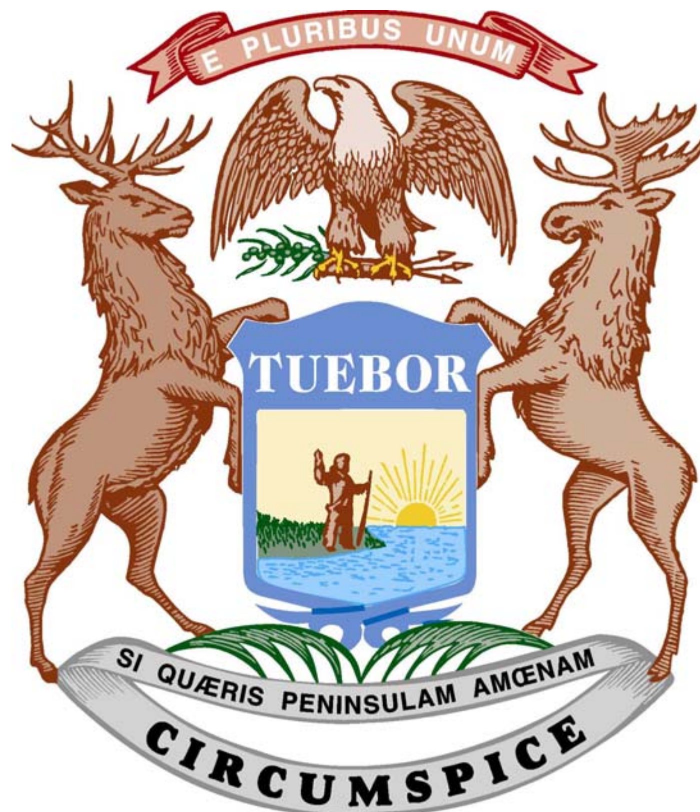
# Administration Estimates Michigan Economic and Revenue Outlook




## FY 2010-11, FY 2011-12 and FY 2012-13

**Michigan Department of Treasury**
**Andy Dillon, State Treasurer**

**Office of Revenue and Tax Analysis**
**Jay Wortley, Director**
**Andrew Lockwood, Senior Economist**
**Thomas Patchak-Schuster, Senior Economist**
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# Table of Contents


**Administration Estimates--Executive Summary** ..... 1

**Revenue Review and Outlook** ..... 1

**2011, 2012 and 2013 U.S. Economic Outlook** ..... 1

**2011, 2012 and 2013 Michigan Economic Outlook** ..... 2

**Forecast Risks** ..... 2

**Economic Review and Outlook** ..... 3

**Current U.S. Economic Situation** ..... 3
Summary ..... 3
Housing Market ..... 4
House Prices ..... 5
Repercussions ..... 6
Monetary Policy ..... 9
Interest Rates ..... 9
Additional Recent Federal Reserve Bank Actions ..... 9
Fiscal Policy ..... 10
Inflation ..... 11
Major Economic Indicators ..... 14
Employment ..... 16
Vehicle Sales and Production ..... 20

**Current Michigan Economic Conditions** ..... 22
Vehicle Production ..... 22
Employment ..... 22
Housing Market ..... 23
Personal Income ..... 24

**2011, 2012 and 2013 U.S. Economic Outlook** ..... 25
Summary ..... 25
Assumptions ..... 27
Forecast Risks ..... 27

**2011, 2012 and 2013 Michigan Economic Outlook** ..... 29

**Fiscal Year Economics** ..... 33

**Administration Revenue Estimates** .......... 35

**Revenue Estimate Overview** .......... 35

**FY 2010 Revenue Review** .......... 36

**FY 2011 Revenue Outlook** .......... 37

**FY 2012 Revenue Outlook** .......... 38

**FY 2013 Revenue Outlook** .......... 39

**Constitutional Revenue Limit** .......... 40

**Budget Stabilization Fund Calculation** .......... 40

**School Aid Fund Revenue Adjustment Factor** .......... 43

**Revenue Detail** .......... 44

## List of Tables

**Table 1** **Administration Economic Forecast** .......... 32

**Table 2** **FY 2009–10 Administration Revenue Estimates** .......... 36

**Table 3** **FY 2010–11 Administration Revenue Estimates** .......... 37

**Table 4** **FY 2011–12 Administration Revenue Estimates** .......... 38

**Table 5** **FY 2012–13 Administration Revenue Estimates** .......... 39

**Table 6** **Administration Constitutional Revenue Limit Calculation** .......... 40

**Table 7** **Budget and Economic Stabilization Fund Calculation, Based on CY 2011 Personal Income Growth, Administration Calculation** .......... 41

**Table 8** **Budget and Economic Stabilization Fund Calculation, Based on CY 2012 Personal Income Growth, Administration Calculation** .......... 42

**Table 9** **Administration School Aid Revenue Adjustment Factor for FY 2012** .......... 43

**Table 10** **Administration School Aid Revenue Adjustment Factor for FY 2013** .......... 43

**Table 11 Administration General Fund General Purpose Revenue Detail** ........................ 45

**Table 12 Administration School Aid Fund Revenue Detail** ................................................ 46

**Table 13 Administration Major Tax Totals** ........................................................................ 46

**ADMINISTRATION ESTIMATES**
**EXECUTIVE SUMMARY**
**May 16, 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 9.3 percent to $7,417.6 million, up $189.7 million from the January 2011 Consensus estimate. FY 2011 SAF revenue is forecast to increase 2.7 percent to $11,108.0 million, which is $128.9 million above the January 2011 Consensus estimate.
- FY 2012 GF-GP revenue is forecast to increase 1.6 percent to $7,532.7 million, up $238.6 million from the January 2011 Consensus estimate. FY 2012 SAF revenue is forecast to increase 2.0 percent to $11,327.3 million, up $133.7 million from the January 2011 Consensus estimate.
- FY 2013 GF-GP revenue is forecast to decrease 1.5 percent to $7,419.7 million. FY 2013 SAF revenue is forecast to increase 2.3 percent to $11,590.8 million.

## 2011, 2012 and 2013 U.S. Economic Outlook

- After increasing 2.9 percent in 2010 and 2.8 percent in 2011, real gross domestic product is forecast to rise 3.2 percent in 2012, as well as in 2013.
- Wage and salary employment growth is projected to accelerate from 1.1 percent in 2011 to 2.1 percent in 2012. Employment is then expected to rise 2.2 percent in 2013. With an annualized employment growth rate at or above 2.0 percent each quarter between 2011Q4 and 2013Q4, the national labor market is expected to regain 5.8 million jobs between the end of 2011 and the end of 2013.
- The U.S. unemployment rate is forecast to decline each quarter over the forecast horizon. Consequently, the U.S. unemployment rate is expected to drop from 9.6 percent to 8.9 percent in 2011. The rate is projected to average 8.5 percent in 2012 and 8.0 percent in 2013.
- In 2009, housing starts fell to a 50-year low (554,000 units) and then rose modestly in 2010 to 585,000 units. Starts are forecast to post moderate growth in 2011 and then rise sharply (35.3 percent) in 2012. With a 13.0 percent increase in 2013, starts are expected to total 970,000, which would still be the sixth straight year with starts below 1.0 million.
- 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 in 2010 to 13.2 million units. Sales in 2012 are expected to increase to 14.9 million units. At 15.3 million units, light vehicle sales in 2013 rise above 15.0 million units for the first year since 2007.

- In 2010, consumer prices rose 1.6 percent. Prices are expected to increase 2.8 percent in 2011. Inflation is expected to slow to 2.1 percent in 2012 before edging up slightly to 2.2 percent in 2013.

## 2011, 2012 and 2013 Michigan Economic Outlook

- In 2009, Michigan wage and salary employment plummeted 7.0 percent – the largest drop in over 50 years. In 2010, Michigan employment declined at a substantially slower rate (-0.3 percent). Across the forecast horizon, Michigan employment is expected to rise each year with 1.9 percent growth in 2011, 1.4 percent growth in 2012 and 1.2 percent growth in 2013.
- The Michigan unemployment rate is forecast to drop from 12.5 percent to 10.0 percent in 2011, to 9.5 percent in 2012 and to 9.2 percent in 2013.
- After dropping 8.3 percent in 2009, wages and salaries increased 2.1 percent in 2010. Wages and salaries growth is expected to accelerate sharply in 2011 to 4.8 percent. In 2012, wage growth slows slightly to 4.7 percent before slowing to 3.7 percent in 2013.
- Michigan personal income fell 3.1 percent in 2009 – marking the first annual Michigan income drop since 1958. In 2010, income increased 2.8 percent. Personal income growth is forecast to accelerate to 4.9 percent in 2011. Income growth is forecast to slow to 4.0 percent in 2012 before accelerating to 4.3 percent in 2013.
- Disposable income is forecast to rise 4.1 percent in FY 2011, 3.4 percent in FY 2012 and 3.7 percent in FY 2013.

## Forecast Risks

- 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. On the other hand, oil prices could decline from their current high levels and this would help boost economic activity more than forecast.
- The devastation in Japan represents a key threat to strong and sustained economic growth. Unrest in the Middle East and its outcomes could seriously impact economic growth. Geopolitical factors, such as a domestic terrorist attack, would depress economic activity.
- A stronger (weaker) housing market would boost (depress) the economy more than forecast.
- Many federal fiscal and monetary policies have wound down and spending reductions by state and local governments could collectively have more of a negative impact on economic growth than forecast.
- Continued and strong job growth remains central to sustaining recent gains across the economy and to combating dampening factors such as weak consumer confidence.
- U.S. financial and credit markets face upside as well as downside risks.
- The Great Recession may have negatively affected confidence more than assumed.

# ECONOMIC REVIEW AND OUTLOOK
**May 16, 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 equaled 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 during the recession.

Real GDP has grown each quarter since the recession's end (2009Q3 – 2011Q1). 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). Growth then accelerated the following two quarters with 2.6 percent growth in 2010Q3 and 3.1 percent growth in 2010Q4. Numerous factors including bad weather, higher gasoline prices, government budget cuts and a wider trade deficit restrained growth in the first quarter of 2011 to 1.7 percent.

During the recovery to date, greater equipment investment and inventory accumulation taken together account for 69.5 percent of the overall net real GDP gain. Consumption increases equal 58.7 percent of the overall real GDP gain. At the same time, continued declines in investment in residential and non-residential structures (-13.8 percent) and a worsening trade deficit (-9.2 percent) have detracted from growth. Federal government spending has added to real GDP growth (+6.7 percent) while lower state and local government spending has subtracted from growth (-7.1 percent).

Over the course of the recession, U.S. wage and salary employment shrank by 5.4 percent – the greatest recessionary employment decline since 1945. In addition, employment declined in the first eight months of the current recovery. As a result, between December 2007 and December 2009, the U.S. lost a net 8.7 million jobs (-6.3 percent). In early 2010, wage and salary employment recorded substantial gains between March and May (averaging 309,000 jobs per month) -- boosted significantly by temporary Census worker hiring. However, in part depressed by the end of many temporary Census jobs, the economy lost a net 329,000 jobs between June and September. Employment has risen each month since October. Consequently, U.S. wage and salary employment increased by 940,000 jobs over the course of 2010. The 2010 employment gain stands in sharp contrast to the economy's net loss of 5.1 million jobs in 2009. Over the first four months of 2011, the U.S. has gained an additional 768,000 jobs.

## Housing Market

The housing market remains little improved from the record lows to which the market 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 only slight ground since its post-credit decline and shows little indication of having the strength to return anywhere close to its historic norms. In its April 2011 *Beige Book,* the Federal Reserve commented, "Real estate markets for single family homes for the most part either were little changed from low levels or continued to weaken across all Districts." Even more pessimistically, RealtyTrac noted:

> Weak demand, declining home prices and the lack of credit availability are weighing heavily on the market, which is still facing the dual threat of a looming shadow inventory of distressed properties and the probability that foreclosure activity will begin to increase again as lenders and servicers gradually work their way through the backlog of thousands of foreclosures that have been delayed due to improperly processed paperwork.

In calendar year 2008, housing starts fell below 1.0 million units (905,500 units) for the first time on record. The housing market then worsened considerably in 2009, falling 38.8 percent to only 554,000 units. Starts rose only slightly in 2010 to 585,000 units (5.6 percent). This performance stands in sharp contrast to the 2.1 million unit pace in 2005 or even the 1.8 million units and 1.4 million units 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 2010, annualized starts were up 42.3 percent from the prior April's all-time record low – rising to their highest annual rate since late 2008 (679,000 unit rate). However, since the home buyer credit's expiration, starts have moderated. In 2011Q1, the starts rate averaged 563,000 units. While rising above 600,000 units in January 2011, starts fell to their third lowest rate on record in February (512,000 units). The rate then rebounded modestly in March to 549,000 units.

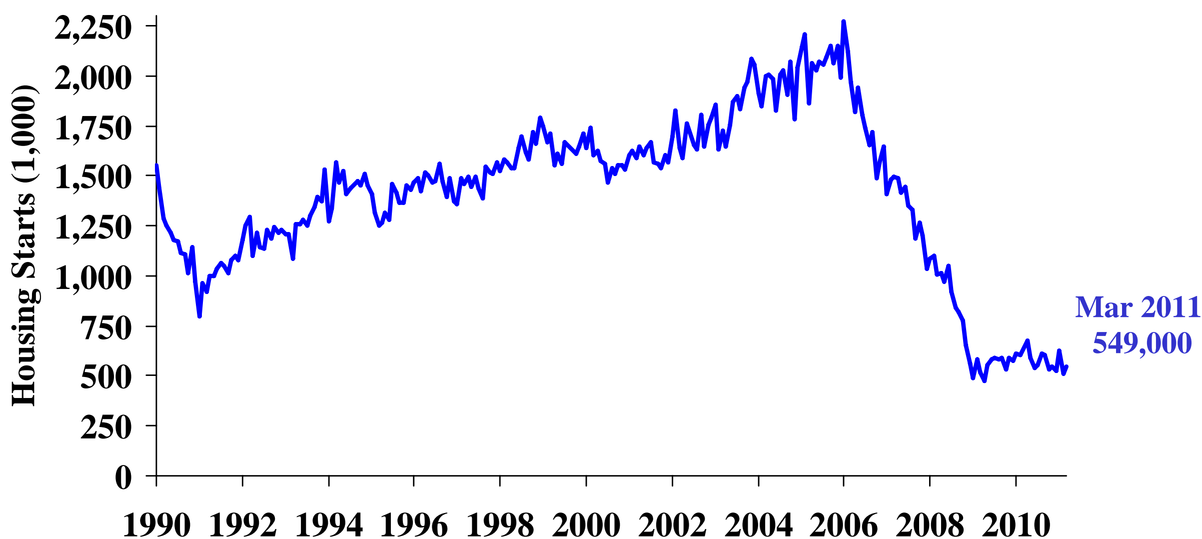
At the end of April 2011, the Mortgage Bankers Association's weekly market composite index was down 17.5 percent from a year ago with the purchase index down sharply (-37.3 percent) and the refinancing index dropping 1.7 percent. The composite index has fallen since the January Consensus Conference. The index's four-week average is down 5.8 percent with the purchase index average down 1.9 percent.

After rising to 22 points the week of the May 2010 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 index has remained essentially flat since November 2010 – reporting a 16 reading through April with the exception of March 2011 when the index read 17. Compared to a year ago, the April 2011 reading is down three points.

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 sales 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. Between July and November, the index trended upward

– increasing in four of the five months. The index has fluctuated since December. In March 2011, the index was slightly lower than November 2010 (-0.4 percent) but down 10.0 percent from last March when the home credit boosted the housing market.

The thirty-year mortgage rate has fluctuated since the January 2011 Consensus Conference. The rate trended upward in the month directly following the Conference – rising from 4.80 percent to 5.12 percent. Between mid-February and mid-March, the rate fell to 4.79 percent. The rate then headed upward over the next month – rising to 4.98 percent. However, the rate has fallen in recent weeks with the rate returning to 4.76 percent in the final week of April.




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

*House Prices*

Between October 2010 (the most recent month available prior to the January 2011 Conference) and February 2011 (the most recent month currently available), the Federal Housing Finance Agency's (FHFA) purchase-only house price index (seasonally adjusted) declined 4.0 percent. Further, the February 2011 index is down 5.8 percent from a year ago compared to a 4.0 percent year-ago drop in October 2010.

The Census Bureau's March 2011 median new home sales price was down 4.9 percent from a year ago. In comparison, the median price *rose* 9.5 percent between January 2010 and January 2011. According to the National Association of Realtors, the median existing-house price was down 5.9 percent between March 2010 and March 2011 compared to a 4.2 percent year-ago decrease in January 2011.

Between June 2009 and February 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 March 2010. Home prices then rose substantially in April and May and increased slightly in June. However, between June 2010 and February 2011, the index has fallen each month. Consequently, home prices are down 3.3 percent from a year ago – marking the largest year-ago decline since November 2009.

*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-February 2011 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 8.22 percent of all loans outstanding in 2010Q4, down 91 basis points from 2010Q3, and a decrease of 125 basis points from one year ago. However, the percentage of loans in the foreclosure process at the end of the fourth quarter increased 24 basis points from the third quarter of 2010 to 4.63 percent – tying the survey's record high. The seriously delinquent rate, the 2010Q4 percentage of loans that are 90 days or more past due or in the process of foreclosure, was 8.57 percent, a decrease of 13 basis points from 2010Q3, and a decrease of 110 basis points from the 2009Q4.

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 $6.8 trillion (-53.1 percent). As a result, the homeowner equity rate (the amount of homeowner equity/homeowner real estate value) dropped by 20.1 percentage points falling from 55.2 percent to 36.4 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, nearly $1.0 trillion in homeowner equity was recouped. However, in the last two quarters, homeowner equity fell sharply – giving up more than two-thirds of the equity that had been gained in the prior five quarters. Between 2009Q2 and 2010Q4, homeowner equity increased a net $282.0 billion and the homeowner equity rate rose 2.1 percentage points to 38.5 percent. This net gain still leaves homeowners with $6.5 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) fell in each of the first three quarters of 2010. However, the reductions were not due to rising home values, but instead to foreclosures of severely underwater properties. Further, the percent of residential properties with mortgages underwater rose from 22.5 percent to 23.1 percent in 2010Q4. In the

fourth quarter, 11.1 million residential properties were underwater up from 10.8 million properties in the prior quarter.

According to the Federal Reserve, the overall real estate loan delinquency rate has fallen over the past two quarters by slightly less than one percentage point to 9.01 percent in 2010Q4. However, the rate remains well above the 2.40 percent in 2007Q3 – the quarter directly prior to the recession. Similarly, the residential property loan delinquency rate dropped by 1.38 percentage points to 9.94 percent over the past two quarters. However, the rate remains well above the 2.78 percent rate directly prior to the recession.

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 (April 2011) saw evidence of reduced net tightening (percent tightened less percent loosened) over the past two quarters.

In each of the past six quarters, more banks reported loosening lending standards for large and mid-sized firms than reported tightening standards. In 2011Q2, a net 16.4 percent of banks reported loosening standards – the highest net percent loosening since 2005Q3.

While households borrowed at a $741.8 billion annual rate in 2007Q4, that rate dropped by 41.4 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 2010Q4, households continued to pay down their debt levels. In 2009, households reduced their debt levels by $234.5 billion and further reduced their debt by $239.0 billion in 2010.

With the substantial declines in household borrowing, the personal savings rate has risen substantially between 2008 through 2010 inclusive. The savings rate averaged 2.1 percent in 2007, 4.1 percent in 2008 and 5.9 percent in 2009. In 2010, the rate fell slightly to 5.8 percent. Since 2008Q4, the savings rate has exceeded 5.0 percent each quarter. 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. In addition, household debt service and financial obligation ratios have fallen substantially in recent years.

Between 2007Q3 and 2009Q1, overall consumer net worth fell each quarter compared to the prior quarter. Over this period, net worth declined by $16.9 trillion (25.8 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 $16.9 trillion that it had lost. While net worth then fell by $1.6 trillion in 2010Q2, net worth rose in the last two quarters of 2010 – increasing by $3.5 trillion. Consequently, 2010Q4 net worth ($56.8 trillion) stood $8.1 trillion higher than in 2009Q1. However, 2010Q4 net worth is still 13.5 percent ($8.8 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 November 2010, the index had regained all that it had lost since the Lehman bankruptcy. In early May 2011, the index was 11.5 percent above its September 12, 2008 level, but still 7.0 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 4.63 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 fell further, falling to its prior low level (0.20 percentage point) in late December 2009. In early March 2010, the spread dropped to a new record low (0.10 percentage points). The European credit crisis increased the spread. By mid-June 2010, the spread rose to nearly 0.50 percentage point. The spread then fell significantly -- falling to nearly 0.15 percentage points by late August 2010. The spread rose to 0.26 percentage point by early May 2011, but remains at historically very 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). However, by mid-February 2011, the spread dropped to 4.44 points – near a historic low. The amount of junk bond issuance further highlights investors' reduced risk aversion. In 2009, junk bond issuance totaled a then record $151.5 billion – more than three times the amount issued in 2008. This record was eclipsed in 2010 when junk bond issuance totaled $252.4 billion.

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. 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. 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. Reiterating statements from earlier meetings, the FOMC stated in its most recent (April 27, 2011) 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 (Fed) 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 mid April 2011, credit totaled $2,643.3 billion – an all-time high for a series dating back to late 1990.

In August 2010, the Fed announced that it would keep its securities holdings essentially 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 since September, the Fed reiterated its intent to continue reinvesting principal payments. In addition, in November 2010, 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 (QE2). At meetings since November, the Fed reaffirmed its intent to purchase the additional $600 billion in Treasuries by the end of 2011Q2. However, the Fed has continued to state that the FOMC remains ready to reassess these policies. At its April 2011 meeting, the FOMC stated:

> The Committee will regularly review the size and composition of its securities holdings in light of incoming information and is prepared to adjust those holdings as needed to best foster maximum employment and price stability.

Fiscal Policy

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 in effect 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 a 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.

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.

With a new Congress in place in 2011, considerable debate has surrounded spending cuts. Congress and the President reached agreement on modest cuts as part of the recent fiscal year 2011 budget agreement. However, the U.S. Treasury estimates that the federal government will hit its debt ceiling in mid-May 2011. Considerable uncertainty surrounds what spending and tax agreements might be needed as part of legislation to raise the debt ceiling.

## Inflation

Between June 2008 and February 2009, oil prices fell from a record $133.93 per barrel to $39.16 per barrel. However, primarily the result of unrest throughout the Middle East, oil prices have risen substantially. In March 2011, oil prices rose above $100 per barrel for the first time since 2008 – rising to $102.94. Oil prices rose further in April – increasing to $110.04.

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 late December 2008 (Energy Information Agency, conventional regular U.S. average). 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. In the first four months of 2011 alone, gasoline prices have risen an additional $0.89 per gallon to $3.91.

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, for each month since October 2010, prices have been below their year-ago levels. In March 2011, natural gas prices were down 20.1 percent from a year earlier and off 66.7 percent from the recent July 2008 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 .

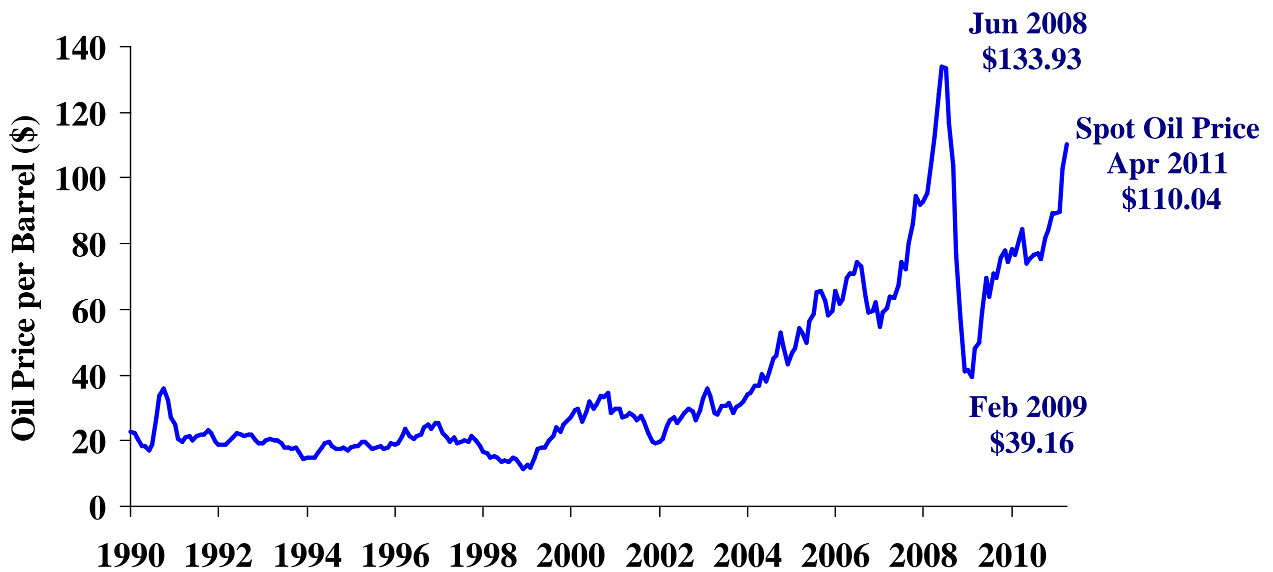
With input inflation accelerating in recent months, the Federal Reserve observed that the ability of those facing the higher input prices was mixed:

> Input prices rose in most Districts, particularly for cotton and other agricultural commodities, petroleum-based products, and industrial metals. In addition, shippers added fuel surcharges in several Districts. Boston, Cleveland and Atlanta cited increasing cost pressures, and some manufacturers in Boston were raising their selling price to pass costs along to customers. The ability to pass through increases, however, varied in both the Chicago and Atlanta Districts, with manufacturers generally being more successful than retail or construction firms.

In its April 2011 statement, the FOMC expects that higher energy prices' impact on broader inflation to be temporary:

> Increases in the prices of energy and other commodities have pushed up inflation in recent months. The Committee expects these effects to be transitory, but it will pay close attention to the evolution of inflation and inflation expectations. The Committee continues to anticipate a gradual return to higher levels of resource utilization in a context of price stability.

**Oil Prices Up Sharply from Early 2009**




Source: Federal Reserve Bank of St. Louis.

The Institute for Supply Management's manufacturing price index has fluctuated over the past three years. Most recently, the index has pointed to higher prices. 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 2010 and March 2011, the share trended upward. By March, the share had risen to 72 percent – where it remained in April.

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 2010 and August 2010, the share declined from 42 percent to 19 percent. Since August, the index has trended upward. By April 2011, the share had risen to 57 percent – the highest percentage reported since July 2008.

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 March 2011, overall producer prices were 5.8 percent higher than a year earlier. However, core producer price inflation (excluding food and energy) has remained modest. Since January 2010, year-ago core producer price increases have ranged between 0.9 percent and 1.9 percent. In March 2011, core producer prices were up 1.9 percent compared to March 2010.

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. In July 2009, the economy experienced the largest cyclical consumer price decline (-2.1 percent) since 1949. 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. Between June 2010 and November 2010, consumer inflation remained in a very tight range (1.1 percent to 1.2 percent). However, over the past four months (December 2010 through March 2011), consumer inflation has picked up – rising to 2.7 percent in March.

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 through the end of 2010. In the first three months of 2011, core inflation has accelerated – although only slightly – with core inflation rising to 1.2 percent in March 2011. In addition, the lack of wage pressure may place significant downward pressure on consumer – and producer – inflation.

The Economic Cycle Research Institute's (ECRI) future inflation gauge (FIG) indicates that price pressures have strengthened recently. Between July 2010 and March 2011, the FIG rose each month. The FIG then fell in April. The index, at 104.7, remains historically low – still below its average since 2000 (110), but is higher than in any month last year.

## Major Economic Indicators

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

In December 2008, **the ISM manufacturing index (PMI)** fell to 33.3 -- its lowest level since June 1980. The index then rose each month between January 2009 and August 2009. At 51.4, 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 March 2010 when the index reported its highest reading since June 2004 (60.4). Over the next four months, the index fell each month – losing a combined 5.3 points. The index then increased in each of the following seven months. As a result, the index rose 6.3 points to 61.4 – the PMI's highest reading since December 1983. The index fell in both March 2011 and April 2011. Nevertheless, the index remained above 60 for the fourth straight month. In addition, April marked the 21st consecutive month in which the PMI indicated an expanding manufacturing sector.

Midway through the 2007-2009 recession, in November 2008, the **ISM non-manufacturing index (NMI)** fell to 37.6. While the NMI has only been published since 2008, calculating the NMI for earlier years, using the index's weighting scheme, indicates that the November 2008 reading would have been the NMI's lowest reading in at least eleven years. Then – albeit haltingly – the NMI increased to 50.1 by September 2009. September 2009 marked the first month that the index signaled sector growth in just over a year. In each month between September 2009 and April 2011, the index has signaled growth in each month except November 2009 when the index fell just below 50.0 (49.9). In February 2011, the NMI rose to 59.7 – the index's highest published or calculated value since August 2005. However, the NMI fell substantially over the past two months – dropping to 52.8 in April 2011.

**Industrial production** worsened considerably between mid-2008 and mid-2009. While the three-month average of industrial production was down 1.7 percent from a year ago in June 2008, the average fell an astounding 14.6 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 February 2010, the rate of decline became progressively smaller so that by February 2010, the average was down only 0.5 percent compared to a year earlier. Compared to a year ago, the average rose each month between March 2010 and March 2011. However, after accelerating to 7.5 percent in July 2010, the increases have slowed. In March 2011, the average was up 5.7 percent from March 2010. Nevertheless, March 2011's three-month average of industrial production was still 7.4 points less than the pre-recession peak (November 2007).

As industrial production fell in 2008 and 2009, so too did **capacity utilization**. Between February 2008 and July 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 (67.7 percent) for the series which dates back to 1967. Between August 2009 and March 2011, the average rose each month with increases totaling 9.4 points. Compared to a year ago, the March reading was 4.8

points higher. Compared to the June 2007 pre-recession peak, capacity utilization is down 4.1 points.

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 since January 2010. In March 2011, the average was up 9.0 percent from a year earlier. Similarly, the core new durable goods orders average has increased in each of the past 15 months. In fact, the core average has reported double-digit year-ago increases in each of the past 13 months. In March 2011, the average was up 12.6 percent from a year earlier.

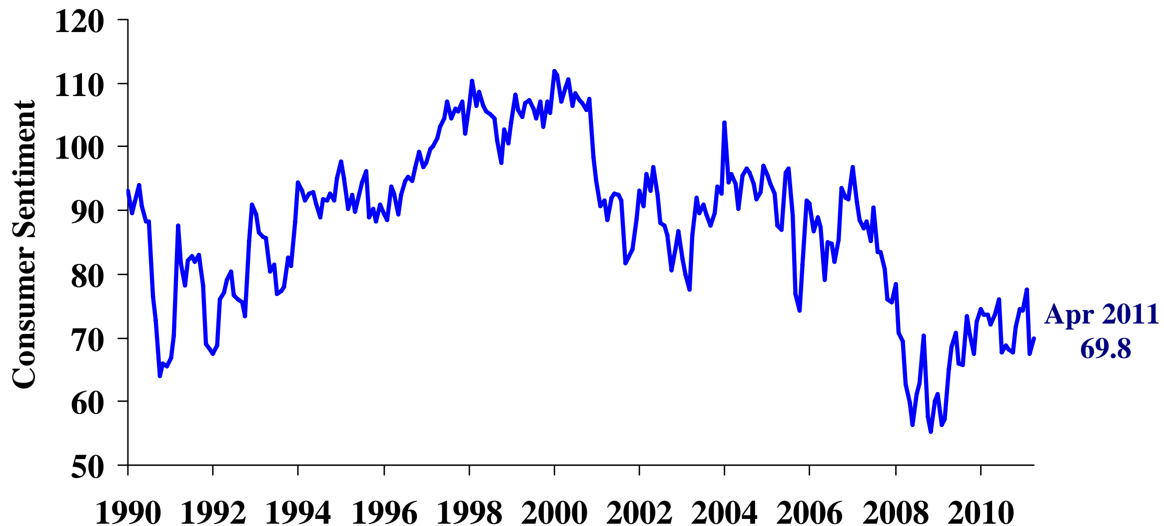
In November 2008, the three-month average of **retail sales**, excluding motor vehicle and gasoline sales, fell compared to a year ago for the first time in a history extending back to 1992. Each month over the next year, the average fell compared to a year ago. However, declines lessened beginning in the second half of 2009. By December 2009, the average was down only 0.3 percent compared to a year ago. Throughout 2010, the year-ago increase trended upward so that by December 2010, the average was up 5.7 percent. While slowing in 2011Q1, the March year-ago increase only slowed to 5.4 percent.

Similarly, the motor vehicle and parts dealers' retail sales average fell, compared to a year ago, each month between December 2007 and November 2009 with double-digit declines each month between mid-2008 and mid-2009. Since December 2009, the average has seen year-ago increases each month. In March 2011, the average rose 15.7 percent from a year earlier – marking the fifth straight double-digit year-ago increase in the average. With the sharp increase in gasoline prices, consumer spending on gasoline has risen substantially. March 2011 gas sales (three-month average) were up 14.0 percent from the prior year and up an astounding 47.0 percent from March 2009.

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. Between May 2009 and November 2010, the index 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. However, between November 2010 and February 2011, the index rose substantially – rising from 57.8 to 72.0. The index fell sharply in March to 63.8 and only recovered slightly in April in which the index rose to 65.4. 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. The index then fell sharply in July to 67.8 around which the index fluctuated through October. The index then trended upward into February 2011 when sentiment rose to a three-year high (77.5). However, the index fell sharply in March and only recovered a slight portion of March's drop in April. As a result, sentiment registered a 69.8 – almost 25 points below the index's average over the ten years directly prior to the recession.

**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 (LEI)** fell almost every month. However, between April 2009 and March 2011, the index has reported increases in all but two months. Furthermore, since July 2010, the LEI has reported increases every month. Over the last three months, the LEI has risen at a 6.2 percent annual rate – indicating an accelerating recovery.

**Economic Cycle Research Institute (ECRI) weekly leading index** data indicated 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 regained traction. The weekly leading index's 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 a record high +27.8. 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 -10.9 by late July. However, after September, the declines progressively slowed – with growth turning positive by mid-December 2010. Growth then trended upward through mid-April 2011 with the rate reaching 7.7. Over the second half of April, the rate fell to 6.7.

## Employment

Since the January 2011 Consensus Conference, most employment data point to an improved labor market – albeit one still significantly smaller than prior to the recently ended recession. The four-week average of initial unemployment claims was below the key 400,000 level each

week between late February and mid-April. Wage and salary employment has risen each month since the Conference with gains exceeding 200,000 jobs in each of the past three months.

The U.S. unemployment rate rose sharply between April 2008 and October 2009. Over this period, the unemployment rate doubled, rising from 4.9 percent to 10.1 percent – the highest monthly rate since April 1983. The rate then trended downward through mid-2010 with the rate falling to 9.5 percent in June 2010. After trending upward to 9.8 percent by November, the rate dropped in each of the next four months with substantial drops (-0.4 of a percentage point) in both December 2010 and January 2011. As a result, the rate fell to 8.8 percent in March 2011 – the lowest rate in two years. While rising to 9.0 percent in April 2011, the rate was still 0.8 of a percentage point lower than April 2010.

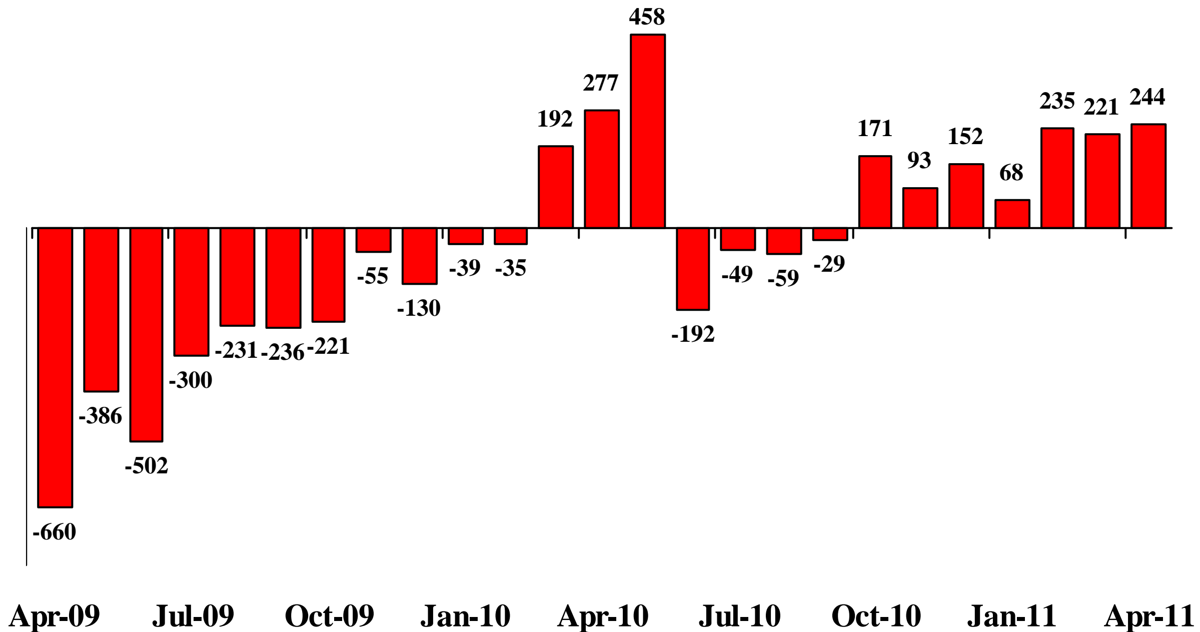
April 2011 marked the eighth straight month in which household employment was higher than a year earlier. However, the April 2011 employment level was only 292,000 persons above a year earlier. As a result, the April 2011 employment level was more than 1.0 million persons lower than April 2009. Similarly, the April 2011 unemployment level was 1.4 million persons lower than a year earlier, but essentially unchanged compared to two years ago. Compared to November 2007 (the month prior to the recession), employment is still 6.9 million persons lower and unemployment is 6.5 million persons higher. In fact, the April 2011 employment level is 304,000 persons lower than in June 2009 (the last month of the recession). Over 1.0 million fewer persons are classified as unemployed than in June 2009. However, the unemployment decline is more than accounted for by decline in the labor force of 1.3 million persons since the recession's end.

In late February 2011, the four-week average of unemployment insurance initial claims dropped below 400,000 claims for the first time since July 2008. The average remained below 400,000 through mid-April. In recent weeks, the average has risen and remained above 400,000. For the most recent week available (the four-week period ending April 30), the average stood at 431,250 claims – the average's highest level since late November 2010. However, according to the Bureau of Labor Statistics, a significant share of the largest state net increases in initial claims occurred in the transportation sector. A substantial share of these increases is most likely the result of the March 2011 Japanese earthquake whose impact is most probably temporary.

In 2011Q1, the number of announced job cuts (Challenger Report) totaled 130,749 – 28 percent below a year ago and the lowest first quarter total since 1995. Announced job cuts have been declining over the past year and are now even below the pace prior to the recession.

Between February 2008 and February 2010, wage and salary employment fell every month, declining 8.8 million jobs to its lowest level since July 1999. In part boosted by Census worker hiring, wage and salary employment rose each month between March 2010 and May 2010 with gains averaging 309,000 jobs per month. With Census worker employment falling, overall employment dropped the next four months with an average loss of 82,000 jobs per month. However, employment has increased in each of the past seven months. Furthermore, gains have exceeded 200,000 jobs in each of the past three months. Between October 2010 and April 2011, employment rose by 1.2 million jobs. As a result, April 2011 employment is up a net 1.3 million jobs compared to a year ago. In sharp contrast, the U.S. had *lost* a net 1.7 million jobs

between April 2009 and April 2010. Compared to June 2009 (the last month of the recession), April 2011 wage and salary employment is up by 535,000 jobs. Nevertheless, April 2011 employment remains 6.9 million jobs below employment in November 2007, just prior to the recession




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

Between July 2006 and December 2009, manufacturing sector employment fell in all but one month (when sector employment rose by only 2,000 jobs). Over this period, the sector lost 2.8 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. Between January 2010 and July 2010, manufacturing employment rose in all but one month. Over these seven months, the sector gained a net 124,000 jobs. After having fallen in each of the next three months, sector employment increased each month between November 2010 and April 2011 – rising 167,000 jobs over these six months. Consequently, April 2011 manufacturing sector employment is up by 197,000 jobs from a year ago. Despite this, manufacturing employment is still 2.0 million jobs below the sector's pre-recession November 2007 level.

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 2.2 million jobs (-28.0 percent). Sector job losses were particularly severe in

late 2008 and the first half of 2009. Sector job losses worsened in January and February 2010. After rising in March and April 2010, construction employment fell in eight of the following nine months. Sector employment then rose sharply in February 2011 and rose very slightly in March 2011 and in April 2011. As a result, over the past year, construction sector employment has fallen by 42,000 jobs. Construction employment is down by 2.0 million jobs compared to November 2007 (directly prior to the recession). Since the end of the recession (June 2009), construction employment is essentially unchanged.

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 dramatically from early 2009. In 2009Q1, the index averaged 28.2 (a record low for a series that dates back to 1948). The index averaged 54.8 in 2010Q1. In 2011Q1, the index averaged 63.1 – the highest quarterly reading since 1973Q1. Every month since October 2009, the employment index has signaled improving sector employment. Furthermore, April 2011 marked the fourth straight month in which the index was above 60.0.

Between January 2008 and June 2010, the ISM non-manufacturing employment index signaled worsening employment in the services sector (reading under 50.0). However, in each of the first six months of 2010, the index recorded a reading in the upper 40's – a substantial improvement from its November 2008 record low (31.5). Since July 2010, the index has signaled growing sector employment in all but one month. The sector employment index rose to a post-recession high in February 2011 (55.6) before declining in March and in April. As a result, the employment index stood at 51.9 in April – its lowest reading since September 2010.

According to the most recent Job Openings and Labor Turnover Survey available, the number of job openings rose in February 2011 to 3.1 million – the highest post-recession level. In addition, the February 2011 level is up 22.6 percent from February 2010. The February 2011 year-ago increase contrasts with the 8.9 percent decline between February 2009 and February 2010. The November 2010 level (the last reading available prior to the January Conference) was 31.1 percent higher than November 2009. The February 2011 hiring rate (3.0 percent) was essentially unchanged from both the November 2010 reading (also 3.0 percent) and the February 2010 measure (2.9 percent). However the February 2011 hires rate was significantly below the pre-2009 average monthly hire rate (3.8 percent). The February 2011 hires level was up 3.3 percent from a year earlier – an improvement from the February 2010 year-ago 5.3 percent *decline*. However, the February 2011 hires level (3.9 million) remains 23.4 percent below the pre-2009 average monthly hires level (5.1 million).

According to the National Federation of Independent Businesses, the March 2011 net percent of small businesses planning to increase employment was two percent (percent planning to expand minus percent planning to scale back) – down two percentage points from the November 2010 survey (released in December 2010), but four percentage points above the March 2010 reading of negative two percentage points. Further, March 2011 marked the sixth consecutive monthly positive net percentage of small businesses planning to increase employment.

According to the April 2011 Conference Board Survey, the share of consumers viewing jobs plentiful has risen one percentage point since December 2010 to 5.2 percent – the highest reading

in almost two years. Similarly, the percentage of those who find jobs scarce decreased 5.2 percentage points to 41.8 percent. However, the share finding jobs plentiful is substantially below pre-recession readings exceeding 25 percent. At the same time, the Conference Board Employment Trends Index in March 2011 (ETI, based on eight labor market indicators including the Board's job scarcity reading) was up eight percent from a year ago.

Vehicle Sales and Production

Calendar year (CY) 2009 light vehicle sales totaled slightly over 10.4 million units – the worst annual sales year since 1982 when sales came in just under 10.4 million units. In 2010, sales rose 10.6 percent to 11.5 million units. Nevertheless, 2010 sales were still well below the 13.2 million units sold in 2008 and substantially less than the 16.1 million unit sales in 2007. Further, 2010 marked the third straight year of sub 10 million domestic vehicle sales – the first such string since the early 1980s.

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 at least 1967. 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. Between September 2010 and February 2011, the light vehicle sales rate rose each month. The February 2011 sales rate (13.4 million units) represented the highest sales rate since August 2009 when Cash for Clunkers boosted sales. The sales rate dropped to just under 13.1 million units in March 2011 before rising to just over a 13.1 million unit rate in April 2011. As a result, the year-to-date 2011 light vehicle sales rate (13.0 million unit rate) represents an 18.0 percent increase from the first four months of 2010 (11.0 million unit rate).

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.

In late December 2008, 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 reported a $4.7 billion profit in 2010 – its first calendar year profit since 2004 and its highest annual profit in more than a decade. In addition, GM posted a $3.2 billion quarterly profit in 2011Q1. While first quarter profits were boosted by some one-time items, the company still reported a $2.0 billion profit excluding special items.

Between June 10, 2009, when Chrysler emerged from bankruptcy, and the end of 2009, the company posted losses totaling $3.8 billion. However, for all four quarters of 2010 combined, Chrysler reported only a $652 million loss. Furthermore, the company posted a $116 million profit in 2011Q1 – the company's first quarterly profit since 2006.

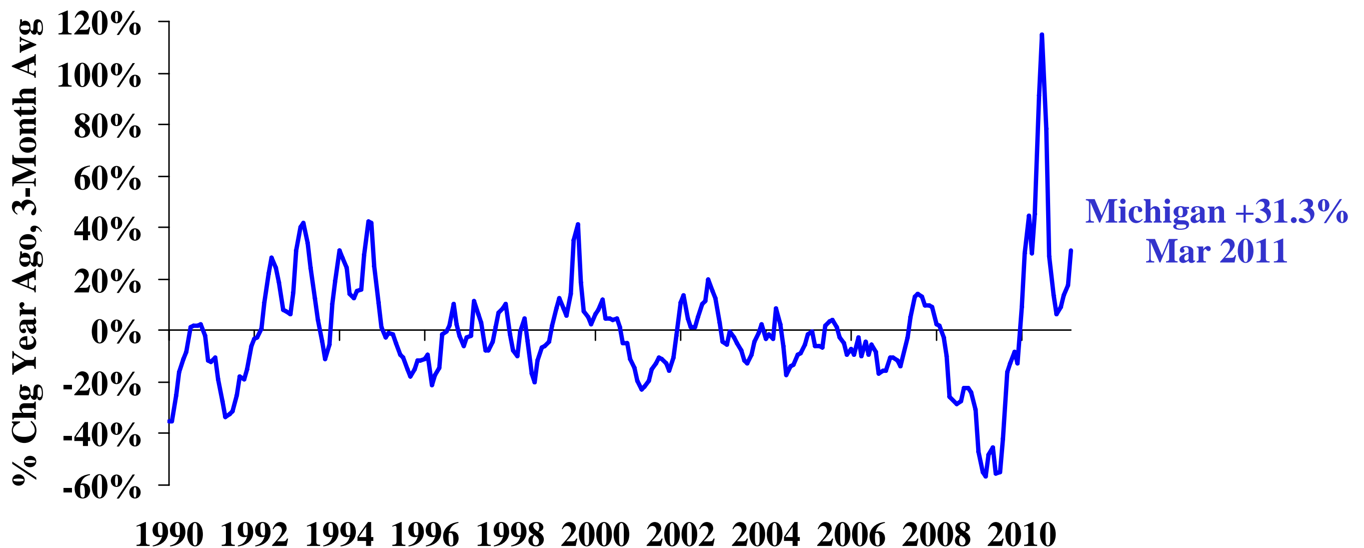
In calendar year 2010, Ford Motor Company earned $6.6 billion in profits – its highest annual profit in more than a decade. In the first quarter of 2011, Ford reported a $2.6 billion profit -- the company's eighth straight quarterly profit and its best first quarter performance since 1998.

As a result of the severe recession and flagging vehicle sales, U.S. vehicle production dropped sharply in 2009. In 2009, vehicle production dropped 34.2 percent – falling from 8.8 million units to 5.8 million units. However, with the recovery, production recovered two-thirds of its 2009 losses in 2010 as production rebounded to 7.7 million units. In 2011Q1, production increased 17.0 percent compared to a year ago. In the near future, vehicle production may be restrained by parts shortages resulting from the massive and highly destructive March 2011 earthquake in Japan. At the same time, curtailed Japanese vehicle production may increase demand for U.S. vehicles and bolster U.S. vehicle production.

## Current Michigan Economic Conditions

Vehicle Production

Following national trends, Michigan vehicle production fell 20.9 percent in 2008 and an additional 37.9 percent in 2009. However, in 2010, Michigan production regained only 36.4 percent of its losses from the two prior years. As result, while 2010 Michigan vehicle production was up 37.6 percent from 2009, 2010 production was down 32.4 percent compared to 2008 production. However, 2011Q1 (January 2011-March 2011) Michigan vehicle production rose 31.3 percent compared to a year ago – substantially faster than the 17.0 percent increase nationally. March 2011 marked the 15th straight three-month period that the Michigan average exceeded the year-ago average. In the first quarter of 2011, State auto production was up 11.8 percent from a year ago while Michigan truck production rose an impressive 41.4 percent.




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. Most of the past decade has been marked by weak manufacturing employment performance, declining vehicle production, continued declines in Big Three market share and continued supply rationalization among vehicle suppliers. As a

result, 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 April 2000 to March 2011, Michigan has lost a net 772,200 jobs (-16.5 percent). Since April 2000, Michigan manufacturing employment has fallen by 412,100 jobs, a loss of nearly half (-45.5 percent) of the jobs in that sector at the state's overall employment peak. The manufacturing employment drop accounted for 53.4 percent of the State's overall employment loss.

In 2009, Michigan lost 7.0 percent (289,900) of its wage and salary jobs. The 7.0 percent decline represented Michigan's sharpest annual employment drop in over 50 years. In 2009, Michigan manufacturing employment plummeted, dropping 19.0 percent.

However, Michigan employment declines slowed considerably in 2010. In 2010, the state lost only a net 10,900 jobs (-0.3 percent). While 2010 marked the tenth straight year that Michigan employment fell, the 2010 decline was second, only to the 0.2 percent decline in 2005, as the least severe drop over the past decade. In addition, Michigan manufacturing employment actually increased in 2010 with the state gaining a net 9,600 manufacturing jobs (2.1 percent gain).

In the first quarter of 2011, Michigan employment rose 2.0 percent compared to 2010Q1. Along with this overall quarterly increase, State manufacturing employment is up 6.8 percent compared to last year.

Michigan's unemployment rate has remained in double-digits for each of the past 28 months. In August 2009, Michigan's unemployment rate increased to 14.1 percent – the state's highest rate since June 1983. However, Michigan's unemployment rate has since fallen sharply (-3.8 percentage points). By March 2011, the state's unemployment rate had dropped to 10.3 percent – its lowest level since late 2008.

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 by the housing bust due to sharply declining employment. Nevertheless, the state's housing market has recently seen some signs of improvement.

Between 2005 and 2009, Michigan housing unit authorizations fell 84.8 percent, declining from 45,328 units to 6,884 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 22.3 percent increase nationally. With the home buyer credit's expiration, the year-ago increase in Michigan authorizations slowed markedly. For the year as a whole, 2010 Michigan authorizations rose 31.8 percent. Nevertheless, 2010 Michigan authorizations were still 36.0

percent below the state's lowest count prior to the recent housing downturn. In addition, 2010 Michigan authorizations were 82.4 percent below the State's 1996-2005 average (51,688 units). 2011Q1 Michigan authorizations (1,664 units) were essentially unchanged from a year ago while U.S. authorizations were down 12.6 percent.

In February 2011, according to Case-Shiller house price measures (seasonally adjusted), the Detroit MSA recorded a 3.6 percent year-over-year house price decline, compared to a 3.3 percent average decrease for the twenty U.S. metro areas surveyed for the measure. The February 2011 Detroit price measure was its highest reading since August 2010 but was 45.9 percent below Detroit's peak measure (February 2006). In comparison, the 20-city reading was 31.4 percent below its peak reading (April 2006).

In 2010, foreclosure sales accounted for one-third of all Michigan housing sales according to RealtyTrac. In the quarter just ended (2011Q1), Michigan foreclosures fell 18.0 percent from a year ago, compared to a 26.9 percent reduction nationally according to CoreLogic. However, as is the case nationally, backlogged paperwork likely plays a substantial role in reducing Michigan foreclosure activity. In 2011Q1, Michigan ranked fifth among U.S. states in the number of foreclosures (37,506). In addition, in 2011Q1, Michigan ranked seventh with one foreclosure for every 121 housing units – compared to one for every 191 units nationally.

The share of mortgage properties underwater in Michigan is substantially higher than the national average. In 2010Q4, 23.1 percent of residential properties with mortgages were underwater nationally. In Michigan, 36 percent of such properties were underwater – placing Michigan fourth among the fifty states behind Nevada (65 percent), Arizona (51 percent) and Florida (47 percent). Furthermore, the loan amount as a percent of house value in Michigan is 84 percent – ranking fourth highest among the fifty states.

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 3.7 percent from a year ago, 2009Q4 Michigan personal income dropped 2.1 percent from 2008Q4. Michigan personal income grew compared to a year ago in each quarter in 2010. Further, those increases accelerated from 1.7 percent in the first quarter to 3.8 percent in the fourth quarter. Michigan's 2010Q4 growth was slightly slower than national income (3.9 percent) and ranked 25$^{th}$ 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 -6.4 percent and -9.8 percent. Wages and salaries fell only slightly (-0.6 percent) in 2010Q1 and rose in the following three quarters. Michigan's 2010Q4 increase (3.8 percent) slightly exceeded national growth (3.4 percent).

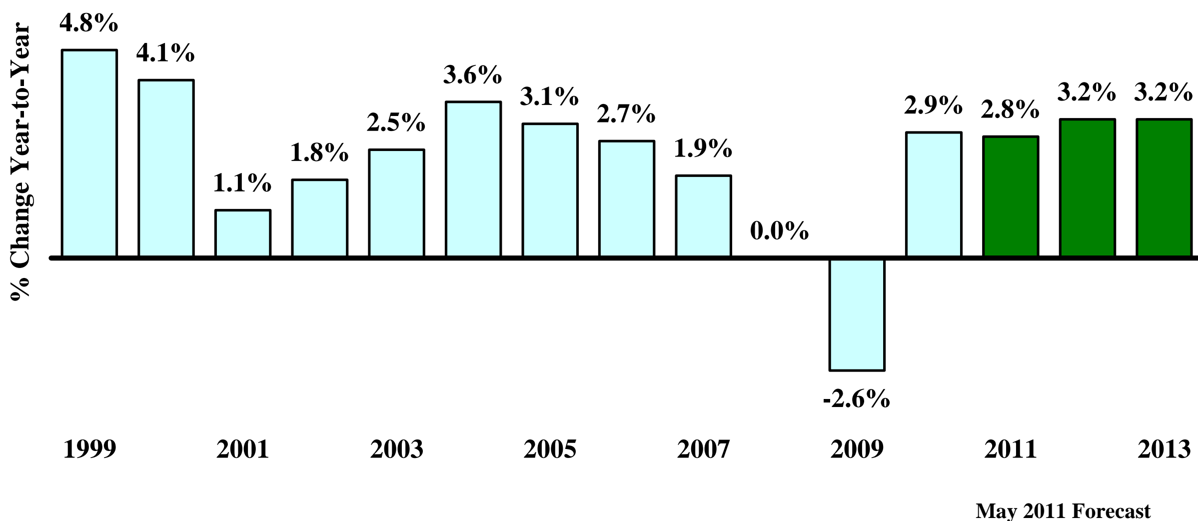
Michigan manufacturing wages and salaries reported declines compared to year-ago levels in twelve straight quarters between 2007Q2 and 2010Q1. As with overall wages and salaries, 2009 saw the four largest sector drops – ranging between -16.1 percent and -23.0 percent. The

2010Q1 decline was relatively modest (-2.7 percent). Manufacturing wages and salaries have increased in the last three reported quarters with sector wages and salaries rising 7.4 percent between 2009Q4 and 2010Q4 – substantially faster than the 4.1 percent national increase.

## 2011, 2012 and 2013 U.S. Economic Outlook

Summary

After declining 2.6 percent in 2009, real GDP rose 2.9 percent in 2010. The economy is expected to experience similar growth in 2011 (2.8 percent), 2012 (3.2 percent) and 2013 (3.2 percent).




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

The U.S. economy contracted severely over the second half of 2008 and 2009Q1 (-5.2 percent average annual rate). Real GDP fell slightly in 2009Q2 before reporting modest growth in 2009Q3. Real GDP has now risen in each of the past seven quarters. Over this period, economic growth has alternately accelerated and slowed. Over the forecast horizon, growth is expected to exceed 2.5 percent in every quarter.

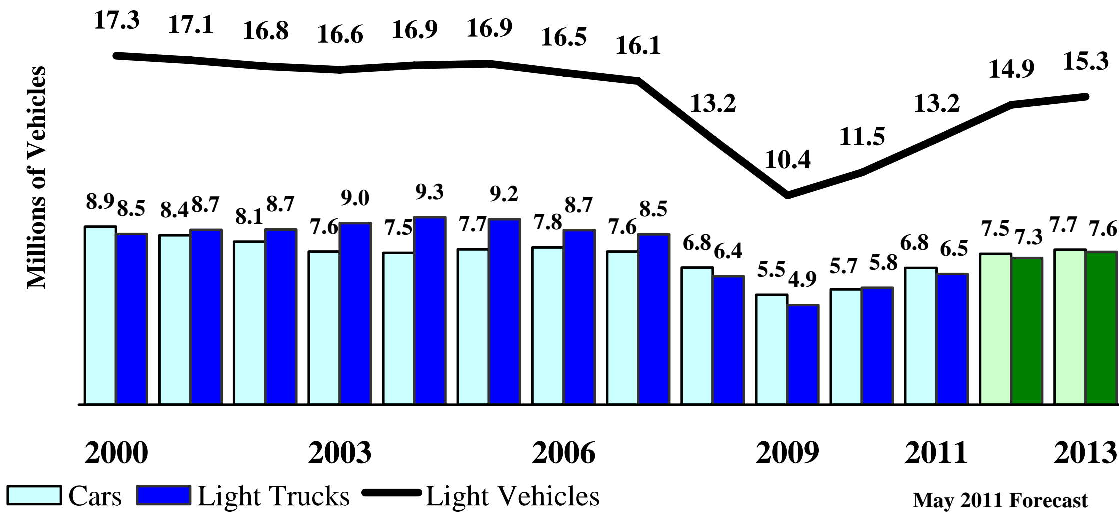
Light vehicle sales totaled 11.5 million units in 2010. Light vehicle sales are forecast to increase each year of the forecast. Vehicle sales are projected to total 13.2 million units in 2011, 14.9 million units in 2012 and 15.3 million units in 2013.

The U.S. unemployment rate rose to a 9.6 percent rate in 2010 – just below the record high 9.7 percent rate set in 1982 (going back to 1948). The rate is expected to drop to 8.9 percent in 2011, 8.5 percent in 2012 and 8.0 percent in 2013.

After falling at its fastest rate since at least 1940 in 2009 (-4.4 percent), U.S. wage and salary employment fell modestly in 2010 (-0.8 percent). In 2011, employment is expected to rise 1.1 percent. Employment is then forecast to increase 2.1 percent in 2012 and rise 2.2 percent in 2013. Following their first decline since 1955, overall consumer prices rose 1.6 percent in 2010. Inflation is expected to accelerate to 2.8 percent in 2011 before slowing to 2.1 percent in 2012. In 2013, prices are projected to increase 2.2 percent.

The short-term Treasury bill rate dropped to 0.1 percent in 2010. The rate is expected to average 0.1 percent in 2011 as well, but rise to 0.5 percent in 2012 and to 0.7 percent in 2013. Corporate interest rates are forecast to change slightly over the forecast horizon. The rate will rise from 4.9 percent in 2010 to 5.2 percent in 2011 before falling to 5.1 percent in 2012 and dropping to 5.0 percent in 2013. Down from 5.0 percent in 2009, mortgage rates averaged 4.7 percent in 2010. Mortgage rates are expected to increase – but only slightly – over the forecast horizon with the rate rising to 5.0 percent in 2011, to 5.2 percent in 2012 and to 5.3 percent in 2013.

## Vehicle Sales Continue Their Rebound




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

Assumptions

For the most part, oil prices per barrel are expected to range between $110 and $120 over the forecast horizon. Natural gas prices are assumed to grow 4.4 percent in 2012 and rise 11.8 percent in 2013.

Throughout the forecast horizon, the housing market is expected to strengthen but to remain historically weak. Despite increases in housing starts each year, starts are still expected to remain below 1.0 million units into 2013.

The forecast assumes that the FOMC will hold the target federal funds rate constant at a record low 0.00-0.25 percent range through the end of 2011. The Fed is then expected to raise the federal funds rate over the course of 2012. By the end of 2012, the federal funds rate is assumed to be slightly more than 1.0 percentage point higher than its current record low level. The FOMC is then seen as leaving the federal funds rate unchanged through the end of 2013.

Economic growth among major U.S. trading partners is expected to accelerate slightly through 2012Q1. Rest-of-world growth is then expected to hold steady over the balance of the forecast.

The savings rate is assumed to fall gradually over the course of 2011. As a result, the average savings rate falls from 5.8 percent to 5.4 percent between 2011 and 2012. The rate then declines in 2012 to an average rate of 4.3 percent. The average savings rate remains unchanged in 2013 at 4.3 percent.

Forecast Risks

The economic recovery is facing significant challenges. The Great Recession did serious damage to household balance sheets and psyches, and significantly tightened credit conditions. Substantial uncertainty surrounds how badly (and for how long) the Recession has harmed consumer and investor sentiment. 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.

Current debate surrounds prospective government spending and taxation actions. The forecast assumes moderate spending declines across the forecast horizon (around 2.0 percent cuts in inflation-adjusted federal government spending both in 2012 and in 2013). The impact of greater (or smaller) cuts remains uncertain. Extremely greater cuts would likely curtail economic growth below forecasted levels. At the same time -- though more a far term risk -- failure to agree to cut spending sufficiently could impair the federal government's credit rating with negative impacts for the broader economy (including higher interest rates and a lower value of the dollar). In addition, there remains a significant risk federal stalemate surrounding debt ceiling legislation discussion.

As for monetary policy, the Federal Reserve will complete its second round of quantitative easing by the end of June 2011. Questions surround the impact of no further substantial stimulus by the Federal Reserve in the economy. There also remains substantial uncertainty as to when and how much the Fed will raise interest rates as well as when the Fed will stop rolling over current holdings and begin reducing reserves.

In large part, the major risks to the baseline forecast 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. Recent employment gains are encouraging, but the labor market remains at risk of being significantly harmed by a negative economic shock.

**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 2013 starts are more than 60 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 2013 starts still total 969,700 units -- marking the sixth 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, a 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 completing its second round of quantitative easing by mid-2011. The fragility of the financial system poses a substantial downward risk to the baseline forecast. While less problematic than last year, significant credit market vulnerability remains. However, lending standards have loosened at the same time that banks have a tremendous amount of excess reserves. Thus, newly profitable firms may borrow substantially more than expected in 2011 to take advantage of tax incentives. In addition, consumers with improved balance sheets, may spend more than anticipated.

Europe may be on the verge of another credit crisis spurred by the need for European banks and governments to refinance or sell substantial amount of debt – raising serious concerns that there will not be enough demand to buy such a tremendously large amount of debt. 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 15.4 million unit rate by 2013Q4. The forecast assumes that all three Big Three vehicle manufacturers remain viable. Recent reports provide substantial support for this assumption, but some risk remains.

In the near future, vehicle production may be restrained by parts shortages resulting from the massive and highly destructive March 2011 earthquake in Japan. At the same time, curtailed

Japanese vehicle production may increase demand for U.S. vehicles and bolster U.S. vehicle production. 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 ($110- $120 a barrel). Recent high oil prices have sent gasoline prices near record highs. Still 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 and more 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.

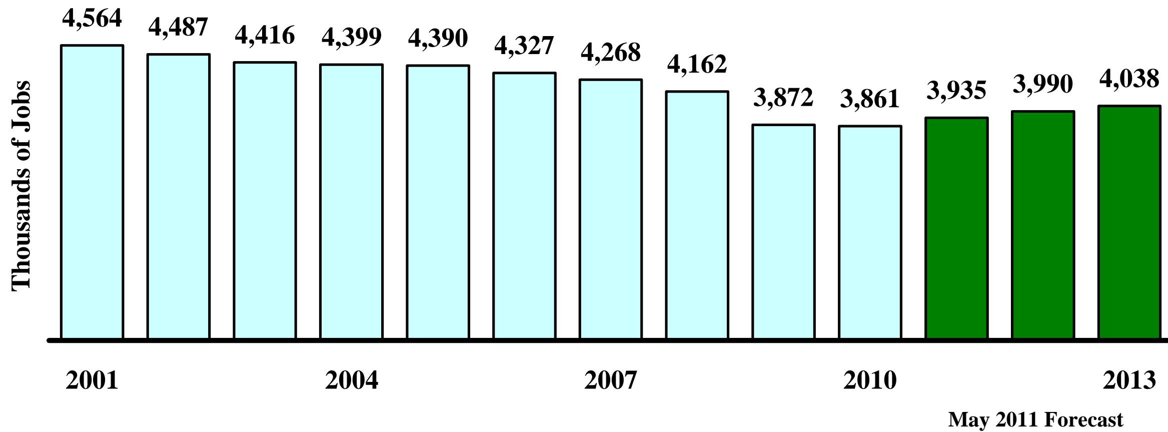
**Other Factors.** Geopolitical factors (such as a domestic terrorist attack) remain a downside risk to the baseline forecast. Continued declines in the dollar may stimulate demand for U.S. goods.

## 2011, 2012 and 2013 Michigan Economic Outlook

Michigan employment fell an estimated 7.0 percent in 2009 – its sharpest decline since 1958. State employment dropped another 0.3 percent in 2010, but is expected to increase 1.9 percent in 2011 – marking the first calendar year Michigan employment increase since 2000. State employment is then projected to rise 1.4 percent in 2012 and to increase 1.2 percent in 2013.

Private non-manufacturing employment is projected to increase by 71,500 jobs in calendar year 2011 before rising by 51,800 jobs in 2012 and growing by 44,200 jobs in 2013. Manufacturing employment is forecast to increase 4.5 percent in 2011. However, manufacturing employment growth is expected to slow with a 1.8 percent increase in 2012 and 1.7 percent growth in 2013. Between CY 2010 and CY 2013, manufacturing employment is projected to rise by 38,300 jobs.

## Michigan Wage and Salary Employment Rises




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

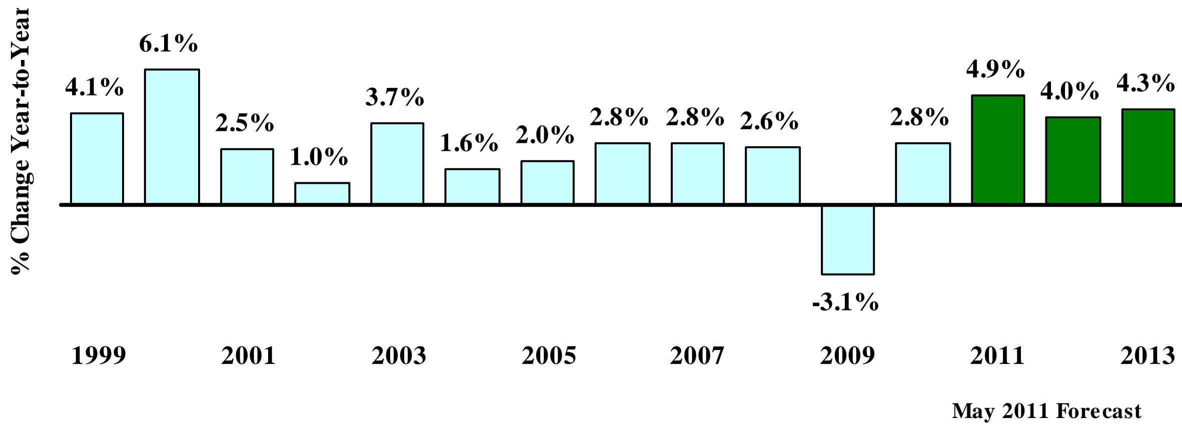
Following the large 2009 drop in Michigan transportation equipment employment (-25.9 percent) the sector experienced a slight increase in 2010. The sector is forecast to see increases each year between 2011 and 2013. Despite the increases, forecasted 2013 transportation equipment employment (149,900 jobs) is down 26.0 percent from 2007 sector employment and is off 56.7 percent from the sector's 2000 employment (346,100 jobs). This forecast assumes that all three of the Big Three remain viable.

State household employment is forecast to rise each quarter over the balance of the forecast horizon. After soaring from 8.3 percent to 13.3 percent in 2009, Michigan's unemployment rate declined in 2010 to 12.5 percent. Michigan's unemployment rate is forecast to fall further over the forecast horizon with the rate dropping to 10.0 percent in 2011, 9.5 percent in 2012 and 9.2 percent in 2013.

After falling 8.3 percent in 2009, Michigan wages and salaries rose 2.1 percent in 2010. State wages and salaries are expected to rise 4.8 percent in 2011 and increase 4.7 percent in 2012. Wage growth is then expected to slow to 3.7 percent in 2013. In 2009, overall Michigan personal income declined 3.1 percent. Personal income rose 2.8 percent in 2010. Personal income is expected to rise 4.9 percent in 2011, increase 4.0 percent in 2012 and rise 4.3 percent in 2013. The forecasted 2011 Michigan personal income increase would represent the state's fastest nominal income growth since 2000.

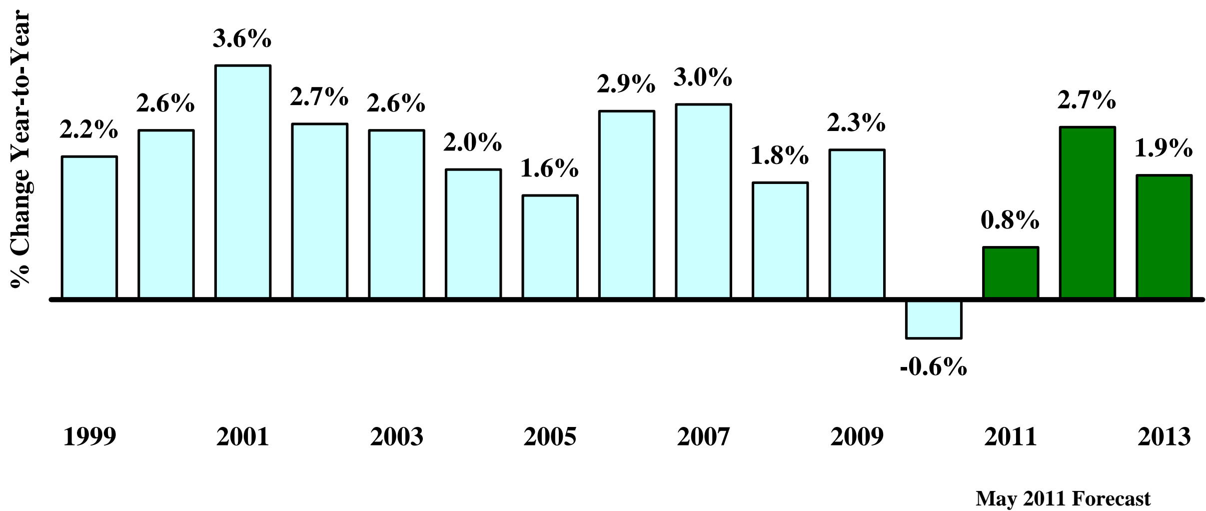
The overall CY price level, as measured by the Detroit CPI, is forecast to increase 2.7 percent in 2011, 1.9 percent in 2012 and 2.1 percent in 2013. Real (inflation adjusted) Michigan personal income is expected to rise 2.2 percent in 2011 and increase 2.1 percent in both 2012 and 2013.

## Michigan Personal Income Reports Solid Growth




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

## Overall Price Level Rises Moderately




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

**Table 1**

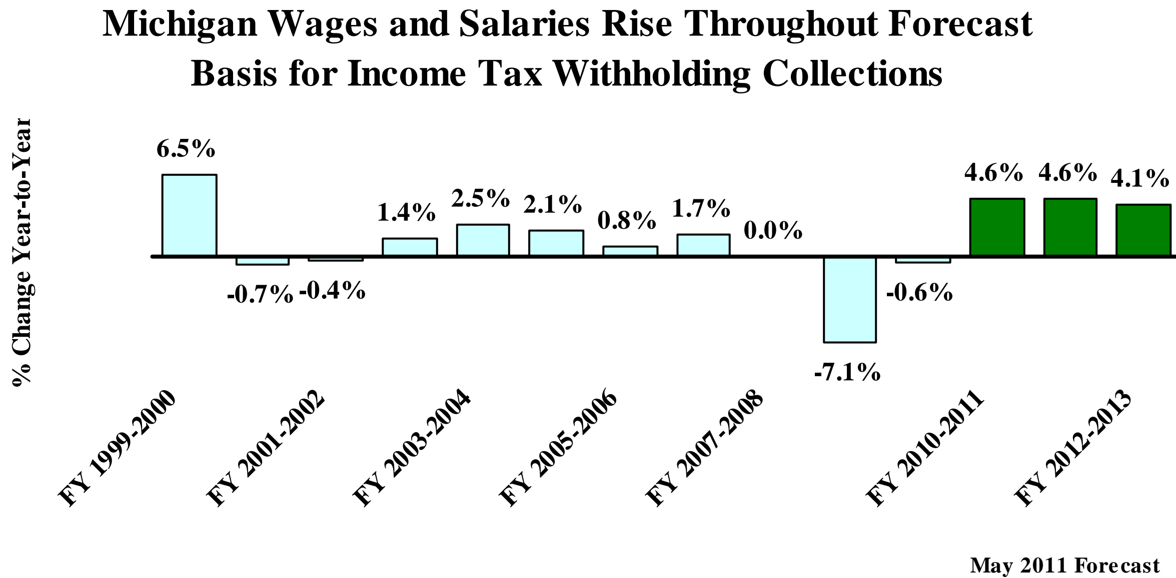
## Administration Economic Forecast

May 2011

| | Calendar 2010 Actual | Percent Change from Prior Year | Calendar 2011 Forecast | Percent Change from Prior Year | Calendar 2012 Forecast | Percent Change from Prior Year | Calendar 2013 Forecast | Percent Change from Prior Year |
|---|---|---|---|---|---|---|---|---|
| **United States** | | | | | | | | |
| Real Gross Domestic Product (Billions of Chained 2005 Dollars) | $13,248 | 2.9% | $13,619 | 2.8% | $14,055 | 3.2% | $14,505 | 3.2% |
| Implicit Price Deflator GDP (2005 = 100) | 110.7 | 1.0% | 112.2 | 1.4% | 113.9 | 1.5% | 116.1 | 1.9% |
| Consumer Price Index (1982-84 = 100) | 218.1 | 1.6% | 224.2 | 2.8% | 228.9 | 2.1% | 233.9 | 2.2% |
| Consumer Price Index - Fiscal Year (1982-84 = 100) | 217.4 | 1.7% | 222.4 | 2.3% | 227.5 | 2.3% | 232.3 | 2.1% |
| Personal Consumption Deflator (2005 = 100) | 111.1 | 1.7% | 113.4 | 2.0% | 115.4 | 1.8% | 117.6 | 1.9% |
| 3-month Treasury Bills Interest Rate (percent) | 0.1 | | 0.1 | | 0.5 | | 0.7 | |
| Aaa Corporate Bonds Interest Rate (percent) | 4.9 | | 5.2 | | 5.1 | | 5.0 | |
| Unemployment Rate - Civilian (percent) | 9.6 | | 8.9 | | 8.5 | | 8.0 | |
| Wage and Salary Employment (millions) | 129.818 | -0.8% | 131.250 | 1.1% | 134.010 | 2.1% | 136.960 | 2.2% |
| Housing Starts (millions of starts) | 0.585 | 5.6% | 0.634 | 8.4% | 0.858 | 35.3% | 0.970 | 13.0% |
| Light Vehicle Sales (millions of units) | 11.5 | 10.6% | 13.2 | 14.8% | 14.9 | 12.9% | 15.3 | 2.7% |
| Passenger Car Sales (millions of units) | 5.7 | 3.6% | 6.8 | 19.3% | 7.5 | 10.3% | 7.7 | 2.7% |
| Light Truck Sales (millions of units) | 5.8 | 18.4% | 6.5 | 12.1% | 7.3 | 12.3% | 7.6 | 4.1% |
| Big 3 Share of Light Vehicles (percent) | 44.2 | | 45.3 | | 45.2 | | 45.1 | |
| **Michigan** | | | | | | | | |
| Wage and Salary Employment (thousands) | 3,861 | -0.3% | 3,935 | 1.9% | 3,990 | 1.4% | 4,038 | 1.2% |
| Unemployment Rate (percent) | 12.5 | | 10.0 | | 9.5 | | 9.2 | |
| Personal Income (millions of dollars) | $351,830 | 2.8% | $369,070 | 4.9% | $383,833 | 4.0% | $400,337 | 4.3% |
| Real Personal Income (millions of 1982-84 dollars) | $171,553 | 2.0% | $175,330 | 2.2% | $178,943 | 2.1% | $182,719 | 2.1% |
| Wages and Salaries (millions of dollars) | $174,256 | 2.1% | $182,621 | 4.8% | $191,204 | 4.7% | $198,278 | 3.7% |
| Detroit Consumer Price Index (1982-84 = 100) | 205.1 | 0.8% | 210.5 | 2.7% | 214.5 | 1.9% | 219.1 | 2.1% |

## Fiscal Year Economics

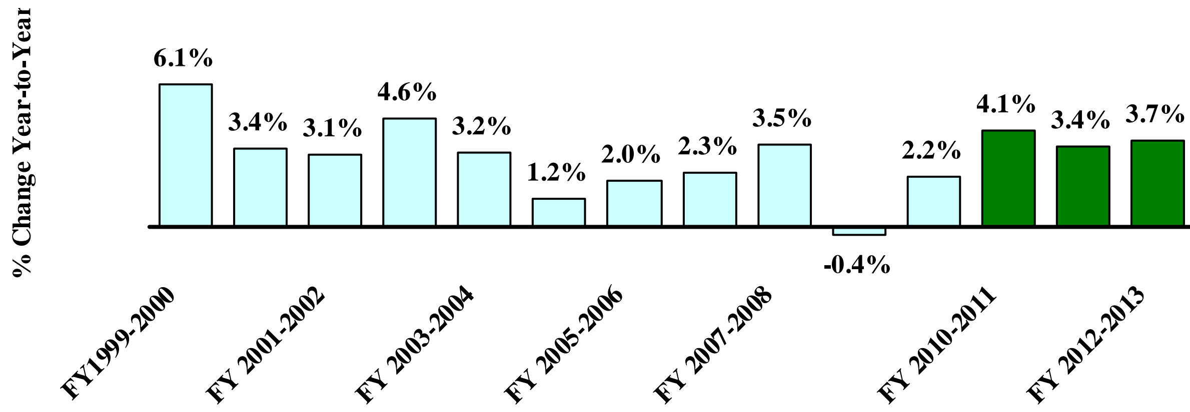
Michigan's largest taxes are the individual income tax ($5.5 billion in FY 2010), which includes refunds, and sales and use taxes ($7.4 billion). Income tax withholding is the largest income tax component. Withholding ($6.8 billion) is most affected by growth in wages and salaries. Michigan wages and salaries are expected to rise 4.6 percent in both FY 2011 as well as FY 2012. Wages and salaries are then forecast to increase 4.1 percent in FY 2013.




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

Sales and use taxes depend primarily on Michigan disposable (after tax) income and inflation. Disposable income is expected to rise 4.1 percent in FY 2011, 3.4 percent in FY 2012 and 3.7 percent in FY 2013. Prices, as measured by the Detroit CPI, are forecast to increase 2.1 percent in FY 2011, FY 2012 and FY 2013.

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




May 2011 Forecast

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

# ADMINISTRATION REVENUE ESTIMATES
**May 16, 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, FY 2012 and FY 2013 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, and so on. 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

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)**

| | Actual | |
|---|---|---|
| | **Amount** | **Growth** |
| General Fund - General Purpose | | |
| Baseline Revenue | $6,505.9 | -3.8% |
| Tax Cut Adjustments | $279.3 | |
| Net Resources | $6,785.2 | -7.9% |
| School Aid Fund | | |
| Baseline Revenue | $10,808.9 | -0.8% |
| Tax Cut Adjustments | $8.1 | |
| Net Resources | $10,816.9 | -1.0% |
| Combined | | |
| Baseline Revenue | $17,314.8 | -2.0% |
| Tax Cut Adjustments | $287.4 | |
| Net Resources | $17,602.2 | -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 $7,417.6 million, a 9.8 percent baseline increase, and a 9.3 percent increase after tax adjustments compared to FY 2010. The FY 2011 estimate is $189.7 million above the January 2011 Consensus estimate.

SAF revenue is forecast to be $11,108.0 million, representing a 2.7 percent baseline revenue increase and a 2.7 percent increase after tax adjustments compared to FY 2010. The FY 2011 SAF estimate is $128.9 million above the January 2011 Consensus estimate (See Table 3).

**Table 3**

**FY 2010-11 Administration Revenue Estimates**

**(millions)**

| | Consensus Jan 14, 2011 | | Administration May 16, 2011 | | |
|---|---|---|---|---|---|
| | **Amount** | **Growth** | **Amount** | **Growth** | **Change** |
| General Fund - General Purpose | | | | | |
| Baseline Revenue | $6,843.4 | 5.2% | $7,144.8 | 9.8% | |
| Tax Cut Adjustments | $384.4 | | $272.8 | | |
| Net Resources | $7,227.8 | 6.5% | $7,417.6 | 9.3% | $189.7 |
| School Aid Fund | | | | | |
| Baseline Revenue | $10,955.6 | 1.4% | $11,105.5 | 2.7% | |
| Tax Cut Adjustments | $23.5 | | $2.5 | | |
| Net Resources | $10,979.1 | 1.5% | $11,108.0 | 2.7% | $128.9 |
| Combined | | | | | |
| Baseline Revenue | $17,799.0 | 2.8% | $18,250.3 | 5.4% | |
| Tax Cut Adjustments | $407.9 | | $275.3 | | |
| Net Resources | $18,206.9 | 3.4% | $18,525.6 | 5.2% | $318.6 |

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 $7,532.7 million, a 3.8 percent baseline increase and a 1.6 percent increase after tax adjustments compared to FY 2011. The FY 2011 GF-GP revenue estimate is up $238.6 million above the January 2011 Consensus estimate. SAF revenue is forecast to be $11,327.3 million; representing a 1.7 percent baseline increase and a 2.0 percent net increase compared to FY 2011. The FY 2012 SAF estimate is $133.7 million above the January 2011 Consensus estimate (see Table 4).

**Table 4**

**FY 2011-12 Administration Revenue Estimates**

**(millions)**

| | Consensus Jan 14, 2011 | | Administration May 16, 2011 | | |
|---|---|---|---|---|---|
| | **Amount** | **Growth** | **Amount** | **Growth** | **Change** |
| General Fund - General Purpose | | | | | |
| Baseline Revenue | $7,107.6 | 3.9% | $7,419.7 | 3.8% | |
| Tax Cut Adjustments | $186.5 | | $113.1 | | |
| Net Resources | $7,294.1 | 0.9% | $7,532.7 | 1.6% | $238.6 |
| School Aid Fund | | | | | |
| Baseline Revenue | $11,163.8 | 1.9% | $11,297.4 | 1.7% | |
| Tax Cut Adjustments | $29.9 | | $29.9 | | |
| Net Resources | $11,193.7 | 2.0% | $11,327.3 | 2.0% | $133.7 |
| Combined | | | | | |
| Baseline Revenue | $18,271.4 | 2.7% | $18,717.1 | 2.6% | |
| Tax Cut Adjustments | $216.4 | | $142.9 | | |
| Net Resources | $18,487.8 | 1.5% | $18,860.0 | 1.8% | $372.3 |

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

## FY 2013 Revenue Outlook

FY 2013 GF-GP revenue is estimated to be $7,419.7 million, a 4.4 percent baseline increase and a 1.5 percent decrease after tax adjustments compared to FY 2012. The FY 2013 GF-GP revenue estimate is down $113.1 million below the current FY 2012 GF-GP estimate. SAF revenue is forecast to be $11,590.8 million; representing a 2.3 percent baseline increase and a 2.3 percent net increase compared to FY 2012. The FY 2013 SAF estimate is $263.5 million above the current FY 2012 SAF estimate (see Table 5).

**Table 5**

### FY 2012-13 Administration Revenue Estimates

**(millions)**

| | Administration May 16, 2011 | |
|---|---|---|
| | **Amount** | **Growth** |
| General Fund - General Purpose | | |
| Baseline Revenue | $7,747.9 | 4.4% |
| Tax Cut Adjustments | ($328.2) | |
| Net Resources | $7,419.7 | -1.5% |
| School Aid Fund | | |
| Baseline Revenue | $11,553.3 | 2.3% |
| Tax Cut Adjustments | $37.5 | |
| Net Resources | $11,590.8 | 2.3% |
| Combined | | |
| Baseline Revenue | $19,301.1 | 3.1% |
| Tax Cut Adjustments | ($290.6) | |
| Net Resources | $19,010.5 | 0.8% |

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 2013. FY 2010 revenues are expected to be $8.9 billion below the limit, FY 2011 revenues $7.0 billion below the limit, FY 2012 revenues $7.3 billion below the limit, and FY 2013 revenues $8.5 billion below the limit (See Table 6).

**Table 6**

**Administration Revenue Limit Calculation**

**(millions)**

| | FY 2009<br>Final<br>June 2010 | FY 2010<br>Admin<br>May 2011 | FY 2011<br>Admin<br>May 2011 | FY 2012<br>Admin<br>May 2011 | FY 2013<br>Admin<br>May 2011 |
|---|---|---|---|---|---|
| **Revenue Subject to Limit** | $24,838.6 | $24,265.7 | $25,473.1 | $26,095.6 | $26,490.1 |
| **Revenue Limit** | **CY 2007** | **CY 2008** | **CY 2009** | **CY 2010** | **CY 2011** |
| Personal Income | $345,885 | $349,612 | $342,302 | $351,830 | $369,070 |
| Ratio | 9.49% | 9.49% | 9.49% | 9.49% | 9.49% |
| Revenue Limit | $32,824.5 | $33,178.2 | $32,484.5 | $33,388.7 | $35,024.7 |
| **Amount Under (Over) Limit** | **$7,985.9** | **$8,912.5** | **$7,011.3** | **$7,293.1** | **$8,534.6** |

## 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 5.4 percent in 2011. Thus, the formula has a pay-in for FY 2012 of $252.2 million (See Table 7). In 2012, real calendar year personal income for Michigan is forecast to increase 2.9 percent, so the formula calls for a pay-in of $67.8 million for FY 2013 (See Table 8).

**Table 7**

## Budget and Economic Stabilization Fund Calculation Based on CY 2011 Personal Income Growth Administration Calculation

| | CY 2010 | CY 2011 |
|---|---|---|
| Michigan Personal Income | $ 351,830 [1] | $ 369,070 [1] |
| less Transfer Payments | $ 81,535 [1] | $ 81,902 [1] |
| Income Net of Transfers | $ 270,295 | $ 287,168 |
| Detroit CPI | 2.045 [2] | 2.062 [3] |
| for 12 months ending | (June 2010) | (June 2011) |
| Real Adjusted Michigan Personal Income | $ 132,157 | $ 139,293 |
| Change in Real Adjusted Personal Income | | 5.4% |
| Excess over 2% | | 3.4% |
| GF-GP Revenue Fiscal Year 2010-2011 | | $ 7,417.6 |
| | | FY 2011-2012 |
| BSF Pay-In Calculated for FY 2012 | | $ 252.2 |

Notes:

[1] Personal Income and Transfer Payments, Administration Forecast, May 2011.

[2] Detroit Consumer Price Index, Average of 6 monthly values reported by BLS for each 12-month period.

[3] Detroit Consumer Price Index, Administration Forecast, May 2011.

**Table 8**

# Budget and Economic Stabilization Fund Calculation Based on CY 2012 Personal Income Growth Administration Calculation

| | CY 2011 | CY 2012 |
|---|---|---|
| Michigan Personal Income | $ 369,070 [1] | $ 383,833 [1] |
| less Transfer Payments | $ 81,902 [1] | $ 84,048 [1] |
| Income Net of Transfers | $ 287,168 | $ 299,785 |
| Detroit CPI | 2.062 [2] | 2.093 [2] |
| for 12 months ending | (June 2011) | (June 2012) |
| Real Adjusted Michigan Personal Income | $ 139,293 | $ 143,264 |
| Change in Real Adjusted Personal Income | | 2.9% |
| Excess over 2% | | 0.9% |
| GF-GP Revenue Fiscal Year 2011-2012 | | $ 7,532.7 |

| | FY 2012-2013 |
|---|---|
| BSF Pay-In Calculated for FY 2013 | $ 67.8 |

Notes:

[1] Personal Income and Transfer Payments, Administration Forecast, May 2011.

[2] Detroit Consumer Price Index, Administration Forecast, May 2011.

## 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 1.0222 (See Table 9). For FY 2013, the SAF revenue adjustment factor is calculated to be 1.0199 (See Table 10).

**Table 9**

## Administration School Aid Revenue Adjustment Factor

**For Fiscal Year 2012**

| | FY 2010 | FY 2011 | FY 2012 |
|---|---|---|---|
| Baseline SAF Revenue | $10,808.8 | $11,105.5 | $11,297.4 |
| Balance Sheet Adjustments | $8.1 | $2.5 | $29.9 |
| Net SAF Estimates | $10,816.8 | $11,108.0 | $11,327.3 |
| Subtotal Adjustments to FY 2012 Base | $21.8 | $27.4 | $0.0 |
| Baseline Revenue on a FY 2012 Base | $10,838.7 | $11,135.3 | $11,327.3 |

School Aid Fund Revenue Adjustment Calculation for FY 2012

| | | | | | |
|---|---|---|---|---|---|
| Sum of FY 2010 & FY 2011 | $10,838.7 | + | $11,135.3 | = | $21,974.0 |
| Sum of FY 2011 & FY 2012 | $11,135.3 | + | $11,327.3 | = | $22,462.7 |

| | |
|---|---|
| **FY 2012 Revenue Adjustment Factor** | **1.0222** |

Note: Factor is calculated off a FY 2012 base year.

**Table 10**

## Administration School Aid Revenue Adjustment Factor

**For Fiscal Year 2013**

| | FY 2011 | FY 2012 | FY 2013 |
|---|---|---|---|
| Baseline SAF Revenue | $11,105.5 | $11,297.4 | $11,553.3 |
| Balance Sheet Adjustments | $2.5 | $29.9 | $37.5 |
| Net SAF Estimates | $11,108.0 | $11,327.3 | $11,590.8 |
| Subtotal Adjustments to FY 2012 Base | $27.4 | $0.0 | ($7.7) |
| Baseline Revenue on a FY 2012 Base | $11,135.3 | $11,327.3 | $11,583.1 |

School Aid Fund Revenue Adjustment Calculation for FY 2013

| | | | | | |
|---|---|---|---|---|---|
| Sum of FY 2011 & FY 2012 | $11,135.3 | + | $11,327.3 | = | $22,462.7 |
| Sum of FY 2012 & FY 2013 | $11,327.3 | + | $11,583.1 | = | $22,910.5 |

| | |
|---|---|
| **FY 2013 Revenue Adjustment Factor** | **1.0199** |

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 12 and 13). Tax totals for the income, sales, use, tobacco and casino taxes for all funds are also included (See Table 14).

**Table 11**

## Administration General Fund General Purpose Revenue Detail

(millions)

| | FY 2011 | | FY 2012 | | FY 2013 | |
|---|---|---|---|---|---|---|
| | Amount | Growth | Amount | Growth | Amount | Growth |
| **GF-GP Tax Amounts** | | | | | | |
| Income Tax | $4,207.6 | 13.9% | $4,171.0 | -0.9% | $4,187.4 | 0.4% |
| Sales | $98.5 | 35.0% | $101.2 | 2.7% | $106.2 | 5.0% |
| Use | $774.3 | -5.4% | $835.9 | 8.0% | $860.9 | 3.0% |
| Cigarette | $194.0 | -3.4% | $189.8 | -2.2% | $185.0 | -2.5% |
| Beer & Wine | $52.0 | 2.0% | $53.0 | 1.9% | $53.5 | 0.9% |
| Liquor Specific | $38.5 | 1.3% | $39.5 | 2.6% | $40.0 | 1.3% |
| Single Business Tax | $0.0 | NA | $0.0 | NA | $0.0 | NA |
| Insurance Co. Premium | $271.6 | 5.5% | $280.0 | 3.1% | $287.0 | 2.5% |
| Michigan Business Tax | $1,251.1 | 10.3% | $1,326.4 | 6.0% | $1,163.9 | -12.3% |
| Telephone & Telegraph | $62.0 | 2.0% | $62.0 | 0.0% | $60.0 | -3.2% |
| Oil & Gas Severance | $68.0 | 16.2% | $72.0 | 5.9% | $79.3 | 10.1% |
| GF-GP Other Taxes | $17.0 | -29.5% | $20.0 | 17.6% | $24.0 | 20.0% |
| **Total GF-GP Taxes** | $7,034.7 | 9.7% | $7,150.8 | 1.7% | $7,047.2 | -1.4% |
| **GF-GP Non-Tax Revenue** | | | | | | |
| Federal Aid | $22.0 | 5.8% | $23.0 | 4.5% | $23.0 | 0.0% |
| From Local Agencies | $0.4 | 0.0% | $0.4 | 0.0% | $0.4 | 0.0% |
| From Services | $9.5 | 0.0% | $9.5 | 0.0% | $9.5 | 0.0% |
| From Licenses & Permits | $20.0 | 24.2% | $22.0 | 10.0% | $22.0 | 0.0% |
| Miscellaneous | $28.0 | 26.1% | $30.0 | 7.1% | $30.0 | 0.0% |
| Driver Responsibility Fees | $108.0 | 0.9% | $108.0 | 0.0% | $108.5 | 0.5% |
| Interfund Interest | ($15.0) | 33.9% | ($20.0) | 33.3% | ($30.0) | 50.0% |
| Liquor Purchase | $158.5 | 0.9% | $161.5 | 1.9% | $163.5 | 1.2% |
| Charitable Games | $11.5 | 1.8% | $11.5 | 0.0% | $11.5 | 0.0% |
| Transfer From Escheats | $40.0 | 2.8% | $36.0 | -10.0% | $34.0 | -5.6% |
| Other Non Tax | $0.0 | 0.0% | $0.0 | 0.0% | $0.0 | 0.0% |
| **Total Non Tax** | $382.9 | 2.9% | $381.9 | -0.3% | $372.4 | -2.5% |
| **Total GF-GP Revenue** | $7,417.6 | 9.3% | $7,532.7 | 1.6% | $7,419.7 | -1.5% |

**Table 12**

## Administration School Aid Fund Revenue Detail

| | FY 2011 | | FY 2012 | | FY 2013 | |
|---|---|---|---|---|---|---|
| | Amount | Growth | Amount | Growth | Amount | Growth |
| **School Aid Fund** | | | | | | |
| Income Tax | $1,952.1 | 6.3% | $2,011.2 | 3.0% | $2,078.0 | 3.3% |
| Sales Tax | $4,723.0 | 5.2% | $4,850.8 | 2.7% | $5,006.6 | 3.2% |
| Use Tax | $387.2 | -2.7% | $418.0 | 8.0% | $430.4 | 3.0% |
| Liquor Excise Tax | $38.5 | 2.4% | $39.5 | 2.6% | $40.0 | 1.3% |
| Cigarette & Tobacco | $374.6 | -4.7% | $366.3 | -2.2% | $353.2 | -3.6% |
| State Education Tax | $1,850.0 | -4.2% | $1,825.0 | -1.4% | $1,829.0 | 0.2% |
| Real Estate Transfer | $125.0 | 2.8% | $136.0 | 8.8% | $149.8 | 10.1% |
| Michigan Business Tax | $739.2 | 1.7% | $752.5 | 1.8% | $766.8 | 1.9% |
| Industrial Facilities Tax | $46.5 | -15.8% | $47.5 | 2.2% | $49.3 | 3.8% |
| Casino (45% of 18%) | $114.9 | 3.4% | $116.5 | 1.4% | $117.5 | 0.9% |
| Commercial Forest | $3.1 | 3.3% | $3.1 | 0.0% | $3.1 | 0.0% |
| Other Spec Taxes | $14.0 | -0.7% | $14.0 | 0.0% | $14.0 | 0.0% |
| **Subtotal Taxes** | $10,368.1 | 2.5% | $10,580.3 | 2.0% | $10,837.8 | 2.4% |
| Lottery Transfer | $740.0 | 5.5% | $747.0 | 0.9% | $753.0 | 0.8% |
| **Total SAF Revenue** | $11,108.1 | 2.7% | $11,327.3 | 2.0% | $11,590.8 | 2.3% |

**Table 13**

## Administration Major Tax Totals

| | FY 2011 | | FY 2012 | | FY 2013 | |
|---|---|---|---|---|---|---|
| | Amount | Growth | Amount | Growth | Amount | Growth |
| **Major Tax Totals (Includes all Funds)** | | | | | | |
| Income Tax | $6,160.5 | 11.4% | $6,183.2 | 0.4% | $6,266.4 | 1.3% |
| Sales Tax | $6,497.0 | 5.2% | $6,672.3 | 2.7% | $6,884.7 | 3.2% |
| Use Tax | $1,161.4 | -4.5% | $1,253.9 | 8.0% | $1,291.3 | 3.0% |
| Michigan Business Tax | $1,990.3 | 6.9% | $2,078.9 | 4.5% | $1,930.6 | -7.1% |
| Cigarette and Tobacco | $964.3 | -4.2% | $943.7 | -2.1% | $917.6 | -2.8% |
| Casino Tax | $114.9 | 3.4% | $116.5 | 1.4% | $117.5 | 0.9% |