foreclosure. A recently issued Congressional oversight panel report found HAMP's performance very disappointing. According to the report, of the up to \$75 billion the government had committed, it now appears that the government may spend only \$4 billion. The panel's report also found that most trial modifications designed under the program failed to lead to permanent modifications. Finally, according to the report, of the more than 483,000 permanent mortgage modifications in progress under HAMP, most have left borrowers worse off with unpaid principal balances that are higher than they were premodification. Summing up the report's findings, the panel's chair observed, that HAMP has had "a lot less impact on the housing market than we thought it would have."

### Repercussions

The depressed housing market and concomitant home price declines -- along with a poor jobs market -- have had serious repercussions including high delinquency and foreclosure rates, sharp drops in homeowner equity and consumer net worth and lower stock prices. While many of these factors are still poor, some have recently improved significantly.

The most recent Mortgage Bankers Association's (MBA) National Delinquency Survey released in mid-November 2010 provided a mixed picture of the home mortgage market. MBA reported that the mortgage delinquency rate for mortgage loans decreased to a seasonally adjusted rate of 9.13 percent of all loans outstanding in 2010Q3, down 72 basis points from 2010Q2, and a decrease of 51 basis points from one year ago. Further, the percentage of loans in the foreclosure process at the end of the third quarter was 4.39 percent, down 18 basis points from the second quarter of 2010 and down eight basis points from one year ago. The seriously delinquent rate, the percentage of loans that are 90 days or more past due or in the process of foreclosure, was 8.70 percent, a decrease of 41 basis points from last quarter, and a decrease of 15 basis points from the third quarter of last year. However, the foreclosure *starts* rate increased for all loan types and the foreclosure starts rate for prime fixed loans set a new record high in the survey, as more loans entered the foreclosure process. Thirty-three states saw increases in the rate of foreclosure starts in the third quarter.

Looking forward, Michael Fratantoni, MBA's Vice President of Research and Economics, sees only limited progress over the next year:

Most often, homeowners fall behind on their mortgages because their income has dropped due to unemployment or other causes. Although the employment report for October was relatively positive, the job market had improved only marginally through the third quarter, so while there was a small improvement in the delinquency rate, the level of that rate remains quite high. As we anticipate that the unemployment rate will be little changed over the next year, we also expect only modest improvements in the delinquency rate.

Declining home prices have meant lower homeowner equity (house value less mortgage debt). Each quarter between 2007Q1 and 2009Q1, inclusive, the *amount* of homeowner equity fell.

Over this period, the amount of homeowner equity fell by \$6.9 trillion (-53.4 percent). As a result, the homeowner equity rate (the amount of homeowner equity/homeowner real estate value) dropped by 20.3 percentage points falling from 56.5 percent to 36.3 percent. Prior to the current housing bust, the homeowner equity rate had never fallen below 50 percent. Each quarter between 2009Q2 to 2010Q2 (inclusive), the amount of homeowner equity rose. As a result, over \$1.0 trillion in homeowner equity was recouped. However, in 2010Q3, homeowner equity fell sharply – giving up more than half of the equity that had been regained in the prior five quarters. Between 2009Q2 and 2010Q3, homeowner equity increased a net \$452.1 billion and the homeowner equity rate rose 2.6 percentage points to 38.8 percent. While this net gain is significant, the increase still leaves homeowners with \$6.4 trillion less in homeowner equity than at the end of 2006.

According to CoreLogic, the share of residential properties with mortgages that were “under water” (borrowers owe more on their mortgages than their homes are worth) has fallen for three straight quarters. In the most recently ended quarter (2010Q3), 22.5 percent of residential properties with mortgages were underwater – down from 23.0 percent in 2010Q2. However, the reduction in the share of mortgaged residential properties underwater has not been due to rising home values, but instead to foreclosures of severely underwater properties.

According to the Federal Reserve, the overall real estate loan delinquency rate has ballooned from 2.41 percent in 2007Q3 (the quarter prior to the recession) to 9.83 percent in 2010Q3.

When the housing market was booming, lenders relaxed their lending standards and extended credit to subprime (more risky, less qualified) borrowers. When the booming market went bust, lenders tightened their lending standards – even beyond what they were prior to the boom.

The most recent Federal Reserve Senior Loan Officer Opinion Survey on Bank Lending Practice (October 2010) saw evidence of some easing in lending standards. However, the Survey also found strong indication that lending standards will remain, for some time, substantially tighter than they were prior to the financial crisis:

The October survey indicated that, on net, banks eased standards and terms over the previous three months on some categories of loans to households and businesses. Both large and other domestic banks reported having eased some standards and terms; large banks were primarily responsible for the easing reported in July. However, substantial fractions of banks reported in response to a set of special questions that standards for many categories of loans would not return to their longer-run averages for the foreseeable future.

In each of the first three quarters of 2010, the net percent tightening of prime mortgage loans (percent tightened less percent loosened) fell compared to the previous quarter – declining from 24.1 percent (2009Q4) to a negative 5.5 percent in 2010Q3 (5.5 percent more banks loosening standards than tightening). The net share tightening rose in the fourth quarter to 9.3 percent. Nevertheless, the 2010Q4 net share was significantly below a year earlier (down 14.8 points) and substantially smaller than 2008Q4 when 69.2 percent of banks reported tightening standards. Similarly, a progressively smaller percent of banks reported tightening lending conditions for

nontraditional loans each quarter between 2009Q2 and 2010Q3. Over this period, the net share dropped dramatically from 64.0 percent to 4.5 percent. While the share rose to 9.5 percent in 2010Q4, the percent was down 20.9 points from 2009Q4 and was 80.2 percentage points lower than in 2008Q4.

Between 2008Q4 and 2010Q4, the net share of banks tightening lending standards for commercial and industrial loans to large and mid-sized firms declined each quarter. The net share fell from 83.6 percent to 14.0 percent between 2008Q4 and 2009Q4. Further, a larger share of banks reported loosening standards than the share tightening standards each quarter in 2010 with a net 10.5 percent loosening compared to tightening.

While households borrowed at a \$741.5 billion annual rate in 2007Q4, that rate dropped by 35.2 percent in 2008Q1. In 2008Q2, households, on net, *reduced* their debt levels for the first time in the series' history dating back to 1946. Through 2010Q3, households continued to pay down their debt levels. In calendar year 2009, households reduced their debt levels by \$240.0 billion. In the first half of 2010, households reduced their debt levels at a \$292.9 billion annual rate. In 201Q3, households reduced their debt levels at a \$232.0 billion annual rate.

With the substantial declines in household borrowing, the personal savings rate has risen substantially over the past three years. The savings rate averaged 2.1 percent in 2007, 4.1 percent in 2008 and 5.9 percent in 2009. Since 2008Q4, the savings rate has exceeded 5.0 percent each quarter. Further, through the first three quarters of 2010, the average 2010 savings rate matches the 2009 average. The recent figures indicate that, in the near future, the savings rate will neither increase significantly nor fall substantially. While bolstering long-term growth, a high savings rate dampens near-term growth.

Between 2007Q3 and 2009Q1, overall consumer net worth fell each quarter compared to the prior quarter. Over this period, net worth declined by \$16.8 trillion (25.6 percent). Prior to these declines, net worth had never fallen for more than two straight quarters in a history dating back to 1952. Each quarter between 2009Q2 and 2010Q1, net worth increased from the prior quarter. As a result, net worth regained \$6.2 trillion of the \$16.8 trillion that it had lost. Net worth then fell by \$1.4 trillion in 2010Q2 and then rose by \$1.2 trillion in 2010Q3. Consequently, 2010Q3 net worth (\$54.9 trillion) stood \$6.0 trillion higher than in 2009Q1. However, 2010Q3 net worth is still 16.5 percent (\$10.9 trillion) less than its all-time peak reached in 2007Q2 level.

Spillover into broader financial markets meant sharp declines in stock prices along with the sharp house price declines. The U.S. stock market plummeted following Lehman Brother's declaring bankruptcy in mid September 2008. From the last trading day before the Lehman bankruptcy (September 12, 2008) and the market's March 9, 2009 trough, the Wilshire 5000 index lost nearly half (46.3 percent) of its value. Since March 2009, the market has rebounded. By early December 2010, the index had regained all that it had lost since the Lehman bankruptcy. In December, the index trended upward. The index reached a two-and-a-half year high on December 29, 2010 before falling on the last two days of 2010 trading. At year end, the index was 4.1 percent above its September 12, 2008 level, but still 13.2 percent off its December 10, 2007 peak.

There have been some indications that investor worries have moderated. In fall 2008, at the height of the financial crisis, banks were extremely wary of lending to each other. However, this wariness has lessened considerably. The TED spread (the difference between the three-month LIBOR rate, a benchmark for the rate banks charge each other to borrow from one another, and the 90-day Treasury bill rate) provides a good measure of banks' wariness to lend to one another. In mid-October 2008, the TED spread rose to a record 4.56 percentage points. The spread fell sharply over the next month, but remained above 2.00 percentage points into early December 2008. The spread then fell to around 1.00 percentage point by mid-January 2009 where it hovered until the end of April 2009. The spread then fell further, falling to its prior low level (0.20 percentage points) in late December 2009. In early March 2010, the spread dropped to a new record low (0.10 percentage points). The European credit crisis did increase the spread. By mid-June, the spread had risen to nearly 0.50 percentage points. However, the spread then fell significantly -- falling to nearly 0.15 percentage points by late August. The spread has fluctuated since August. At 0.18 percentage points, the late December spread remains at historically low levels.

The junk (below investment grade) corporate bond market provides an indication of the bond market's lending wariness. In mid-December 2008, at the height of the financial crisis and credit freeze, those buying junk corporate bonds were demanding a record 21.8 percentage points higher interest rate (a 21.8 percentage point spread). A year later, the spread shrank to 6.75 percentage points. By mid-December 2010, the spread had fallen to a three-year low (5.53 percentage points). The amount of junk bond issuance further highlights investors' reduced risk aversion. In 2009, junk bond issuance totaled a then record \$163.8 billion -- more than three times the \$47.7 billion issued in 2008. Through mid-December, 2010 junk bond issuance had already far exceeded the full-year 2009 total. As of mid-December, 2010Q4 junk bond issuance totaled \$109.7 billion -- already breaking the previous quarterly record (\$99.8 billion) just set in the prior quarter.

The increase in risk taking has helped spur increased investment and, in turn, greater growth. However, if investor optimism is significantly disappointed within the forecast horizon, this may serve to severely reduce investment and also economic growth compared to baseline projections.

## Monetary Policy

### Interest Rates

Faced with credit market tightening, turmoil in the financial markets and the floundering housing market, the Federal Open Market Committee (FOMC) began cutting the target federal funds rate in September 2007. Between September 2007 and October 2008 in a combination of scheduled and unscheduled meetings, the FOMC cut the federal funds rate from 5.25 percent to 1.00 percent. Finally, at its December 16, 2008 meeting, the FOMC took an unprecedented step and lowered the target federal funds rate range to 0.00 percent to 0.25 percent. At the same time, the FOMC cut the discount rate to 0.50 percent, its lowest level since the 1940s.

In total, between September 2007 and December 2008, the Federal Reserve cut the target federal funds rate ten times and the discount rate eleven times. As a result, the target federal funds rate was cut a total of 500-525 basis points and the discount rate was cut 525 basis points.

The FOMC has continued to state that it will maintain interest rates at their record low levels for a significant length of time. As the FOMC stated in its most recent (December 14, 2010) statement:

The Committee will maintain the target range for the federal funds rate at 0 to 1/4 percent and continues to anticipate that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels for the federal funds rate for an extended period.

#### *Additional Recent Federal Reserve Bank Actions*

In addition to dramatically lowering its key interest rates to record low levels, the Federal Reserve also addressed the financial and economic crises by injecting substantial liquidity into financial markets. While having remained relatively flat prior to late 2008, Federal Reserve Bank reserves have exploded since mid-September 2008. Between mid-September 2008 and mid-December 2008, Federal Reserve Bank credit more than doubled from \$891.5 billion to \$2,236.9 billion. Reserve bank credit has remained around these extremely high levels. In late December 2010, credit totaled \$2,407.7 billion – an all-time high for a series dating back to late 1990.

The Fed instituted numerous liquidity programs in 2008 to help revitalize various poorly functioning financial markets including money market mutual fund markets, high-quality asset-backed commercial paper markets, and Treasury and other collateral markets. The Fed also instituted an overnight loan facility to provide funding for primary dealers (banks and securities broker-dealers that trade in U.S. Government securities with the Federal Reserve Bank of New York). In addition to addressing problems in specific markets, many of the programs were also aimed at improving the functioning of financial markets more generally. However, “In light of ongoing improvements in the functioning of financial markets,” the Fed has ended all of these programs with the exception of the Term Asset-Backed Securities Loan Facility (TALF).

In November 2008, the Federal Reserve Board created (TALF) to support the asset-backed securities (ABS) market, a key source of credit for households and small businesses, by helping to unfreeze the ABS market and narrow outsized interest rate spreads:

New issuance of ABS declined precipitously in September and came to a halt in October. At the same time, interest rate spreads on AAA-rated tranches of ABS soared to levels well outside the range of historical experience, reflecting unusually high risk premiums. The ABS markets historically have funded a substantial share of consumer credit and SBA-guaranteed small business loans. Continued disruption of these markets could significantly limit the availability of credit to households and small businesses and thereby contribute to further weakening of U.S. economic activity. The TALF is designed to increase credit

availability and support economic activity by facilitating renewed issuance of consumer and small business ABS at more normal interest rate spreads.

When first introduced, the Fed announced plans, under TALF, to lend up to \$200 billion in loans for ABS backed by student loans, auto loans, credit card loans, and loans guaranteed by the Small Business Administration. In February 2009, the Federal Reserve stated that it was ready to expand the Term Asset-Backed Securities Loan Facility to \$1 trillion. The Fed also broadened the types of ABS supported by the facility (e.g., ABS backed by certain commercial mortgage-backed securities and certain residential mortgage-backed securities). In mid-March, the Fed again broadened the range of eligible ABS to include those backed by mortgage servicing advances, by loans or leases relating to business equipment, by leases of vehicle fleets and by floor plan loans.

The Fed officially launched the program in March 2009. On May 1, 2009, the Fed announced that, starting in June, commercial mortgage-backed securities (CMBS) and securities backed by insurance premium finance loans would be eligible collateral under the TALF. At first, the Fed authorized purchases through the end of 2009. However, in August 2009, recognizing that “the markets for asset-backed securities (ABS) backed by consumer and business loans and for commercial mortgage-backed securities (CMBS) are still impaired and seem likely to remain so for some time,” the Fed extended the eligibility date for newly issued ABS and legacy CMBS through March 31, 2010 and newly issued CMBS to June 30, 2010.

In December 2009, the Fed announced that it was slowing these purchases and would complete its purchases of \$1.25 trillion of agency mortgage-backed securities and \$175 billion of agency debt by the end of March 2010. However, the Fed indicated that, “The Committee will continue to evaluate the timing and overall amounts of its purchases of securities in light of the evolving economic outlook and conditions in financial markets.”

On August 10, 2010, the Fed announced that it would keep its securities holdings unchanged by reinvesting the principal payments from the agency debt and agency mortgage-backed securities in longer-term Treasury securities and rolling over the Treasuries as they mature. At subsequent FOMC meetings in September, November and December, the Fed reiterated its intent to continue reinvesting principal payments. In addition, in November, the Fed announced that it would purchase an additional \$600 billion of longer-term Treasuries by June 2011 (a pace of \$75 billion per month) in a second round of quantitative easing. The Fed reaffirmed its intent to purchase the additional \$600 billion in Treasuries by the end of 2011Q2. At both the November and December meetings, the Fed indicated that the FOMC would continue to reassess these policies:

The Committee will regularly review the pace of its securities purchases and the overall size of the asset-purchase program in light of incoming information and will adjust the program as needed to best foster maximum employment and price stability.

The massive size and broad range of the Federal Reserve’s programs have played a critical role in facilitating and improving the functioning of financial markets and thus the overall economy. As the preceding indicates, the Fed has modified the terms of TALF several times. Most recently, the Fed has indicated that it would purchase an additional \$600 billion in Treasuries by the end of June 2011 and continue to reinvest principal payments. However, the Fed has

continued to assert that there may be further changes in the light of evolving economic and financial market conditions. Thus, there remains uncertainty surrounding future breadth, timing and size of TALF. Further, there remains even greater uncertainty about the program's impact on the economy and financial markets.

### Fiscal Policy

In late 2008, in the wake of the Lehman Brothers' debacle, Congress passed a \$700 billion maximum financial rescue package, the Troubled Asset Relief Program (TARP), designed to complement the Fed's actions to restart lending. TARP's goal was to enhance liquidity and, hence, financial institutions' willingness to lend. The U.S. Treasury used the appropriated funds to buy ownership into major financial institutions and instituted a program to assist companies issuing credit cards, car loans and/or student loans. TARP also raised the FDIC limit on insured deposits from \$100,000 to \$250,000.

According to the U.S. Treasury, companies assisted by TARP have repaid over \$250 billion of funds they have received. In December 2010, Treasury estimated that the program will cost the federal government, on net, around \$50 billion while the Congressional Budget Office estimated TARP's net cost to be approximately \$25 billion. These more recent cost estimates are significantly lower than the CBO's August \$66 billion estimate and the Office of Management and Budget's October \$113 billion projection. The \$250 billion plus in repayments and lower program net cost estimates suggest that financial markets are improving and a certain measure of stability is returning to the financial sector.

On February 17, 2009, the President signed the American Recovery and Reinvestment Act (ARRA). The Act took a multi-pronged approach and included federal tax relief, expansion of unemployment benefits and other social welfare provisions, and domestic spending in education, health care, and infrastructure, including the energy sector. The unemployment benefits expansion increased the number of weeks of eligibility from 26 weeks to up to 99 weeks. ARRA as passed provided for extended unemployment benefits through the end of 2009. The deadline was subsequently moved to December 2010. The bill provided for tax cuts, with the bulk going to individuals. The key element of the individual tax cuts was a \$400 per worker (\$800 per couple) tax credit in 2009 and 2010. In addition to the expiration of extended unemployment benefits, tax relief passed during the Bush-era was set to expire at the end of 2010. In the context of these looming deadlines, the federal government enacted a new stimulus package in mid-December 2010. The package extended emergency unemployment insurance for an additional 13 months. The legislation did not extend the \$400/\$800 tax credit. However, the package included numerous tax relief elements. Major taxation elements of the 2010 legislation included:

- A two-year extension of Bush-era tax relief including:
  - Lower individual income tax rates enacted in 2001. Without the 2010 legislation income tax rates would have reverted to their higher rates effective prior to the original 2001 legislation.
  - Lower capital gains/dividends tax rates.

- \$1,000 child tax credit (due to revert to \$500).
- Enhancements to the earned income tax credit.
- Under Bush-era legislation, there was no estate tax in 2010. However, after 2010, the estate tax was scheduled to return with a 55 percent maximum rate and a \$1 million exclusion. The recently enacted legislation reinstates the estate tax for persons dying after December 31, 2009, but at significantly lower maximum rate (35 percent) and a substantially higher exclusion amount (\$5 million). The new estate tax legislation will sunset on December 31, 2012.
- For workers, Social Security payroll taxes are lowered by 2 percentage points from 6.2 percent to 4.2 percent for one year (2011).
- A two-year Alternative Minimum Tax (AMT) “patch” which increases AMT exemption amounts.
- 100 percent bonus depreciation for investments made after September 8, 2010 through December 31, 2011. 50 percent bonus depreciation for investments made in calendar year 2012.

As a part of ARRA, the federal government also enacted homebuyer tax credits. The original \$8,000 credit applied only to first-time homebuyers and was due to expire at the end of November 2009. A second \$6,500 credit was added for existing homeowners who have lived in their home for at least five consecutive years. The government extended the credit’s deadline to the end of April 2010 but did not enact any further extensions. Consequently, the tax credit expired April 30, 2010.

The U.S. government has engaged in a number of programs to bolster the housing market. In early 2009, the federal government enacted “The Making Home Affordable Program.” The program had three elements:

- \$200 billion for preferred stock purchases in Fannie Mae and Freddie Mac with the goal of keeping mortgage rates low.
- Home Affordable Refinance Program which relaxed loan-to-value ratios for Fannie Mae and Freddie Mac to allow slightly underwater (owing more than house is worth) borrowers to take advantage of the low rates.
- Home Affordable Modification Program (HAMP) with the goal of moving the loan servicing industry to make sustainable loan modifications.

In late December 2009, the U.S. Treasury said it would cover an unlimited amount of losses at mortgage giants Fannie Mae and Freddie Mac through 2012. The U.S. government now, directly or indirectly, underwrites nine of every 10 new residential mortgages, nearly twice the percentage before the crisis.



## Inflation

Between June 2008 and February 2009, oil prices fell from a record \$133.93 per barrel to \$39.16 per barrel. Oil prices have since trended upward, increasing to \$84.41 in November 2010. Following oil prices down, the average price of gasoline fell from a record \$4.05 a gallon in early July 2008 to \$1.59 a gallon by the end of December 2008 (Energy Information Agency). Gasoline prices have risen substantially since the end of 2008 with the price of a gallon of gasoline up by \$1.43 to \$3.02 by late December 2010. While prices remain significantly lower than their peak levels, the recent increases have reduced consumers' discretionary spending compared to late December 2008.

Like gasoline prices, natural gas prices rose to extremely high levels in mid 2008 and then fell sharply before bottoming in late 2009. Natural gas prices have remained well below their mid-2008 highs. In July 2008, natural gas prices rose to their second highest level in history, but then dropped substantially. By July 2009, natural gas prices had fallen 69.1 percent compared to a year ago. Through October 2010, natural gas prices were up compared to a year ago. However, in October 2010 prices were up only 4.9 percent. Further, November 2010 prices were down 23.5 percent compared to a year earlier and 71.7 percent lower than the July 2008 recent peak.

In its December 14, 2010, meeting statement, the FOMC expressed its concerns that overall inflation is *too low* being "somewhat low, relative to levels that the Committee judges to be consistent, over the longer run, with its dual mandate" of maximum employment and price stability .

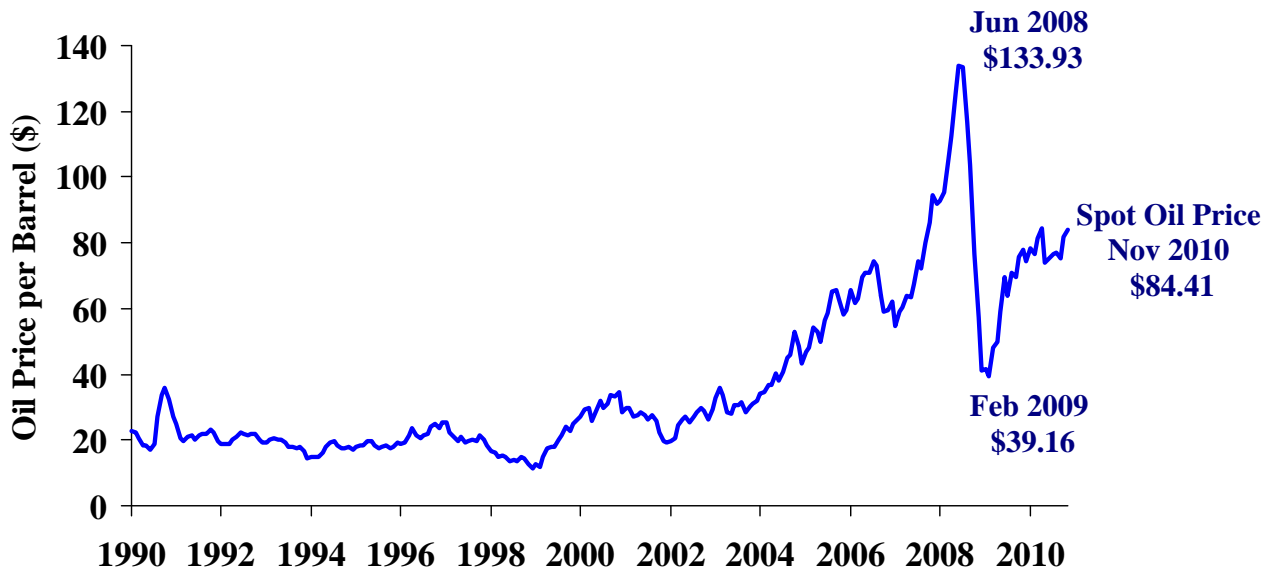
Similarly in its November 2010 Beige Book, the Federal Reserve observed that prices were stable, but saw some mixed evidence of future inflation pressures:

Wage pressures remain subdued across Districts.

.....

Prices of final goods and services were fairly stable across Districts despite rising input costs, especially for agricultural commodities, metals, and fuel. Companies in the Atlanta, Chicago, Kansas City, and San Francisco Districts reported a limited ability to pass through higher input costs to customers given the relative softness in demand. However, some manufacturers in the Boston, Cleveland, and Atlanta Districts have announced plans to raise their product prices in the near future.

## Oil Prices Up from Early 2009 Still Down Significantly from mid-2008



Source: Federal Reserve Bank of St. Louis.

While 84 percent of manufacturing firms surveyed by the Institute for Supply Management (ISM) reported paying higher prices in mid-2008, only 2 percent reported paying higher prices in December 2008. That figure rose to 38 percent by August 2009 before falling to 20 percent in November 2009. Between December 2009 and April 2010, the share reporting higher prices trended higher with 60 percent reporting higher prices in April. The share remained unchanged in May but fell off substantially in June to 32 percent. Between July and October, the share trended upward again before falling one point to 48 percent in November.

Similarly, while 72 percent of non-manufacturing firms reported paying higher prices in mid-2008, only 9 percent reported having done so in December 2008. The percentage alternately rose and fell over the next year with the share twice dropping again to 9 percent. After falling to 9 percent in September 2009, the percentage of firms reporting higher prices trended upward through April 2010. Between April and August, the share declined from 42 percent to 19 percent. The share again rose over the next two months before falling slightly in November to 28 percent.

While overall July 2008 producer prices were up tremendously from a year ago (9.9 percent), July 2009 producer prices were actually *down* 6.9 percent from a year ago – the largest year-over-year decline in producer prices in a history dating back to 1948. Since November 2009, producer prices have risen compared to a year ago with year-over-year increases ranging between 2.2 percent (November 2009) and 5.9 percent (March 2010). In November 2010, overall producer prices were 3.5 percent higher than a year earlier. However, core producer price inflation (excluding food and energy) has remained modest. Over the year, core producer prices increases have ranged between 0.9 percent and 1.6 percent compared to year-ago levels. In November 2010, core producer prices were up 1.2 percent compared to November 2009.

In July 2008, the overall year-over-year consumer price inflation rate stood at 5.6 percent, a 17-year high. However, by January 2009, consumer price inflation was essentially flat (0.03 percent). Between March 2009 and October 2009, the economy saw deflation for the first time since 1955. The economy experienced the largest cyclical consumer price decline in July 2009 with a 2.1 percent decline. By October, consumer prices were nearly flat (-0.2 percent). Between December 2009 and May 2010, year-over-year consumer price inflation trended downward from 2.7 percent to 2.0 percent. Inflation then slowed sharply to 1.1 percent in June 2010. Since June, consumer inflation has remained in a very tight band (1.1 percent to 1.2 percent). November 2010 prices were 1.1 percent above November 2009 prices. Core consumer inflation decelerated from 2.5 percent in September 2008 to 1.4 percent in August 2009. After accelerating slightly during 2009Q4, core consumer inflation again slowed with core consumer price increases ranging between 0.6 percent and 0.9 percent over the last eight months. In November 2010, core consumer inflation stood at 0.8 percent.

The Economic Cycle Research Institute's (ECRI) future inflation gauge (FIG) indicates that price pressures will remain moderate in the near term. In early 2009, the FIG fell to the upper 70s to its lowest levels since 1958. The index then trended upward over the next year reaching a peak in April 2010 (101.8). After falling in each of the next three months, the index again trended upward. Nevertheless, the November 2010 index (99.6) remains below the April peak and substantially below the index's average since 2000 (111).

### Major Economic Indicators

Recent trends in most major economic indicators point to future continued and even accelerating growth. However, many key indicators remain at near historically low levels -- pointing to significant downward risks to the economy and financial markets.

Between August 2008 and December 2008, **the ISM manufacturing index (PMI)** fell each month. By December, the index had fallen to 32.5 -- its lowest level since June 1980. The index then rose each month between January 2009 and August 2009. At 52.8, August's reading marked the first month that the index signaled an expanding manufacturing sector (reading above 50.0) since January 2008. While not increasing each month, the PMI trended upward between September 2009 and April 2010 when the index reported its highest reading since June 2004 (60.4). Since April, the index has fallen in five out of seven months. As a result, the PMI lost 3.8 points between April and November. Nevertheless, the index has signaled an expanding manufacturing sector every month since August 2009.

Midway through the 2007-2009 recession, in November 2008, the **ISM non-manufacturing business activity index** fell to 33.3 (its lowest reading in the index's 11-year history). Then -- albeit haltingly -- the index increased to 50.9 by August 2009. August marked the first month that the index signaled sector growth in nearly a year. Between September 2009 and November 2010, the index has signaled growth in each month except November 2009 when the index fell just below 50.0 (49.6). The index peaked in May 2010 at 61.1 (the highest reading since April 2006). The index then fell each month between June and September when the index dropped to

52.8. The index rose sharply in October and declined slightly in November. As a result, the November index reading stood at 57.0.

**Industrial production** worsened considerably between mid-2008 and mid-2009. While the three-month average of industrial production was down 1.8 percent from a year ago in July 2008, the average fell an astounding 12.7 percent between June 2008 and June 2009. The June 2009 decline was the largest decline since the sharp downturn in 1946, following the end of World War II. Between June 2009 and January 2010, the rate of decline became progressively smaller so that by January 2010, the average was down 1.4 percent compared to a year earlier. Compared to a year ago, the average rose each month between February 2010 and November 2010. However, after accelerating to 8.0 percent in July, the increases have since slowed. In November 2010, the average was up 5.6 percent from November 2009. Nevertheless, November 2010's three-month average of industrial production was still 6.7 points less than the pre-recession peak (September 2007).

As industrial production fell in 2008 and 2009, so too did **capacity utilization**. Between October 2007 and June 2009, the three-month average of capacity utilization fell every month compared to the prior month. As a result, the average fell to a record low (68.5 percent) for the series which dates back to 1967. Between July 2009 and November 2010, the average rose each month with increases totaling 6.6 points. Compared to a year ago, the November reading was 4.3 points higher.

Calendar year 2009 saw double-digit percentage year-ago declines in the three-month average of **new durable goods orders** in all but one month. In sharp contrast, the average has risen each month in 2010 through November and increased by double digits each month since March. The November 2010 average is up 11.4 percent compared to a year earlier. Similarly, core new durable goods orders have also increased by double digits since March and rose 15.9 percent in November 2010.

In November 2008, the three-month average of **retail sales**, excluding motor vehicle and gasoline sales, fell compared to a year ago for the first time in a history extending back to 1992. The average fell compared to a year ago each month over the next year. However, declines lessened beginning in the second half of 2009. In July 2009, the average reported its greatest year-ago decline (-4.0 percent). By November 2009, the average was down only 0.9 percent from a year earlier. In December 2009, the average rose compared to a year ago. In November 2010, the average was up 5.8 percent compared to a year ago – the largest year-ago increase since May 2006. Similarly, the motor vehicle and parts dealers sales average saw its first recorded year-ago decline in December 2007 and continued to see year-over-year drops through November 2009. Since December 2009, the average has seen year-ago increases each month. In November 2010, the average rose 14.9 percent – its largest year-ago increase since September 1999.

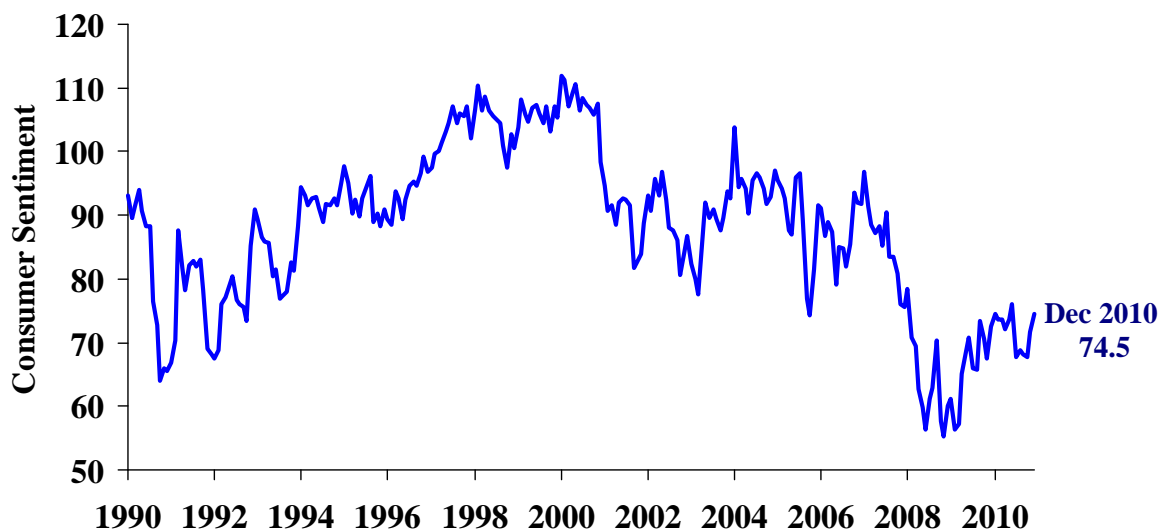
The **Conference Board index of consumer confidence** plummeted to a record low 25.3 in February 2009 – 51.1 points lower than a year earlier. The index rose sharply in April and May, increasing to 54.8. Since May 2009, the index has largely moved within a 10-point range between the mid 40's and the mid 50's. In May 2010, the index jumped to 62.7, but then fell

back to the mid 50's in June. In December 2010, the index stood at 52.5 – up 3.9 points from its recent September low (48.6) but down 1.1 points from a year earlier. Consequently, the index remains at historically low levels.

In November 2008, the **University of Michigan index of consumer sentiment** fell to 55.3 – a 28-year record low. The index rose in December before falling back nearly to November's low in February 2009. Between March 2009 and June 2009, the index rose each month – rising to 70.8 in June. After falling to 65.7 in August 2009, the index trended upward in a saw-toothed fashion through June 2010. By June, the index had risen to 76.0 (a two and half year high). The index then fell sharply in July to 67.8 around which the index fluctuated through October. Rising in November and December, the index has nearly regained its June high – rising to 74.5. Nevertheless, the index remains at historically low levels -- being almost 20 points below the index's average over the ten years directly prior to the recession.

Since mid April 2008, the **ABC News/Washington Post Consumer Comfort index** has not been above -40.0 and has moved in a relatively narrow range between -40 and -54. In late November 2008, the index fell to -54 -- setting the all-time record low for the index's now 25-year history. In late December 2010, the index stood toward the upper end of the three-year range at -44. These readings stand in marked contrast to the index's record high of +38 set in early 2000. Further, the recent figures are also substantially lower than the index's median reading in the years prior to the December 2007-June 2009 recession (-11).

### Consumer Sentiment Up from 28 Year Low But Still At Historically Low Levels



Source: University of Michigan Survey of Consumers.

In late 2008 and early 2009, the **Conference Board index of leading economic indicators** fell almost every month. However, between April 2009 and November 2010, the index has reported increases in all but two months. Over this period, the index has risen an impressive 14.8 percent. Over the last year, the leading index has increased 6.2 percent.

**Economic Cycle Research Institute (ECRI) weekly leading index** data indicate improving economic growth through most of 2009 followed by weaker growth in late 2009 and most of 2010. However, the index's post-August 2010 behavior points to an economy which has been regaining traction. In early December 2008, the index's smoothed annualized growth rate fell to its lowest reading in the index's forty year history (-29.7). Over the next six months, the index still pointed at decline, but a progressively slower one. The growth rate turned positive in mid-June 2009 and then accelerated over the next few months. By early October 2009, the rate had risen to +27.8 – a record *high*. However, between October 2009 and May 2010, the growth rate slowed and turned negative in early June 2010. The rate of decline accelerated over the next two months, growing to -10.3 by late August. However, between September and mid-December, the declines progressively slowed – slowing to -0.1 by mid-December. In the last half of December, the growth rate has been positive with the December 24 reading rising to 2.2 percent (a six-month high).

### Employment

Numerous economic data indicate that the labor market is stabilizing. Layoffs appear to be falling. Many labor market indexes point to improving labor market conditions. Wage and salary employment data provide a mixed picture. Employment fell in the first four months after the May 2010 Consensus Conference, but has seen gains in recent months. However, the hiring picture remains relatively poor.

The U.S. unemployment rate rose sharply between April 2008 and October 2009. Over this period, the unemployment rate doubled, rising from 5.0 percent to 10.1 percent – the highest monthly rate since April 1983. Between November 2009 and November 2010, the rate has fluctuated between 9.5 percent and 10.0 percent. In November, the rate stood at 9.8 percent. Compared to a year ago, the November 2010 employment level is up by 507,000 persons while the number unemployed is down by 221,000 persons. However, compared to the employment losses and unemployment gains over the prior two years, the November 2010 year-ago improvements are slight. As a result, compared to November 2007, the number unemployed is up by 7.8 million persons and the number employed is down by 7.6 million persons. The November 2010 unemployment rate is 5.1 percentage points higher than in November 2007.

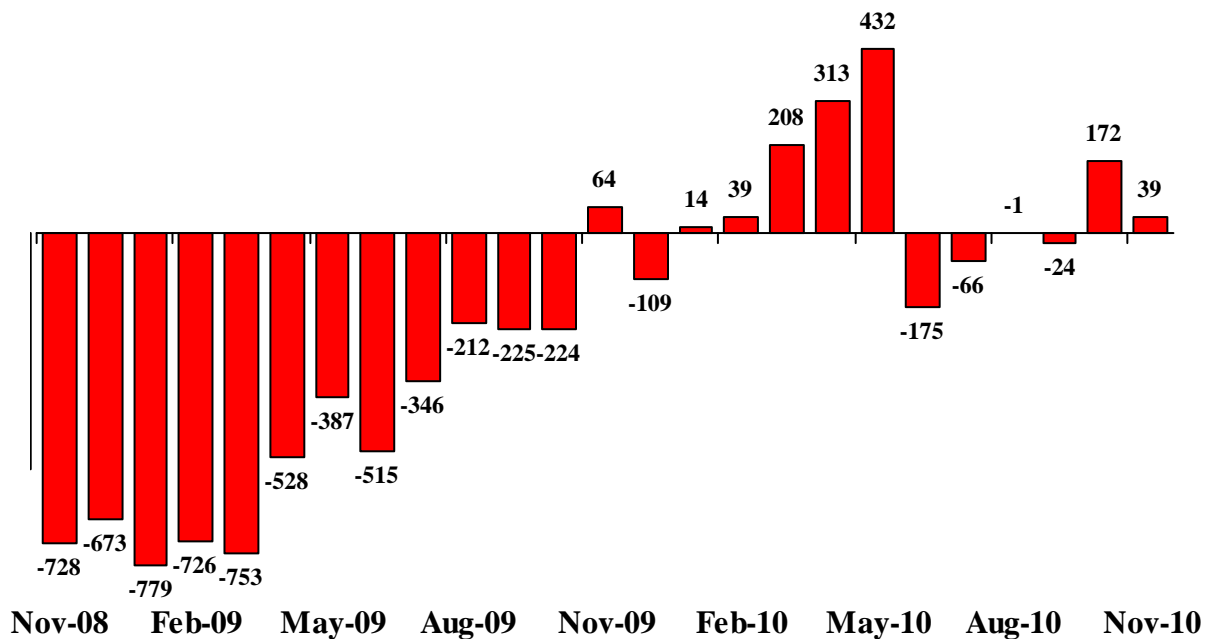
Recent trends in initial unemployment insurance claims point to fewer layoffs. Between the May 2010 Consensus Conference and the end of July, the four-week average of unemployment insurance initial claims fluctuated around 460,000 claims. The average then rose sharply over the next month – increasing to 488,000 claims by the end of August. However, since August, the average has trended downward. The average fell to its post-May Conference low in the last week of December (414,000 claims) -- the lowest average since late July 2008. The late

December average is down 40,250 initial claims since mid-May and is 60,000 claims lower than a year ago.

Challenger Report data indicate layoffs are down dramatically compared to the first eleven months of 2009. Year-to-date, employers have laid off nearly 500,000 workers – down sharply from the same period last year when layoffs totaled more than 1.2 million workers. Despite a sharp monthly rise, November 2010 layoffs were still down slightly from a year ago. Further, at 48,700 jobs, the November figure compares favorably to pre-recession layoffs totals.

Between January 2008 and October 2009, wage and salary employment fell every month, declining 8.3 million jobs to its lowest level since September 1999. Employment rose in November 2009 but fell in December 2009 to a new low since September 1999. Wage and salary employment rose in each of the first five months of 2010. January and February gains were slight, averaging 26,500 jobs. However, the labor market reported gains exceeding 200,000 jobs in each of the following three months with an average increase of 318,000 jobs per month. Employment fell in June and July, was essentially unchanged in August and declined slightly in September. Between June and September, employment dropped by 266,000 jobs. Employment has risen in the past two months with gains totaling 211,000 jobs. Compared to a year ago, November 2010 employment is up by 842,000 jobs. In sharp contrast, the U.S. lost an astounding 5.3 million jobs between November 2008 and November 2009.

### Signs of Labor Market Stabilization in Recent Months (Monthly Change in Thousands)



Source: Bureau of Labor Statistics, U.S. Department of Labor.

Between February 2007 and December 2009, manufacturing sector employment fell each month. Over this period, the sector lost 2.5 million jobs. Manufacturing employment job losses were particularly severe between late 2008 and the first half of 2009. However, like the overall labor market, manufacturing employment job losses slowed over the second half of 2009. Then, in the each of the first seven months of 2010, manufacturing employment increased modestly. In each of the past four months, sector employment has fallen. However, November 2010 manufacturing employment is up by 96,000 jobs (0.8 percent) from a year ago. Taken together, the year-ago increase and the last four monthly declines provide a mixed picture of the sector's labor market.

The bursting housing bubble and credit crunch have exacted an enormous toll on the construction industry. Construction employment fell every month between July 2007 and February 2010 with job losses totaling 2.1 million (-27.4 percent). Sector job losses were particularly severe in late 2008 and the first half of 2009. Sector job losses worsened in January 2010 and February 2010, but construction employment rose modestly both in March and April 2010. Since April 2010 (the last month data were available prior to the May Conference), construction employment has fallen a net 19,000 jobs with monthly changes ranging between a 29,000 jobs loss and a 34,000 jobs gain. November 2010 construction employment was down by 117,000 jobs from a year ago – the smallest year-ago sector decline since mid-2007. In contrast, November 2009, construction employment had been down by 1.1 million jobs from a year earlier.

Between August 2008 and September 2009, the ISM manufacturing employment index signaled a worsening manufacturing sector employment picture (index less than 50.0) every month. However, the index has improved considerably from early 2009. In 2009Q1, the index averaged 27.7 (a record low for a series that dates back to 1948). In contrast, in 2010Q1 the index averaged 54.8. Every month since December 2009, the employment index has signaled improving sector employment. The April 2010 reading (reported in May) was 58.5 – at the time the index's highest level since January 2005. Since April, the index has fluctuated. The index rose to a post-May Conference high in August (60.4). Most recently the index fell to a post-Conference low in November (57.5). The November 2010 reading is 1.0 point lower than the April level, but 7.9 points higher than November 2009.

Between January 2008 and April 2010, the ISM non-manufacturing component index signaled worsening employment in the services sector. However, the April 2010 reading, at 49.5, was only slightly below 50.0 and represented a substantial improvement from its November 2008 record low (31.1). The index fell to a post-May Conference low in August 2010 (48.2). However, in November 2010, the index rose to its highest reading since October 2007. At 52.7, the November level is 3.2 points higher than in April and 11.0 points higher than a year ago.

According to the most recent Job Openings and Labor Turnover Survey available, the number of job openings rose in October 2010 to 3.4 million – up 32.1 percent from October 2009. The October 2010 year-ago increase is in sharp contrast to the 23.6 percent decline in October 2009. The March 2010 level (the last reading available prior to the May Conference) was only 4.3 percent higher than March 2009. However, the October 2010 hiring rate (3.2 percent) was down 0.1 of a percentage point compared to March 2010 and was significantly below the pre-2009 average monthly hire rate (3.8 percent). The October hires level was up 4.9 percent from a year



earlier – an improvement on the October 2009 year-ago 10.1 percent *decline* but significantly less than the March 2010 year-ago rise (10.1 percent).

According to the National Federation of Independent Businesses, the November 2010 net percent of small businesses planning to expand employment was 4 percent -- up 5 percentage points from the April survey (released in May) reading of -1 percent. Further, the November reading represented the highest reading since September 2008. However, the net percent of businesses with job openings fell from 11 percent to 9 percent between April and November.

According to the December 2010 Conference Board survey, the share of consumers viewing jobs as plentiful has fallen 0.7 of a percentage point to 3.9 percent since May. Similarly, the percentage of those who find jobs scarce increased 2.9 percentage points to 46.8 percent. The December 2010 share of those finding jobs scarce is only modestly lower than the 26-year high set in October 2009 (49.4 percent). Likewise, December's share of those finding jobs plentiful is substantially below pre-recession readings exceeding 25 percent. At the same time, the Conference Board Employment Trends Index (ETI) (based on eight labor market indicators including the Board's job scarcity reading) increased in November for the second consecutive month. The ETI now stands at 99.0 and is up 9.3 percent from a year ago.

### Vehicle Sales and Production

Calendar year (CY) 2009 light vehicle sales totaled slightly over 10.4 million units – well below the 13.2 million unit rate for calendar year 2008 and substantially less than the 16.1 million unit sales rate in 2007. The 10.4 million unit rate is the lowest sales rate since calendar year 1982 (slightly under 10.4 million). CY 2009 domestic sales were down 21.8 percent while foreign sales dropped 19.4 percent.

In early 2009, light vehicle sales fell off considerably, compared to 2008, to historic lows. Between February 2008 and February 2009, sales fell from a 15.6 million unit rate to a 9.3 million unit rate – the lowest light vehicle sales rate since December 1981. Adjusting for population, the February 2009 sales rate was the lowest since 1970. Vehicle sales rebounded slightly but remained below a 10.0 million unit rate through June 2009. With the enactment of the federal government “Cash for Clunkers” program, vehicle sales rose above a 10.0 million unit rate in July and increased substantially in August, rising to its highest sales rate in over a year (14.1 million unit rate). Following the incentive program, sales retreated in September before rising gradually over the balance of 2009. After falling in January 2010 and February 2010, sales rose to 11.7 million units in March. Sales then fluctuated between 11.1 million and 11.7 million through September. In both October and November, sales totaled 12.2 million units. Compared to a year ago, November sales were up 12.8 percent. Year-to-date, sales averaged 11.5 million – 10.8 percent higher than the first eleven months of 2009. Compared to a year earlier, November 2010 light vehicle inventories were up 22.0 percent and days supply of inventories increased by 5 days from November 2009.

Beginning in mid-2008, vehicle sales flagged under the weight of weaker employment, substantially tighter credit markets and dramatic declines in household assets. The Big Three's

difficult situation seriously harmed Michigan's economy, which is tightly linked to the Big Three as the State's three largest private sector employers.

In late December 2008, using TARP funds, the Bush Administration extended a bridge loan package to help General Motors and Chrysler keep afloat. Both companies, however, needed more loans. As a condition of additional assistance, the Obama Administration required each firm to restructure in a manner that the Administration found necessary to assure financial viability. Working in close concert with the federal government, Chrysler reached agreements with its major creditors and the UAW, but failed to reach agreement with a few of its creditors by the May 1, 2009 deadline set by the Administration. As a result, the company entered into bankruptcy proceedings. GM filed for bankruptcy protection a month later.

Fortunately, Chrysler and General Motors remained in bankruptcy for relatively short periods of time. Chrysler emerged from bankruptcy on June 10, 2009 upon sealing a deal with Fiat under which the Italian automaker took partial ownership of Chrysler along with management control. GM emerged from bankruptcy on July 10, 2009 with the U.S. federal government taking 61 percent ownership of the auto company and the Canadian government taking 12 percent ownership.

Recent events indicate that General Motors' and Chrysler's respective financial situations have improved and are continuing to improve. Between July 10, 2009, when GM came out of bankruptcy, and the end of 2009, the company lost \$4.3 billion. In contrast, General Motors has reported increasingly larger *profits* in each of the past three quarters: \$865 million (2010Q1), \$1.2 billion (2010Q2) and \$2.0 billion (2010Q3). The company has warned that its 2010Q4 profits will fall below even 2010Q1 levels. Nevertheless, General Motors announced that, in CY 2010, the company will earn its first calendar year profit since 2004 – in sharp contrast to its \$1.2 billion loss incurred in 2009's bankruptcy-shortened year. In mid-November, General Motors issued the second-largest public offering in U.S. history. The offering enabled the company to reduce the federal government's ownership stake in General Motors from 61 percent to 27 percent.

Between June 10, 2009, when Chrysler emerged from bankruptcy, and the end of 2009, the company posted losses totaling \$3.8 billion. In the first three quarters of 2010, Chrysler has posted considerably smaller losses: \$197 million (2010Q1), \$172 million (2010Q2) and \$84 million (2010Q3). In the first three quarters of 2010, Ford Motor Company has made \$6.4 billion in profits.

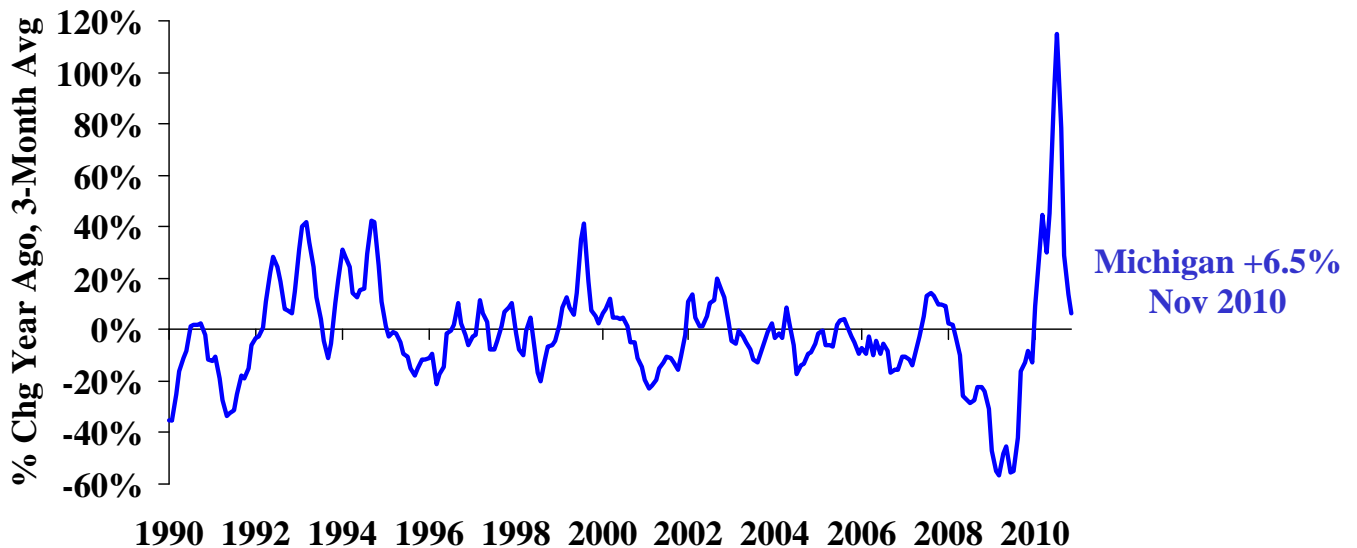
Vehicle production rose sharply in late 2009 as plants that had been on extended closure reopened. As a result, the three-month average of U.S. vehicle production has increased compared to a year ago in each month of 2010. In November, the average rose 6.9 percent from a year ago. Year-to-date, U.S. vehicle production is up 37.7 percent.

## Current Michigan Economic Conditions

### Vehicle Production

In mid-2010, Michigan vehicle production was double its year-ago level with the three-month average of state vehicle production up 115.1 percent in July. Year-ago increases have slowed in recent months with the November 2010 three-month average up only 6.5 percent from the November 2009 average. Nonetheless, November 2010 marks the eleventh straight month that the average exceeded the year-ago average. Auto production was down 31.2 percent while truck production was 43.0 percent higher.

### **Michigan Vehicle Production Increases Have Slowed Substantially**



Source: Automotive News and Michigan Department of Treasury.

### Employment

Michigan's economy relies heavily on the performance of the manufacturing sector in general and the auto industry specifically. Given extremely weak manufacturing employment performance, declining vehicle production, continued declines in Big Three market share along with continued supply rationalization among vehicle suppliers, Michigan's employment performance has been below the national average. Substantial productivity gains in the vehicle industry have also contributed to Michigan's weaker employment performance.

From Michigan's employment peak in June 2000 to November 2010, Michigan has lost 858,600 jobs (-18.3 percent). Since June 2000, Michigan manufacturing employment has fallen by 443,300 jobs, a loss of nearly half (48.9 percent) of the jobs in that sector at the state's overall employment peak.

In 2009, Michigan lost 6.9 percent (285,600) of its wage and salary jobs. The 6.9 percent decline represented the state's ninth straight annual employment decline and Michigan's sharpest employment drop in over 50 years. In contrast, Michigan employment had declined 1.4 percent in 2007 and 2.5 percent in 2008. In 2009, Michigan manufacturing employment plummeted, dropping 19.4 percent.

However, Michigan employment declines slowed considerably in 2010. Between January and November, the state has lost only a net 12,700 jobs. In contrast, Michigan lost almost a net 200,000 jobs in the first eleven months of 2009. In addition, Michigan manufacturing employment has actually increased slightly in 2010 with the state gaining a net 13,700 manufacturing jobs.

Michigan's unemployment rate has remained in double-digits for each of the past 25 months. In December 2009, Michigan's unemployment rate increased to 14.5 percent – the state's highest rate since June 1983. However, Michigan's unemployment rate has trended downward over the course of 2010. By November 2010, the state's unemployment rate had dropped to 12.4 percent – its lowest level since early 2009.

### Housing Market

Despite not being one of the major participants in the housing boom, with skyrocketing home prices and rising housing starts, Michigan was hit disproportionately hard from the housing bust due to sharply declining employment. Nevertheless, the state's housing market has recently seen some signs of improvement.

Between CY 2005 and CY 2009, Michigan housing unit authorizations fell 84.0 percent, declining from 39,692 units to 6,335 units. Nationally, authorizations dropped 73.0 percent over this period. Michigan housing unit authorizations were up sharply in early and mid 2010. In 2010Q1, housing unit authorizations in Michigan were up 84.2 percent from 2009Q1 compared with a 23.1 percent increase nationally. With the home buyer credit's expiration, the year-ago increase in Michigan authorizations has slowed markedly with the October 2010 three-month average up only 7.5 percent from a year ago. However, Michigan continues to fare better than the national average, which fell 4.0 percent from a year earlier.

October's annualized three-month average of Michigan authorizations (10,260 units) remain 27.6 percent below even the state's worst year prior to the current housing downturn (1982) and dramatically below (-80.2 percent) the state's 1996-2005 annual average (51,688 units). However, annualized October 2010 authorizations do represent an improvement over 2009.

In October 2010, according to Case-Shiller house price measures (seasonally adjusted), the Detroit MSA recorded a 5.5 percent year-over-year house price decline, compared to a 0.8 percent average increase for the twenty U.S. metro areas surveyed for the measure. Detroit's October 2010 year-ago decline was the area's largest drop since January 2010.

With 15,311 properties receiving a foreclosure filing in November 2010, Michigan posted the third highest state total despite a 21 percent drop in foreclosure activity from October.

In November 2010, Michigan ranked seventh with one foreclosure for every 296 housing units – compared to one foreclosure for every 492 units nationally (RealtyTrac). Further, foreclosure sales accounted for nearly one-third (32 percent) of 2010Q3 Michigan residential sales – compared to 25 percent nationally. However, Michigan foreclosures are down 4.2 percent from a year ago.

The share of mortgage properties underwater in Michigan is substantially higher than the national average. In 2010Q3, 22.5 percent of residential properties with mortgages were underwater nationally. In Michigan, 38 percent of such properties were underwater – placing Michigan fourth among the fifty states behind Nevada (67 percent), Arizona (49 percent) and Florida (46 percent).

### Personal Income

In 2009, Michigan personal income fell in every quarter compared to a year earlier. However, the declines shrank across the year. While in 2009Q1 Michigan personal income was down 3.6 percent from a year ago, 2009Q4 Michigan personal income dropped 2.0 percent from 2008Q4. Michigan personal income has grown compared to a year ago in each of the first three quarters of 2010. Further, those increases have accelerated from 1.7 percent in the first quarter to 3.3 percent in third quarter. Michigan's 2010Q3 growth was slower than national income (3.6 percent) and ranked 33<sup>rd</sup> among the fifty states.

In each of the quarters between 2008Q3 and 2010Q1, Michigan wage and salary income fell compared to a year ago with all four drops in 2009 being sizeable – ranging between -6.3 percent and -9.8 percent. Wages and salaries fell only slightly (-0.6 percent) in 2010Q1 and rose in the two most recent quarters. Michigan's 2010Q3 increase (3.1 percent) slightly exceeded national growth (2.8 percent).

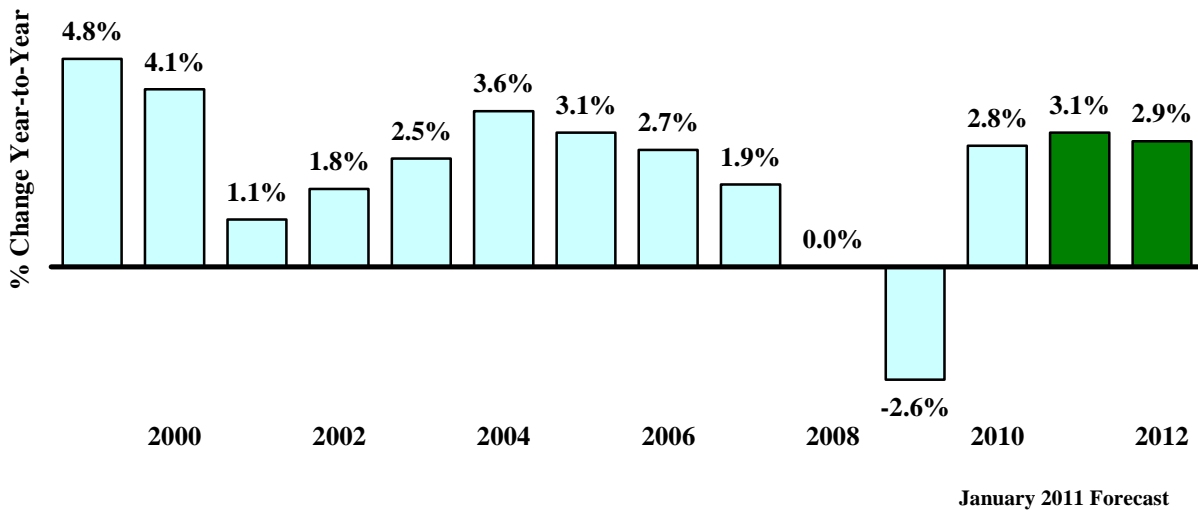
Michigan manufacturing wages and salaries reported year-ago declines in twelve straight quarters between 2007Q2 and 2010Q1. As with overall wages and salaries, 2009 saw the four largest sector drops – ranging between -15.9 percent and -23.1 percent. The 2010Q1 decline was modest (-1.4 percent). Manufacturing wages and salaries have increased in the last two reported quarters with sector wages and salaries rising 7.8 percent between 2009Q3 and 2010Q3. In comparison, nationally 2010Q3 manufacturing wages and salaries were up 4.8 percent compared to a year earlier.

## **2011 and 2012 U.S. Economic Outlook**

### Summary

After declining 2.6 percent in 2009, real GDP rose an estimated 2.8 percent in 2010. The economy is expected to experience similar growth in 2011 (3.1 percent) and 2012 (2.9 percent).

### **Real GDP Remains Solid in 2011 and 2012**



Source: Bureau of Economic Analysis, U.S. Department of Commerce, and Administration Forecast, January 2011.

The U.S. economy contracted severely over 2008H2 and 2009Q1 (-5.2 percent average annual rate). Real GDP fell slightly in 2009Q2 before reporting modest growth in 2009Q3. Real GDP has risen in each of the past five quarters. Over this period, the economy reported strong growth in late 2009 and early 2010 and slower growth over the balance of 2010. Over the two-year 2011-2012 forecast horizon, growth is expected to exceed 3.0 percent in all but one quarter (2012Q1).

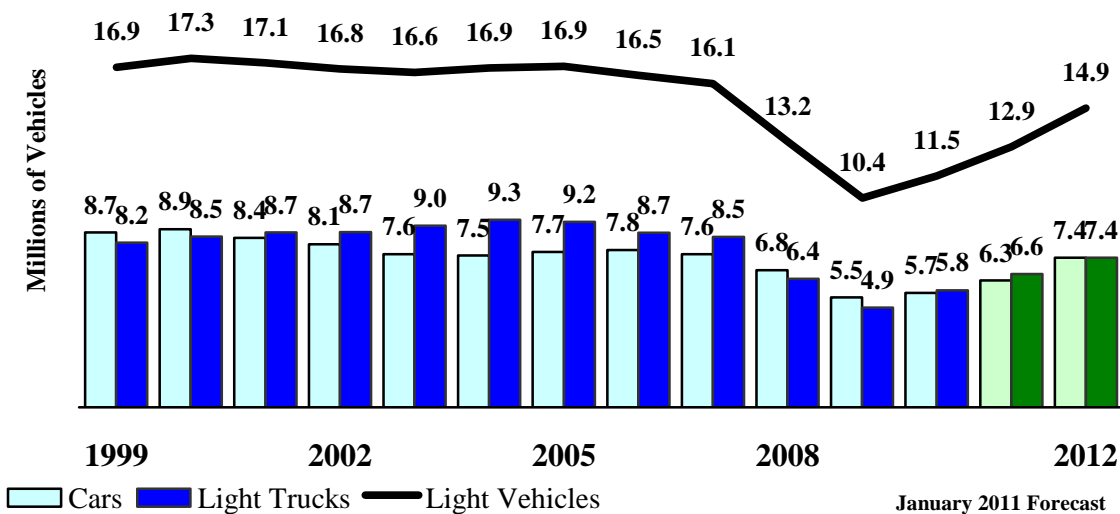
Light vehicle sales totaled an estimated 11.5 million units in 2010. Light vehicle sales are forecast to increase to 12.9 million units in 2011 before rising to nearly 15.0 million (14.9 million units) in 2012.

The U.S. unemployment rose to an estimated 9.7 percent in 2010 – tying 1982 for the highest national unemployment rate on record (going back to 1948). The rate is expected to drop to 9.5 percent in 2011 and to decline further in 2012 to 8.9 percent.

After falling at its fastest rate since at least 1940 in 2009 (-4.3 percent), U.S. wage and salary employment fell modestly in 2010 (-0.5 percent). In 2011, employment is expected to rise 1.3 percent and increase 2.1 percent in 2012. Following their first decline since 1955, overall consumer prices rose an estimated 1.6 percent in 2010. Prices are expected to rise 1.6 percent in 2011 as well. Consumer inflation is then forecast to accelerate slightly to 1.9 percent.

The short-term Treasury bill rate dropped to 0.1 percent in 2010. The rate is expected to rise only slightly – averaging 0.2 percent in both 2011 and 2012. Corporate interest rates are forecast to change slightly over the forecast horizon. The rate will rise from 4.9 percent in 2010 to 5.0 percent in 2011 before falling to 4.8 percent in 2012. Down from 5.0 percent in 2009, mortgage rates averaged 4.7 percent in 2010. Mortgage rates are expected to average 4.7 percent in 2011 and 4.9 percent in 2012.

### Vehicle Sales Continue Their Rebound



Source: Bureau of Economic Analysis, U.S. Department of Commerce, and Administration Forecast, January 2011.

### Assumptions

Oil prices per barrel are expected to rise from the lower \$80's in late 2010 to the low \$90's by 2012. After rising an estimated 23.5 percent in calendar year 2010, natural gas prices are forecast to fall 3.9 percent in 2011. Natural gas prices are then expected to rise 4.2 percent in 2012.

The housing market is expected to remain weak throughout the forecast horizon. In 2009, starts averaged 554,000 units (well below any level ever seen before). Starts rose modestly to 588,000 units in 2010. Starts are expected to rise to 706,000 units in 2011 and to 895,000 units in 2012.

Despite the increases, 2009-2012 will represent the four worst years for starts in a history dating back to 1959.

The forecast assumes that the FOMC will hold the target federal funds rate constant at a record low 0.00-0.25 percent range throughout the forecast horizon.

After rising in 2011Q1, the savings rate is assumed to fall in each subsequent quarter across the forecast. As a result, the calendar year average savings rate declines from 5.8 percent to 4.8 percent between 2011 and 2012.

### Forecast Risks

The economic recovery is facing significant challenges. The recession did serious damage to household balance sheets and psyches, and significantly tightened credit conditions. The housing sector remains weak with housing starts near the record lows set in the recession. Home values (and the worth of other assets) are still well below their pre-recession peaks. While recently showing signs of stabilizing, non-residential construction remains significantly below year-ago levels and substantially below pre-recession levels.

Key questions revolve around the impact of two recent major government actions: the recently passed fiscal stimulus package and the recently implemented second round of substantial quantitative easing by the Federal Reserve.

In large part, the major risks to the baseline represent the four major factors that precipitated the recession: the housing market, the roiled financial markets and the accompanying credit crunch, oil prices, and the light vehicle sales market. In addition, weak job growth poses a substantial risk to the strength and longevity of the current recovery.

**Housing Market.** The baseline forecast expects substantial increases in housing starts each quarter of 2011 with starts continuing to increase through the end of 2012. Projected CY 2012 starts are more than 50 percent higher than in 2010. If the housing market fails to pick up as forecasted, the U.S. and Michigan economies would be weaker than expected. However, despite the large projected increases, forecasted CY 2012 starts still total less than 900,000 units -- marking the fourth straight sub-1.0 million unit annual total. In a history dating back to 1959, 2008 marked the first year that annual starts *ever* fell below 1.0 million units. A stronger than forecasted housing market would boost the overall economy. In addition, weak non-residential construction market poses a significant risk.

**Credit Crunch Impact.** The baseline forecast assumes that financial markets will stabilize soon and remain stable with the Federal Reserve implementing its second quantitative easing. The fragility of the financial system poses a substantial downward risk to the baseline forecast. While less problematic than last year, significant credit market fragility remains. There continues to be, for example, a significant number of small banks failing. In addition, the junk bond market's growth, while an indicator of easing credit conditions and heightened optimism, poses a threat as a larger junk bond share increases the overall investment risk.



Europe may be on the verge of another credit crisis spurred by the need for European banks and governments to refinance or sell debt exceeding a combined 1.0 trillion euros in 2011 – raising serious concerns that there will not be enough demand to buy such a tremendously large amount of debt. Several major institutions have recently raised red flags: The Bank of England recently warned that European banks remain vulnerable to “strains in funding markets.” The European Central Bank warned in December 2010 of a risk of “increasing competition for funding”. Credit Suisse analysts have observed that the funding position of European banks deteriorated in the 2010H2. Particularly vulnerable European nations now include Ireland, Italy Greece, Portugal and Spain. Depending upon the eventual magnitude and severity of the credit problems, these strains could spread to other nations’ financial markets and economies including the U.S.

**Auto Industry.** The baseline forecast is for steadily improving light vehicle sales, which are forecast to rise to a 15.2 million unit rate by 2011Q4. The forecast assumes that all three Big Three vehicle manufacturers remain viable. Failing or weakening auto suppliers pose a risk to both the U.S. and Michigan economic outlooks.

**Oil Prices.** Geopolitical concerns, increased demand, or a major supply disruption could raise prices well above the assumed range (\$85-90 a barrel). Higher oil prices (and consequently higher gasoline prices) would retard domestic growth by depressing consumer sentiment, reducing households’ disposable income and increasing input costs to businesses. Higher oil prices may lead the Federal Reserve to hike rates sooner than expected. This risk is heightened as many other countries around the world recover and thus boost demand. Alternatively, if Asian oil demand decreases due to lower and more sustainable growth rates in China or European demand weakens as a result of financial crises, prices could be lower than assumed.

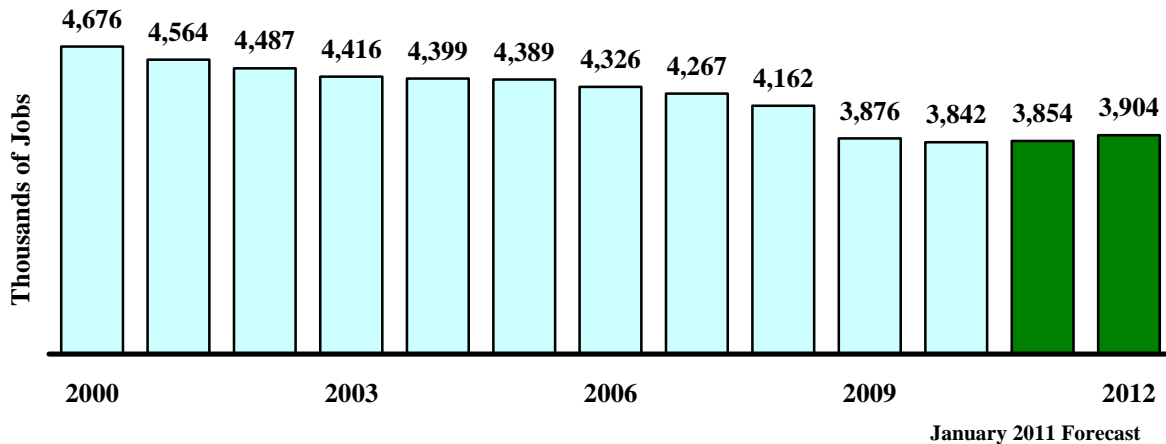
**Other Factors.** Geopolitical factors (such as a domestic terrorist attack) remain a downside risk to the baseline forecast.

## **2011 and 2012 Michigan Economic Outlook**

Michigan employment fell an estimated 6.9 percent in 2009 – its sharpest decline since 1958. State employment dropped another 0.9 percent in 2010, but is expected to increase 0.3 percent in 2011 and 1.3 percent in 2012. 2011 would mark the first calendar year Michigan employment increase since 2000.

Private non-manufacturing employment is projected to increase by 16,100 jobs in calendar year 2011 before rising by 48,700 jobs in 2012. Manufacturing employment is forecast to increase 1.7 percent both in 2011 and in 2012. Between CY 2010 and CY 2012, manufacturing employment rises by 16,000 jobs. Continuing, though lessening, struggles at the domestic Big Three automakers and vehicle suppliers along with concomitant restructurings will depress manufacturing employment.

## Michigan Wage and Salary Employment Little Changed



Source: Michigan Department of Labor and Economic Growth, U.S. Bureau of Labor Statistics, and January 2011 Administration Forecast.

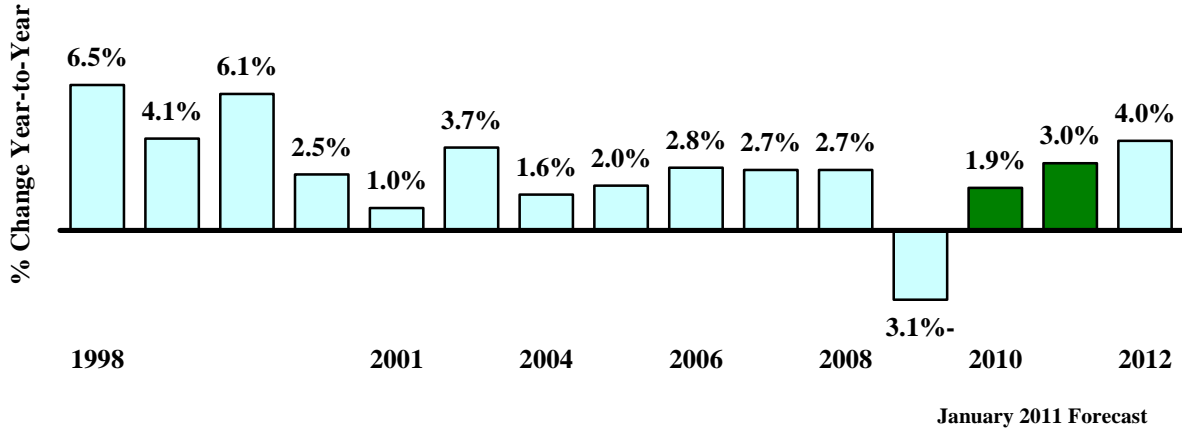
Following the large 2009 drop in Michigan transportation equipment employment (-26.3 percent) the sector experienced a slight increase in 2010. The sector is forecast to see modest increases in 2011 and in 2012 as well. Despite the increases, forecasted CY 2012 transportation equipment employment (133,200 jobs) is down 34.2 percent from 2007 sector employment and off 61.5 percent from the sector's CY 2000 employment (346,100 jobs). This forecast assumes that all three of the Big Three remain viable.

After essentially no change in 2011Q1, state household employment is forecast to rise each quarter over the balance of the forecast horizon. After soaring from 8.3 percent to 13.6 percent in 2009, Michigan's unemployment rate declined slightly in 2010 to an estimated 13.4 percent. Michigan's unemployment rate is then forecast to fall further over the forecast horizon with the rate dropping to 12.3 percent in 2011 and to 11.4 percent in 2012.

After falling 8.3 percent in CY 2009, Michigan wages and salaries rose slightly in 2010 by an estimated 0.3 percent. State wages and salaries are expected to rise 3.3 percent in 2011 and to increase 3.6 percent in 2012. In CY 2009, overall Michigan personal income declined 3.1 percent. Personal income rose an estimated 1.9 percent in 2010. Personal income is expected to rise 3.0 percent in 2011 and to increase 4.0 percent in 2012. The forecasted 2012 Michigan personal income increase would represent the state's fastest nominal income growth since 2000.

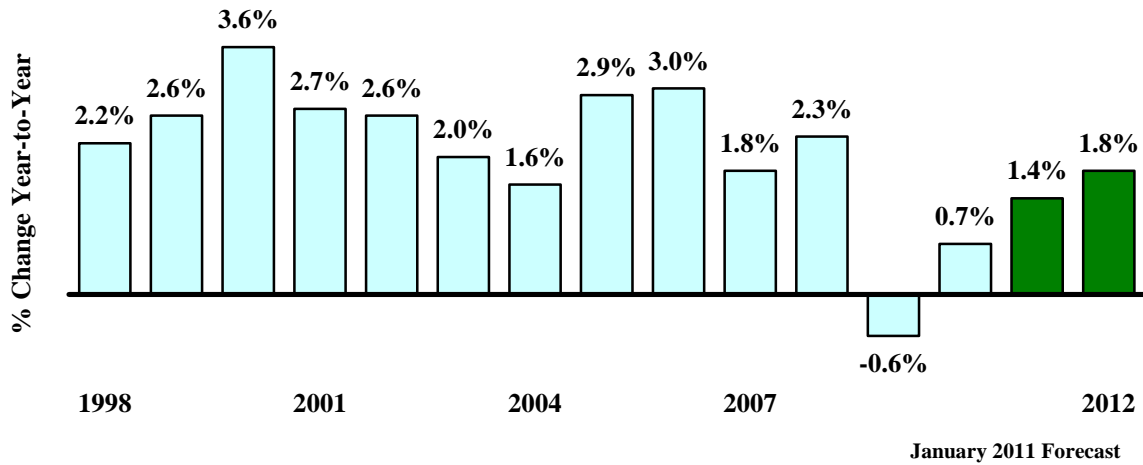
The overall CY price level, as measured by the Detroit CPI, is forecast to increase 1.4 percent in 2011 and 1.8 percent in 2012. As a result, real (inflation adjusted) Michigan personal income is expected to rise 1.6 percent in 2011 and increase 2.2 percent in 2012.

## Michigan Personal Income Rises in Both 2010 and 2011



Source: Bureau of Economic Analysis, U.S. Department of Commerce, and Administration Forecast, January 2011.

## Overall Price Level Rises Moderately Detroit CPI



Source: U.S. Bureau of Labor Statistics and Administration Forecast, January 2011

**Table 1**  
**Administration Economic Forecast**

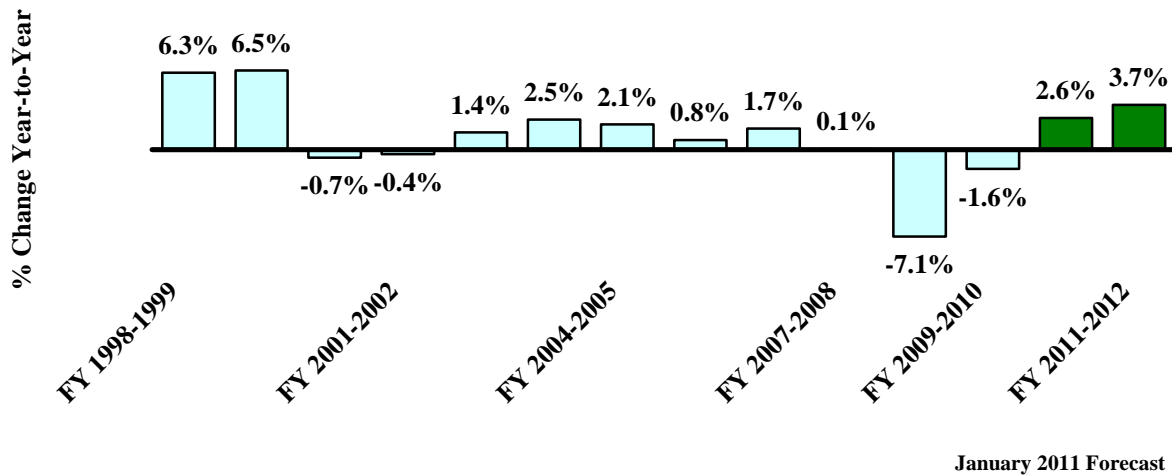
January 2011

	Calendar 2009 Actual	Calendar 2010 Estimated	Percent Change from Prior Year	Calendar 2011 Forecast	Percent Change from Prior Year	Calendar 2012 Forecast	Percent Change from Prior Year
<b>United States</b>							
Real Gross Domestic Product (Billions of Chained 2005 Dollars)	\$12,881	\$13,241	2.8%	\$13,652	3.1%	\$14,048	2.9%
Implicit Price Deflator GDP (2005 = 100)	109.6	110.6	0.9%	111.7	1.0%	113.0	1.2%
Consumer Price Index (1982-84 = 100)	214.5	217.9	1.6%	221.4	1.6%	225.6	1.9%
Consumer Price Index - Fiscal Year (1982-84 = 100)	213.8	217.4	1.7%	220.4	1.4%	224.4	1.8%
Personal Consumption Deflator (2005 = 100)	109.3	111.1	1.7%	112.5	1.2%	114.2	1.5%
3-month Treasury Bills Interest Rate (percent)	0.2	0.1		0.2		0.2	
Aaa Corporate Bonds Interest Rate (percent)	5.3	4.9		5.0		4.8	
Unemployment Rate - Civilian (percent)	9.3	9.7		9.5		8.9	
Housing Starts (millions of starts)	0.554	0.588	6.1%	0.706	20.1%	0.895	26.8%
Light Vehicle Sales (millions of units)	10.4	11.5	10.6%	12.9	12.2%	14.9	15.5%
Passenger Car Sales (millions of units)	5.5	5.7	3.6%	6.3	10.5%	7.4	17.5%
Light Truck Sales (millions of units)	4.9	5.8	18.4%	6.6	13.8%	7.4	12.1%
Import Share of Light Vehicles (percent)	26.2	23.9		24.5		25.0	
<b>Michigan</b>							
Wage and Salary Employment (thousands)	3,876	3,842	-0.9%	3,854	0.3%	3,904	1.3%
Unemployment Rate (percent)	13.6	13.4		12.3		11.4	
Personal Income (millions of dollars)	\$342,303	\$348,807	1.9%	\$359,271	3.0%	\$373,642	4.0%
Real Personal Income (millions of 1982-84 dollars)	\$168,211	\$170,150	1.2%	\$172,810	1.6%	\$176,663	2.2%
Wages and Salaries (millions of dollars)	\$170,771	\$171,284	0.3%	\$176,936	3.3%	\$183,306	3.6%
Detroit Consumer Price Index (1982-84 = 100)	203.5	205.0	0.7%	207.9	1.4%	211.5	1.8%
Detroit CPI Fiscal Year (1982-84 = 100)	202.8	205.0	1.1%	207.6	1.2%	211.1	1.7%

## Fiscal Year Economics

Michigan's largest taxes are the individual income tax (\$5.5 billion in FY 2010), which includes refunds, and sales and use taxes (\$7.4 billion). Income tax withholding is the largest income tax component. Withholding (\$6.8 billion) is most affected by growth in wages and salaries. Michigan wages and salaries are expected to rise in FY 2011 (2.6 percent) and then increase 3.7 percent in FY 2012.

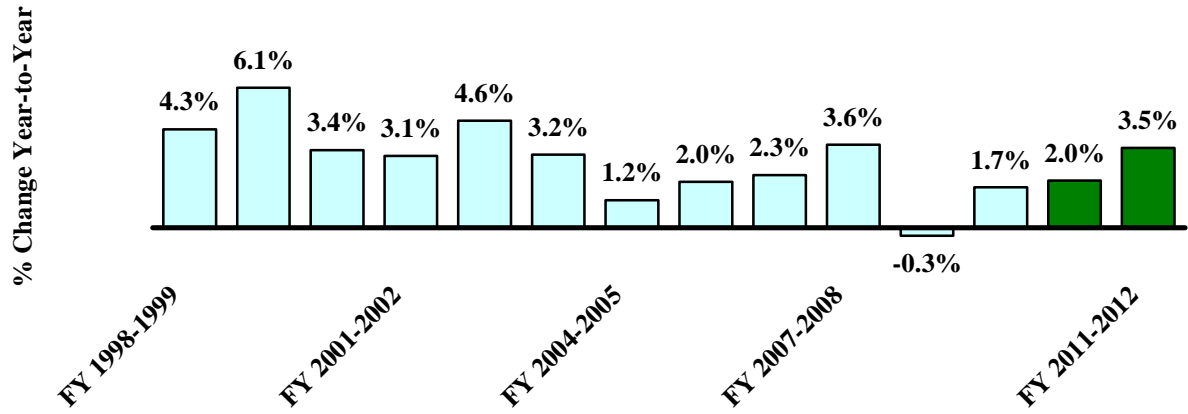
### **Michigan Wages and Salaries Rise in FY 11 and FY 12 Basis for Income Tax Withholding Collections**



Source: Bureau of Economic Analysis, U.S. Department of Commerce, and Administration Forecast, January 2011.

Sales and use taxes depend primarily on Michigan disposable (after tax) income and inflation. Disposable income is expected to be rise 2.0 percent in FY 2011 and 3.5 percent in FY 2012. In FY 2011, overall prices are expected to rise 1.2 percent before increasing 1.7 percent in FY 2012.

## Michigan Disposable Income Increases Basis for Sales and Use Tax Collections



January 2011 Forecast

Source: Research Seminar in Quantitative Economics, University of Michigan, and Administration Forecast, January 2011.

## **ADMINISTRATION REVENUE ESTIMATES**

**January 14, 2011**

### **Revenue Estimate Overview**

The revenue estimates presented in this section consist of baseline revenues, revenue adjustments, and net revenues. Baseline revenues provide an estimate of the effects of the economy on tax revenues. For these estimates, FY 2010 is the base year. Any non-economic changes to the taxes occurring in FY 2011 and FY 2012 are not included in the baseline estimates. Non-economic changes are referred to in the tables as "tax adjustments." The net revenue estimates are the baseline revenues adjusted for tax adjustments.

This treatment of revenue is best illustrated with an example. Suppose tax revenues are \$10.0 billion in a given year, and that based on the economic forecast, revenues are expected to grow by 5.0 percent per year. Baseline revenue would be \$10.0 billion in Year 1, \$10.5 billion in Year 2, and \$11.0 billion in Year 3. Assume a tax rate cut is in place that would reduce revenues by \$100 million in Year 1, \$200 million in Year 2, and \$300 million in Year 3. If Year 1 is the base year, the revenue adjustments for Year 1 would be \$0 since the tax cut for this year is included in the base. The revenue adjustments for Year 2 would be \$100 million, and the revenue adjustments for Year 3 would be \$200 million, since the revenue adjustments are compared to the base year.

In the example above, the baseline revenues would be \$10.0 billion, \$10.5 billion, and \$11.0 billion, for Years 1 through 3, respectively. The revenue adjustments would be \$0 in Year 1, \$100 million in Year 2, and \$200 million in Year 3. The \$200 million in Year 3 represents the tax cuts since Year 1. Net revenue would be \$10.0 billion in Year 1, \$10.4 billion in Year 2, and \$10.8 billion in Year 3.

The following revenue figures are presented on a Consensus basis. Generally speaking, the Consensus estimates do not include certain one-time budget measures, such as withdrawals from the Budget Stabilization Fund, the sale of buildings, etc. The figures also assume the full statutory amount for revenue sharing payments to local governments from the sales tax. In addition, the estimates only include enacted legislation and do not include the effects of any proposed changes. The School Aid Fund estimates consist of taxes plus the transfer from the State Lottery Fund.

## **FY 2010 Revenue Review**

The preliminary total for FY 2010 GF-GP revenue totaled \$6,785.2 million on a Consensus basis, a 7.9 percent decrease compared to FY 2009. FY 2010 SAF revenues totaled \$10,816.9 million, a 1.0 percent decrease compared to FY 2009 (See Table 2).

**Table 2**  
**FY 2009-10 Administration Revenue Estimates**  
(millions)

	<b>Preliminary FY 2010</b>	
	<b>Amount</b>	<b>Growth</b>
General Fund - General Purpose		
Baseline Revenue	\$6,512.2	-8.2%
Tax Cut Adjustments	\$273.0	
Net Resources	\$6,785.2	-7.9%
School Aid Fund		
Baseline Revenue	\$10,792.2	-1.0%
Tax Cut Adjustments	\$24.7	
Net Resources	\$10,816.9	-1.0%
<hr/>		
Combined		
Baseline Revenue	\$17,304.3	-3.8%
Tax Cut Adjustments	\$297.7	
Net Resources	\$17,602.0	-3.7%

Prepared By: Office of Revenue and Tax Analysis, Michigan Department of Treasury



## **FY 2011 Revenue Outlook**

FY 2011 GF-GP revenue is forecast to be \$7,226.0 million, a 6.8 percent baseline increase, and a 6.5 percent increase after tax adjustments from FY 2010. The FY 2011 estimate is \$129.3 million above the May 2010 Consensus estimate.

SAF revenue is forecast to be \$10,917.8 million, representing a 0.8 percent baseline revenue increase and a 0.9 percent increase after tax adjustments from FY 2010. The FY 2011 SAF estimate is \$84.9 million above the May 2010 Consensus estimate (See Table 3).

**Table 3**  
**FY 2010-11 Administration Revenue Estimates**  
(millions)

	Consensus May 21, 2010		Administration January 14, 2011		Change
	Amount	Growth	Amount	Growth	
General Fund - General Purpose					
Baseline Revenue	\$7,162.9	6.3%	\$6,956.3	6.8%	
Tax Cut Adjustments	(\$66.3)		\$269.7		
Net Resources	<u>\$7,096.7</u>	<u>6.6%</u>	<u>\$7,226.0</u>	<u>6.5%</u>	<u>\$129.3</u>
School Aid Fund					
Baseline Revenue	\$10,795.4	0.6%	\$10,877.1	0.8%	
Tax Cut Adjustments	\$37.6		\$40.7		
Net Resources	<u>\$10,832.9</u>	<u>0.8%</u>	<u>\$10,917.8</u>	<u>0.9%</u>	<u>\$84.9</u>
Combined					
Baseline Revenue	\$17,958.3	2.8%	\$17,833.4	3.1%	
Tax Cut Adjustments	(\$28.7)		\$310.4		
Net Resources	<u>\$17,929.6</u>	<u>3.0%</u>	<u>\$18,143.8</u>	<u>3.1%</u>	<u>\$214.2</u>

Prepared By: Office of Revenue and Tax Analysis, Michigan Department of Treasury

## **FY 2012 Revenue Outlook**

FY 2012 GF-GP revenue is estimated to be \$7,364.2 million, a 4.8 percent baseline increase and a 1.9 percent increase after tax adjustments from FY 2011. The FY 2011 GF-GP revenue estimate is up \$138.2 million above the current FY 2011 GF-GP estimate. SAF revenue is forecast to be \$11,154.3 million; representing a 2.2 percent baseline increase and a 2.2 percent net increase from FY 2011. The FY 2012 SAF estimate is \$236.4 million above the current FY 2011 SAF estimate (see Table 4).

**Table 4**  
**FY 2011-12 Administration Revenue Estimates**  
 (millions)

	<b>Administration January 14, 2011</b>	
	<b>Amount</b>	<b>Growth</b>
General Fund - General Purpose		
Baseline Revenue	\$7,288.0	4.8%
Tax Cut Adjustments	\$76.2	
Net Resources	\$7,364.2	1.9%
School Aid Fund		
Baseline Revenue	\$11,112.1	2.2%
Tax Cut Adjustments	\$42.1	
Net Resources	\$11,154.3	2.2%
<hr/>		
Combined		
Baseline Revenue	\$18,400.2	3.2%
Tax Cut Adjustments	\$118.3	
Net Resources	\$18,518.5	2.1%

Prepared By: Office of Revenue and Tax Analysis, Michigan Department of Treasury

## Constitutional Revenue Limit

Article IX, Section 26, of the Michigan Constitution establishes a limit on the amount of revenue State government can collect in any given fiscal year. The revenue limit for a given fiscal year is equal to 9.49 percent of the State's personal income for the calendar year prior to the year in which the fiscal year begins. For example, FY 2009 revenue is compared to CY 2007 personal income. If revenues exceed the limit by less than 1 percent, the State may deposit the excess into the Budget Stabilization Fund (BSF). If the revenues exceed the limit by more than 1 percent, the excess revenue is refunded to taxpayers.

FY 2009 revenues were \$8.0 billion below the revenue limit. State revenues will also be well below the limit for FY 2010 through FY 2012. FY 2010 revenues are expected to be \$8.9 billion below the limit, FY 2011 revenues \$7.2 billion below the limit, and FY 2012 revenues are expected to be \$7.5 billion below the limit (See Table 5).

**Table 5**  
**Administration Revenue Limit Calculation**  
(millions)

	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>
	<u>Final</u>	<u>Admin</u>	<u>Admin</u>	<u>Admin</u>
	<u>June 2010</u>	<u>Jan 2011</u>	<u>Jan 2011</u>	<u>Jan 2011</u>
<b>Revenue Subject to Limit</b>	\$24,838.6	\$24,263.7	\$24,973.8	\$25,592.3
<b><u>Revenue Limit</u></b>	<b><u>CY 2007</u></b>	<b><u>CY 2008</u></b>	<b><u>CY 2009</u></b>	<b><u>CY 2010</u></b>
Personal Income	\$345,885	\$349,612	\$339,219	\$348,807
Ratio	9.49%	9.49%	9.49%	9.49%
Revenue Limit	\$32,824.5	\$33,178.2	\$32,191.9	\$33,101.8
<b><u>Amount Under (Over) Limit</u></b>	<b>\$7,985.9</b>	<b>\$8,914.5</b>	<b>\$7,218.1</b>	<b>\$7,509.5</b>

## Budget Stabilization Fund Calculation

The Management and Budget Act contains provisions for calculating a recommended deposit or withdrawal from the BSF. The calculation looks at personal income net of transfer payments. The net personal income figure is adjusted for inflation. The change in this figure for the calendar year determines whether a pay-in or pay-out is dictated. If the formula calls for a deposit into the BSF, the deposit is made in the next fiscal year. If the formula calls for a withdrawal, the withdrawal is made during the current fiscal year.

If real personal income grows by more than 2 percent in a given calendar year, the fraction of income growth over 2 percent is multiplied by the current fiscal year's GF-GP revenue to determine the pay-in for the next fiscal year. If real personal income declines, the percentage

deficiency under zero is multiplied by the current fiscal year's GF-GP revenue to determine the withdrawal available for the current fiscal year. If the change in real personal income is between 0 and 2 percent, no pay-in or withdrawal is indicated.

Real calendar year personal income for Michigan is expected to increase 2.5 percent in 2011. Thus, the formula has a pay-in for FY 2011 of \$36.1 million (See Table 6). In 2012, real calendar year personal income for Michigan is forecast to increase 2.3 percent, so the formula calls for a pay-in of \$22.1 million for FY 2012 (See Table 7). Withdrawals will be limited by the available balance of the BSF, which is currently just over \$2 million.

**Table 6**  
**Budget and Economic Stabilization Fund Calculation**  
**Based on CY 2011 Personal Income Growth**  
**Administration Calculation**

	CY 2010	CY 2011
Michigan Personal Income	\$ 348,807 <sup>(1)</sup>	\$ 359,271 <sup>(1)</sup>
less Transfer Payments	<u>\$ 81,570 <sup>(1)</sup></u>	<u>\$ 83,008 <sup>(1)</sup></u>
Income Net of Transfers	\$ 267,237	\$ 276,263
Detroit CPI	2.045 <sup>(2)</sup>	2.064 <sup>(3)</sup>
for 12 months ending	(June 2010)	(June 2011)
Real Adjusted Michigan Personal Income	\$ 130,662	\$ 133,870
Change in Real Adjusted Personal Income		2.5%
Excess over 2%		0.5%
GF-GP Revenue Fiscal Year 2010-2011		\$ 7,226.0
BSF Pay-In Calculated for FY 2011		<u>FY 2010-2011</u> \$ 36.1

**Table 7**  
**Budget and Economic Stabilization Fund Calculation**  
**Based on CY 2012 Personal Income Growth**  
**Administration Calculation**

	CY 2011	CY 2012
Michigan Personal Income	\$ 359,271 <sup>(1)</sup>	\$ 373,642 <sup>(1)</sup>
less Transfer Payments	\$ 83,008 <sup>(1)</sup>	\$ 86,513 <sup>(1)</sup>
Income Net of Transfers	\$ 276,263	\$ 287,129
Detroit CPI	2.064 <sup>(2)</sup>	2.097 <sup>(2)</sup>
for 12 months ending	(June 2010)	(June 2011)
Real Adjusted Michigan Personal Income	\$ 133,870	\$ 136,904
Change in Real Adjusted Personal Income		2.3%
Excess over 2%		0.3%
GF-GP Revenue Fiscal Year 2011-2012		\$ 7,364.2
BSF Pay-In Calculated for FY 2012		\$ <u>FY 2010-2011</u> 22.1

**School Aid Fund Revenue Adjustment Factor**

The School Aid Fund (SAF) revenue adjustment factor for the next fiscal year is calculated by dividing the sum of current year and subsequent year SAF revenue by the sum of current year and prior year SAF revenue. For example, the FY 2012 SAF revenue adjustment factor is calculated by dividing the sum of FY 2011 and FY 2012 SAF revenue by the sum of FY 2010 and FY 2011 SAF revenue. The SAF revenue totals are adjusted for any change in the rate and base of the SAF taxes. The year for which the adjustment factor is being calculated is used as the base year for any tax adjustments. For FY 2012, the SAF revenue adjustment factor is calculated to be 1.0147 (See Table 8).

**Table 8**  
**Administration School Aid Revenue Adjustment Factor**  
**For Fiscal Year FY 2012**

	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>
Baseline SAF Revenue	\$10,792.1	\$10,877.1	\$11,112.1
Balance Sheet Adjustments	\$24.7	\$40.7	\$42.1
Net SAF Estimates	<u>\$10,816.8</u>	<u>\$10,917.8</u>	<u>\$11,154.3</u>
Subtotal Adjustments to FY 2012 Base	<u>\$17.5</u>	<u>\$1.4</u>	<u>\$0.0</u>
Baseline Revenue on a FY 2012 Base	\$10,834.2	\$10,919.3	\$11,154.3

School Aid Fund Revenue Adjustment Calculation for FY 2012

Sum of FY 2010 & FY 2011	\$10,834.2	+	\$10,919.3	=	\$21,753.5
Sum of FY 2011 & FY 2012	\$10,919.3	+	\$11,154.3	=	\$22,073.5

<b>FY 2012 Revenue Adjustment Factor</b>	<b>1.0147</b>
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Note: Factor is calculated off a FY 2012 base year.

**Revenue Detail**

The estimated tax and revenue totals include the effects of all enacted tax changes except sales tax savings resulting from reductions in revenue sharing payments to local units. The revenue totals by tax are presented separately for GF-GP and for the SAF (See Tables 9 and 10). Tax totals for the income, sales, use, tobacco and casino taxes for all funds are also included (See Table 11).

**Table 9**  
**Administration General Fund General Purpose Revenue Detail**  
(millions)

	FY 2010		FY 2011		FY 2012	
	Amount	Growth	Amount	Growth	Amount	Growth
<b>GF-GP Tax Amounts</b>						
Income Tax	\$3,694.5	-6.7%	\$3,844.9	4.1%	\$3,876.3	0.8%
Sales	\$73.8	1645.2%	\$90.4	22.4%	\$96.0	6.2%
Use	\$818.2	10.0%	\$826.9	1.1%	\$849.9	2.8%
Cigarette	\$200.8	-3.6%	\$195.6	-2.6%	\$189.8	-3.0%
Beer & Wine	\$51.0	0.4%	\$53.0	3.9%	\$54.0	1.9%
Liquor Specific	\$38.0	0.0%	\$38.5	1.3%	\$39.0	1.3%
Single Business Tax	\$2.3	-90.5%	\$0.0	NA	\$0.0	NA
Insurance Co. Premium	\$257.4	-1.4%	\$271.6	5.5%	\$280.0	3.1%
Michigan Business Tax	\$1,133.7	-25.9%	\$1,384.5	22.1%	\$1,458.5	5.3%
Telephone & Telegraph	\$60.8	-3.5%	\$60.0	-1.3%	\$60.0	0.0%
Casino Wagering	\$0.0	-100.0%	\$0.0	NA	\$0.0	NA
Oil & Gas Severance	\$58.5	23.9%	\$64.0	9.4%	\$68.0	6.3%
GF-GP Other Taxes	\$24.1	-53.7%	\$20.0	-17.0%	\$23.0	15.0%
<b>Total GF-GP Taxes</b>	<b>\$6,413.2</b>	<b>-8.1%</b>	<b>\$6,849.5</b>	<b>6.8%</b>	<b>\$6,994.6</b>	<b>2.1%</b>
<b>GF-GP Non-Tax Revenue</b>						
Federal Aid	\$20.8	-33.3%	\$20.8	0.0%	\$20.8	0.0%
From Local Agencies	\$0.4	-60.0%	\$0.4	0.0%	\$0.4	0.0%
From Services	\$9.5	1.1%	\$9.5	0.0%	\$9.5	0.0%
From Licenses & Permits	\$16.1	-44.1%	\$16.0	-0.6%	\$16.0	0.0%
Miscellaneous	\$22.2	-40.6%	\$22.1	-0.5%	\$22.1	0.0%
Driver Responsibility Fees	\$107.0	5.0%	\$107.0	0.0%	\$107.0	0.0%
Interfund Interest	(\$11.2)	-66.3%	(\$10.0)	-10.7%	(\$15.0)	50.0%
Liquor Purchase	\$157.1	-2.4%	\$159.0	1.2%	\$161.0	1.3%
Charitable Games	\$11.3	-4.2%	\$11.8	4.4%	\$11.8	0.0%
Transfer From Escheats	\$38.9	4.6%	\$40.0	2.8%	\$36.0	-10.0%
Other Non Tax	\$0.0	0.0%	\$0.0	0.0%	\$0.0	0.0%
<b>Total Non Tax</b>	<b>\$372.1</b>	<b>-3.7%</b>	<b>\$376.6</b>	<b>1.2%</b>	<b>\$369.6</b>	<b>-1.9%</b>
<b>Total GF-GP Revenue</b>	<b>\$6,785.2</b>	<b>-7.9%</b>	<b>\$7,226.0</b>	<b>6.5%</b>	<b>\$7,364.2</b>	<b>1.9%</b>

**Table 10**  
**Administration School Aid Fund Revenue Detail**

	FY 2010		FY 2011		FY 2012	
	Amount	Growth	Amount	Growth	Amount	Growth
<b>School Aid Fund</b>						
Income Tax	\$1,836.1	-3.1%	\$1,906.3	3.8%	\$1,988.1	4.3%
Sales Tax	\$4,488.9	1.5%	\$4,592.7	2.3%	\$4,753.9	3.5%
Use Tax	\$397.7	7.9%	\$413.5	4.0%	\$425.0	2.8%
Liquor Excise Tax	\$37.6	0.0%	\$38.5	2.4%	\$39.0	1.3%
Cigarette & Tobacco	\$392.9	-4.3%	\$377.1	-4.0%	\$363.8	-3.5%
State Education Tax	\$1,930.5	-5.4%	\$1,828.0	-5.3%	\$1,780.0	-2.6%
Real Estate Transfer	\$121.6	-3.0%	\$135.0	11.0%	\$150.0	11.1%
Michigan Business Tax	\$726.8	-0.3%	\$739.2	1.7%	\$749.5	1.4%
Industrial Facilities Tax	\$55.2	32.1%	\$44.8	-18.8%	\$44.8	0.0%
Casino (45% of 18%)	\$111.1	2.8%	\$112.0	0.8%	\$113.6	1.4%
Commercial Forest	\$3.0	0.0%	\$3.1	3.3%	\$3.1	0.0%
Other Spec Taxes	\$14.1	6.0%	\$13.2	-6.4%	\$13.2	0.0%
<b>Subtotal Taxes</b>	\$10,115.5	-0.8%	\$10,203.4	0.9%	\$10,424.0	2.2%
Lottery Transfer	\$701.3	-3.2%	\$714.4	1.9%	\$730.3	2.2%
<b>Total SAF Revenue</b>	\$10,816.9	-1.0%	\$10,917.8	0.9%	\$11,154.3	2.2%

**Table 11**  
**Adminstration Major Tax Totals**

	FY 2010		FY 2011		FY 2012	
	Amount	Growth	Amount	Growth	Amount	Growth
<b>Major Tax Totals (Includes all Funds)</b>						
Income Tax	\$5,531.6	-5.5%	\$5,752.2	4.0%	\$5,865.4	2.0%
Sales Tax	\$6,176.8	1.4%	\$6,318.2	2.3%	\$6,538.4	3.5%
Use Tax	\$1,215.9	9.3%	\$1,240.4	2.0%	\$1,274.9	2.8%
Michigan Business Tax	\$1,860.5	-17.7%	\$2,123.7	14.1%	\$2,208.1	4.0%
Cigarette and Tobacco	\$1,006.5	-3.7%	\$972.0	-3.4%	\$942.1	-3.1%
Casino Tax	\$111.1	-8.5%	\$112.0	0.8%	\$113.6	1.4%