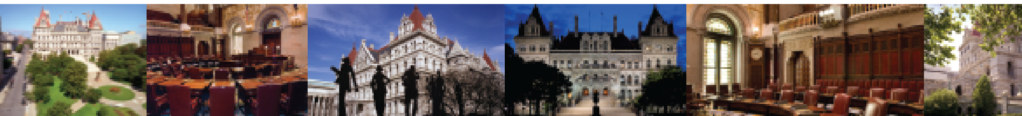
NEW YORK STATE



economic and revenue review

SFY 2014-15

GLOBAL INSIGHT

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FEBRUARY 2014

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Executive Summary

In conjunction with IHS Global Insight, the Senate Finance Committee reviewed and analyzed the economic and revenue projections contained within the Executive Budget for FY 2015. Based upon IHS Global Insight's February economic forecast, the Senate Finance Committee projects $265 million in General Fund revenues (inclusive of miscellaneous receipts) above the Executive Budget forecast for FY 2015. This amount is enhanced by the estimate for the remainder of FY 2014, which is $88 million above than the Executive estimate. Therefore, the two year General Fund receipts forecast is $353 million above the Executive forecast.

The Senate Finance Committee projects All Funds tax revenues to be $172 million above the Executive for FY 2015. This amount is enhanced by the estimate of tax revenues for the remainder of the FY 2014 which is $30 million above the Executive estimate. This results in a two year All Funds tax revenue forecast that is $202 million above the Executive projection.

The major variable impacting the economy in 2013 was federal fiscal policy. At the end of 2012, the economy was facing the "fiscal cliff" due to the pending expiration of the Bush era tax cuts, potential cuts in federal spending due to sequestration, and the imposition of the federal debt ceiling. However, this crisis

was averted with the passage of the American Taxpayer Relief Act (ATRA) which extended many, but not all, of the previous tax cuts, the postponement of sequestration until March, and the extension of the federal debt ceiling until May.

As the end of the federal fiscal year loomed, a political stalemate ensued which resulted in a federal government shutdown in October. With the threat of a default on the U.S. government bonds and a possible downgrade in the bond rating due to the potential imposition of the federal debt ceiling, a continuing resolution was passed to fund the federal government until January 2014 and suspend the debt ceiling until February 2014.

With the expiration of tax cuts, especially the payroll tax cut, economic growth started slow in the first quarter of the year, increasing by only 1.1 percent in the first quarter of the year. Even though any significant action on federal budget issues were consistently postponed during the course of the year, the economy was able to shrug off this uncertainty with real GDP growth accelerating in the second and third quarters, increasing by 2.5 and 4.1 percent, respectively. Even with the federal government shutdown fourth quarter GDP growth only slowed to 3.2 percent. This growth was also buoyed by an unplanned accumulation of inventories.

The stock market was also immune to federal government inaction. Within the first quarter of the year, the S&P 500 increased by over 12 percent from the first

quarter in 2012. The only issue that seemed to increase volatility in the financial markets was the uncertainty over the schedule of the tapering of quantitative easing and economic growth in emerging markets. By the end of 2013, the stock market realized double digit growth, the S&P 500 increasing by 19.1 percent.

With the passage of the Bipartisan Budget Agreement at the beginning of the year, the uncertainty over the federal budget was resolved. However, how to manage the approaching debt ceiling was left unresolved. The positive news relating to the declining unemployment rate and the declining number of initial unemployment claims points to stronger economic growth in 2014, with real GDP growth of 2.7 percent

Of risk to the economy in 2014 is, once again, uncertainty related to global economic growth. The financial markets were volatile in January as concerns with economic growth in the emerging markets reappeared. The slowdown in growth in these countries as well as the potential for the Eurozone to remain in recession could adversely impact economic growth, especially export growth.

The New York economy, as measured by real Gross State Product (GSP) grew at a faster rate than the national economy in 2013, increasing by 2.1 percent as compared to 1.9 percent real GDP growth. Part of this growth was due to the rebuilding effort after Super Storm Sandy. However, as growth is projected to

accelerate at the national level in 2014, growth in the New York economy is projected to slow, growing by 1.7 percent.

As outlined in the following tables, total All Funds tax collections are estimated at $69.4 billion in FY 2014. This estimate is $30 million above the Executive Budget forecast. For FY 2015, All Funds tax revenues are expected to increase by $1.55 billion to $71.0 billion or $172 million above the Executive's projections.

Estimates for the remainder of the current fiscal year reflect strong personal income tax collections due to strong stock market growth in 2013. These estimates also reflect strong estate tax and real estate tax collections resulting from the stronger housing market. IHS Global Insight's forecast of the overall national economy in 2013 is similar to the economic forecast presented by the Executive, with stronger stock market and business growth. The forecast for the State economy in 2014 are essentially not significantly different than that of the Executive.

Although the forecast exhibits stronger revenue growth for the upcoming fiscal year based on the projection of stronger economic growth, there are both upside and downside risks associated with the forecast, as with any forecast. As stated above, the strength of the Eurozone recovery and economic growth in the emerging markets will impact the volatility of the financial markets. How quickly

interest rates rise as a result of the Federal Reserve's tapering of its bond buying could negatively impact the housing market recovery.

On the positive side, increased employment and wage growth as a result of a more optimistic business outlook would have a positive impact on the State's personal income and sales tax revenues. Additional revenues realized by the State should support the State's reserve funds or be used to support taxpayer relief to make New York more competitive for job creation and more affordable for families.

FY 2014 General Fund Tax Collections

(Millions of Dollars)

	Senate Finance	Executive Budget	Variance
Personal Income Tax	**28,694**	**28,732**	**(38)**
Withholding	33,200	33,160	40
Estimated Payments	14,661	14,727	(66)
Final Returns	2,358	2,378	(20)
Other Payments	1,192	1,217	(25)
Gross Collections	51,411	51,482	(71)
Refunds	(8,634)	(8,654)	20
STAR	(3,389)	(3,389)	0
RBTF	(10,694)	(10,707)	13
User Taxes and Fees	**6,547**	**6,525**	**22**
Sales and Use	5,907	5,890	17
Cigarette/Tobacco	386	384	2
Alcoholic Beverage	254	251	3
Business Taxes	**6,048**	**5,988**	**60**
Corporate Franchise	3,127	3,078	49
Corporate Utilities	625	606	19
Insurance	1,276	1,299	(23)
Bank Tax	1,020	1,005	15
Other Taxes	**1,244**	**1,238**	**6**
Estate and Gift	1,226	1,220	6
Pari-mutuel Taxes	17	17	0
Other	1	1	0
Total General Fund Taxes	**42,533**	**42,483**	**50**
Miscellaneous Receipts	3,253	3,253	0
Transfers	15,942	15,904	38
Total General Fund Receipts	**61,728**	**61,653**	**88**

FY 2015 General Fund Tax Collections

(Millions of Dollars)

	Senate Finance	Executive Budget	Variance
Personal Income Tax	**29,756**	**29,669**	**87**
Withholding	34,854	35,049	(195)
Estimated Payments	14,296	14,274	22
Final Returns	2,421	2,316	105
Other Payments	1,307	1,261	46
Gross Collections	52,878	52,900	(22)
Refunds	(8,631)	(8,769)	138
STAR	(3,429)	(3,429)	0
RBTF	(11,062)	(11,033)	(29)
User Taxes and Fees	**6,795**	**6,714**	**81**
Sales and Use	6,147	6,069	78
Cigarette/Tobacco	390	389	1
Alcoholic Beverage	258	256	2
Business Taxes	**5,454**	**5,612**	**(158)**
Corporate Franchise	2,367	2,406	(39)
Corporate Utilities	610	622	(12)
Insurance	1,333	1,375	(42)
Bank Tax	1,144	1,209	(65)
Other Taxes	**1,203**	**1,192**	**11**
Estate and Gift	1,186	1,175	11
Pari-mutuel Taxes	17	17	0
Other	0	0	0
Total General Fund Taxes	**43,208**	**43,187**	**21**
Miscellaneous Receipts	3,857	3,857	0
Transfers	16,715	16,471	244
Total General Fund Receipts	**63,780**	**63,515**	**265**

FY 2014 All Funds Tax Collections

(Millions of Dollars)

	Senate Finance	Executive Budget	Variance
Personal Income Tax	**42,777**	**42,828**	**(51)**
Withholding	33,200	33,160	40
Estimated Payments	14,661	14,727	(66)
Final Returns	2,358	2,378	(20)
Other Payments	1,192	1,217	(25)
Gross Collections	51,411	51,482	(71)
Refunds	(8,634)	(8,654)	20
User Taxes and Fees	**15,129**	**15,107**	**22**
Sales and Use	12,639	12,595	44
Auto Rental Tax	114	114	0
Cigarette/Tobacco	1,420	1,421	(1)
Motor Fuel Tax	482	500	(18)
Highway Use Tax	137	140	(3)
Alcoholic Beverage	254	251	3
MTA Taxicab	83	86	(3)
Business Taxes	**8,234**	**8,186**	**47**
Corporate Franchise	3,614	3,561	53
Corporate Utilities	806	794	12
Insurance	1,426	1,457	(31)
Bank Tax	1,199	1,189	10
Petroleum Business	1,188	1,185	3
Other Taxes	**2,111**	**2,071**	**40**
Real Estate Transfer	867	833	34
Estate and Gift	1,226	1,220	6
Pari-mutuel Taxes	17	17	0
Other	1	1	0
Payroll Tax	**1,194**	**1,222**	**(28)**
Total All Funds Taxes	**69,444**	**69,414**	**30**

FY 2015 All Funds Tax Collections

(Millions of Dollars)

	Senate Finance	Executive Budget	Variance
Personal Income Tax	**44,246**	**44,131**	**115**
Withholding	34,854	35,049	(195)
Estimated Payments	14,296	14,274	22
Final Returns	2,421	2,316	105
Other Payments	1,307	1,261	46
Gross Collections	52,878	52,900	(22)
Refunds	(8,631)	(8,769)	138
User Taxes and Fees	**15,623**	**15,480**	**(143)**
Sales and Use	13,155	12,988	167
Auto Rental Tax	116	119	(3)
Cigarette/Tobacco	1,379	1,374	5
Motor Fuel Tax	479	502	(23)
Highway Use Tax	140	141	(1)
Alcoholic Beverage	258	256	2
MTA Taxicab	97	100	(3)
Business Taxes	**7,639**	**7,835**	**(196)**
Corporate Franchise	2,838	2,893	(55)
Corporate Utilities	798	814	(16)
Insurance	1,494	1,541	(47)
Bank Tax	1,342	1,418	(76)
Petroleum Business	1,167	1,169	(2)
Other Taxes	**2,213**	**2,065**	**148**
Real Estate Transfer	1,010	873	137
Estate and Gift	1,186	1,175	11
Pari-mutuel Taxes	17	17	0
Other	0	0	0
Payroll Tax	**1,245**	**1,283**	**(38)**
Total All Funds Taxes	**70,966**	**70,794**	**172**

United States Economic Outlook

(Dollar Figures in Billions of Dollars)

	2013	2014	2015	2016
GDP	$16,803	$17,509	$18,393	$19,329
Percent Change	3.4	4.2	5.0	5.1
Real GDP	$15,767	$16,196	$16,726	$17,293
Percent Change	1.9	2.7	3.3	3.4
Consumption Expenditures	$10,728	$11,016	$11,354	$11,717
2009 Dollars, Percent Change	2.0	2.7	3.1	3.2
Government Expenditures	$2,898	$2,883	$2,897	$2,905
2009 Dollars, Percent Change	(2.2)	(0.5)	0.5	0.3
Investment Expenditures	$2,568	$2,709	$2,958	$3,173
2009 Dollars, Percent Change	5.4%	5.5%	9.2%	7.3%
Change in Inventories	$85	$63	$63	$51
2009 Dollars, Percent Change	48.2	(26.2)	0.3%	(18.6)
Exports	$2,012	$2,111	$2,205	$2,335
2009 Dollars, Percent Change	2.8	4.9	4.5	5.9
Imports	$2,422	$2,503	$2,661	$2,805
2009 Dollars, Percent Change	1.4	3.4	6.3	5.4
CPI - All Urban, Percent Change	1.5	1.3	1.7	1.8
CPI - Core, Percent Change	1.8	1.7	2.0	1.9
Pretax Corporate Profits	$2,109	$2,245	$2,346	$2,428
Percent Change	5.0	6.4	4.5	3.5
After-tax Corporate Profits	$1,851	$2,035	$1,985	$1,960
Percent Change	5.5	10.0	(2.5)	(1.3)
Personal Income				
Percent Change	2.8	4.0	5.1	5.4
Wages and Salaries				
Percent Change	2.9	4.0	5.3	5.4
Nonagricultural Employment, Millions	136	138	141	144
Percent Change, Seasonally Adjusted	1.6	1.6	2.2	2.1
Unemployment Rate	7.4	6.5	5.8	5.4
Interest Rates				
T-Bill Rate, 3-Month	0.06	0.06	0.40	2.18
T-Note Rate, 10-Year	2.35	2.96	3.31	3.89
T-Bond Rate, 30-Year	3.98	4.58	4.99	5.76
Standard and Poor's 500 Stock Index				
Percent Change	19.1	11.7	3.9	4.3

Source: IHS Global Insight US Macroeconomic Forecast: February 2014

The National Economy

At the end of 2012, unforeseen natural events and shocks caused by the actions of man, or inactions as was the case, injected a great deal of uncertainty into the economy. The Midwest was rebounding from extreme drought; the South was recovering from the impact of Hurricane Isaac; and the Northeast was picking up the pieces from Super Storm Sandy. There was also the potential of falling off the "fiscal cliff" due to the pending expiration of the Bush era tax cuts, potential cuts in federal spending due to sequestration, and the imposition of the federal debt ceiling.

The passage of the American Taxpayer Relief Act (ATRA) at the beginning of January 2013 averted the fiscal cliff through the extension of many, but not all, of the previous tax cuts. Of particular note was the expiration of the payroll tax cut, enacted in 2010, resulting in a tax increase for most workers. However, ATRA did not address the issue of budget sequestration and the debt ceiling, instead these issues were postponed until March and May, respectively.

On March 1, with no action by the federal government, the sequestration went into effect. As a result, $85 billion in spending authority of the federal government was eliminated. However, as the sequestration applied to the spending authority and not to actual spending, the reduction in federal government expenditures in 2013 would be less.

Furthermore, by the end of March, the Federal government was facing the possibility of a government shutdown due to the expiration of the continuing resolution to fund the government. The shutdown was averted but, a new continuing resolution was enacted which only funded the government through the end of the federal fiscal year. In addition, the federal debt ceiling was suspended until August.

As the end of the federal fiscal year loomed, political deadlock ensued which resulted in a federal government shutdown in October. With the threat of a default on U.S. government bonds and a possible downgrade in the bond rating due to the potential imposition of the federal debt ceiling, a continuing resolution was passed to fund the federal government until January 2014 and suspend the debt ceiling until February 2014. However, the sequestration was allowed to stay in place.

In December, eager to avoid the public backlash from another government shutdown, a budget deal for the remainder of the federal fiscal year was made. Under this agreement, a portion of the spending cuts under sequestration were eliminated and the extended unemployment benefits were allowed to expire.

Even with the uncertainty as to the direction of fiscal and monetary policy from the Federal government, any resulting shocks to the economy were temporary. While the stock market exhibited volatility in the weeks surrounding the political

stalemate, it reached record high levels and exhibited double digit growth throughout the year.

The consumer also seemed unphased by the events in Washington, even the payroll tax reduction. Consumption growth was strong in the first quarter of the year and ended strong as well as employment growth strengthened and income increased.

ECONOMIC GROWTH

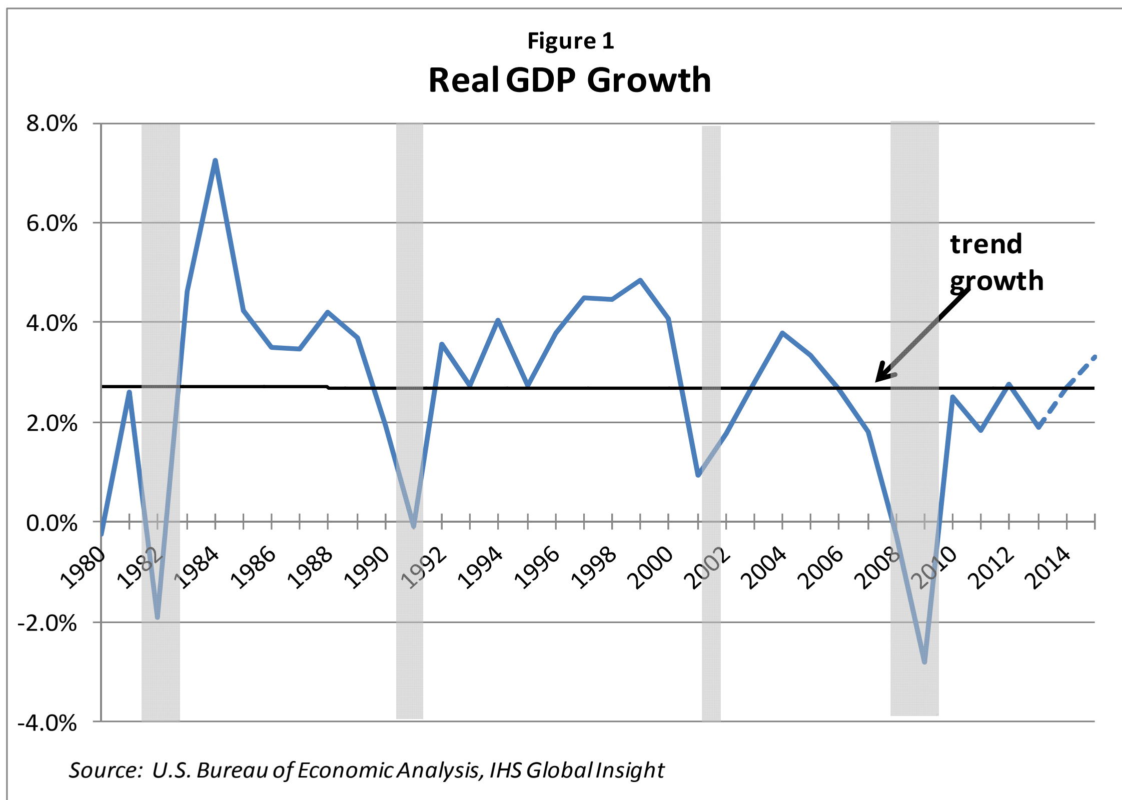
The size of a country's economy is measured by its Gross Domestic Product (GDP), the total amount of output of goods and services produced in the country. The percentage change in GDP shows whether the economy is growing or contracting as well as whether the economy is going into recession, in recovery, or expanding.

Although a variety of factors are used to determine when an economy goes into recession, the most simplistic explanation is a decline in GDP for at least two consecutive quarters. When GDP turns positive, the economy is considered to be in recovery. As the economy becomes stronger and grows at a faster pace, usually in excess of its long term trend growth rate, it is then in the expansion phase.

The main factors driving economic growth are participation in the labor market, investments in capital, and the resulting productivity from the former two. When

an economy is in the recovery phase, these factors are either not growing at the same rate or one may be growing while the others decline or remain stagnant. The speed by which an economy transitions from the recovery phase to the expansion phase depends on all of these factors working efficiently and growing in tandem.

The recovery and expansion phases from the last four recessions are shown in figure one on the next page (the recessions represented by the shaded areas). The recession of 1981 was actually the second half of a double dip recession; the first downturn lasting from January to July 1980.



As shown, the economic recoveries from the 1981 recession and the 1992 recession were short in duration; economic growth in excess of the long term trend

growth rate was exceeded within the first year after the economy hit its trough. The recovery from the 2001 recession lasted longer, not reaching the expansion phase until 2004.

However, the recovery from the Great Recession has been much slower than the last three recessions; 2013 marked the fourth year the economy was in the recovery stage. As the figure one shows, real GDP growth has been erratic during the recovery, hovering at or below the long term growth rate. In 2013, real GDP growth decelerated from growth of 2.5 percent in 2012 to 1.9 percent. A primary reason for this deceleration was the advertent and inadvertent tightening of federal fiscal policy represented by the expiration of the reduction in payroll tax reduction, the sequestration, and government shutdown.

In 2014, the national economy will be in its fifth year of recovery. As some of the governmental uncertainty dissipates, real GDP growth is projected to accelerate once again, growing by 2.7 percent in 2014, at the long term trend growth rate.

LABOR MARKET

As stated above, one of the factors that contributes to an expanding economy is a strong labor market. While there is always some level of unemployment in any economy (the full employment unemployment rate varies between four and six percent), the economy needs a labor force that is able, available and willing to find employment. Growth in the labor market serves two purposes in the

economy. First, wages and salaries earned by workers fuel consumption. Second, the productivity of the workforce increases output, allowing businesses to expand.

Employment Growth

When an economy contracts and goes into recession, either consumers are reducing their demand for goods and services, businesses are not expanding, or a combination of both. This results in a reduction in the need for additional employment and the possibility of layoffs. As shown in figure two, with each

recession, there was a decline in employment, however, the growth in employment after the end of each recession was much different.

As the recessions of 1981 and 1991 ended, growth in employment resumed within the following year. As shown in the chart for GDP growth, the national economy recovered quickly and was soon in the expansion phase. Although the length of the recession in 2001 was shorter in duration than the previous two recessions, the economy experienced two years of declining employment with job growth returning two years after the end of the recession. As a result, the recovery from the 2001 recession was nicknamed the jobless recovery, resulting in a slow recovery of the national economy overall. Note that even as the national economy entered into the expansion phase after the 2001 recession, employment growth was not as strong as the previous two economic expansions; increasing by less than two percent.

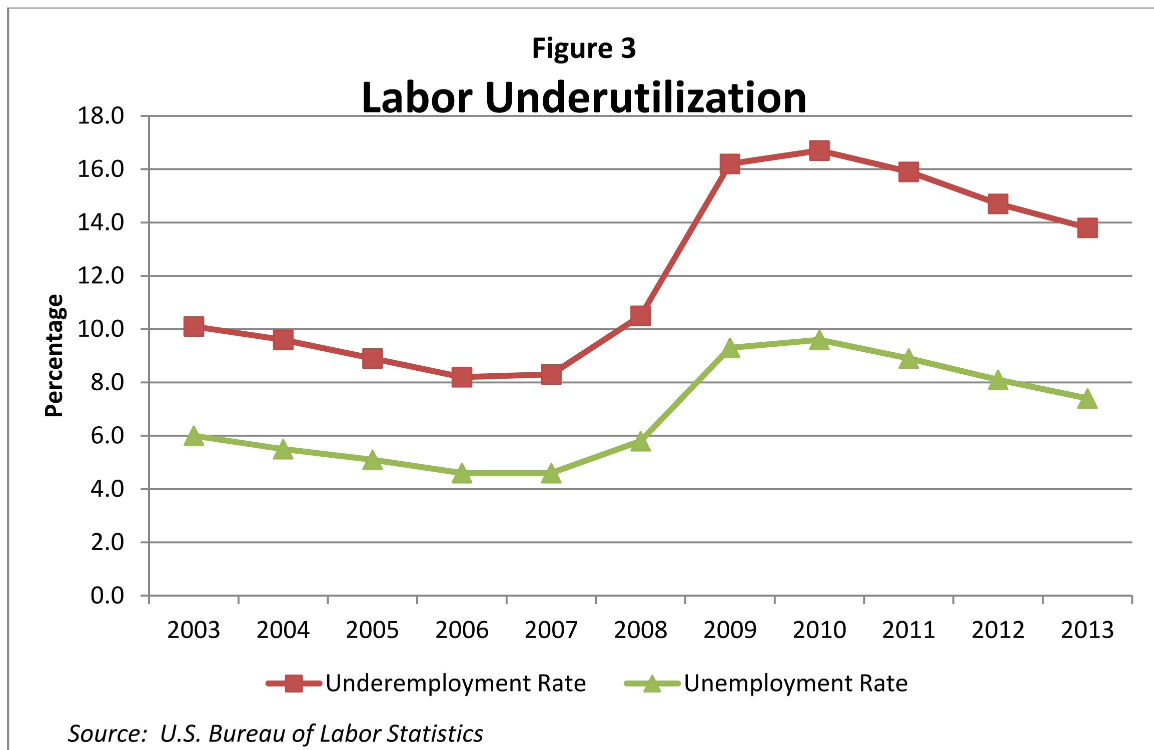
The recovery from the Great Recession has been a jobless recovery as well, employment growth only returning in 2011. Similar to the previous recovery, employment growth has remained at less than two percent, growth of 1.6 percent in 2013. Although job growth is projected to continue in 2014, the pace of such growth is projected to remain at 1.6 percent.

Unemployment and Underemployment

In order to have economic expansion, there needs to be a labor force that is willing, able and available to find employment. The unemployment rate is a percentage of the labor force that is unemployed. Under this concept, the definition of unemployed is the workers in the labor force without jobs and who have searched for employment in the last four weeks. Underemployment, or underutilization, is the percentage of the workforce that is:

- unemployed workers – those counted in the unemployment rate,
- discouraged workers – those not in the labor force who want and are available for work, but have not searched for work in the prior four weeks since they believe there are no jobs available; and
- marginally attached workers – those who work part time but want to work full time or those who work part time for economic reasons.[1]

[1] Alternative Measures of Labor Underutilization for States, 2013 Annual Averages, U.S. Bureau of Labor Statistics



Similar to the concept that an economy at full employment includes a certain level of unemployment, the level of underemployment in the labor market will exceed the level of unemployment. In order for an economy to grow in excess of its long term growth rate, not only does employment need to grow but, the gap between the unemployment rate and the underemployment rate should narrow as the labor force is working to its fullest potential.

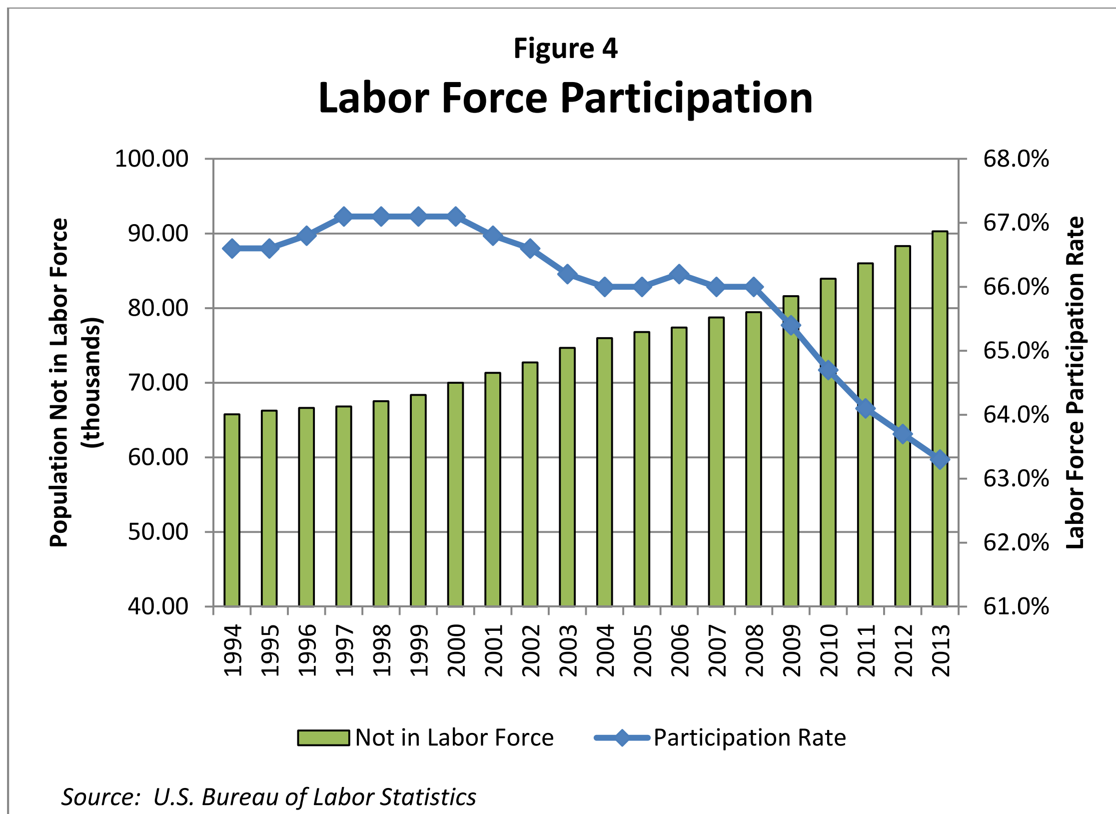
As the national economy was recovering from the 2001 recession, the difference between the percentage of the labor force unemployed and underemployed averaged 390 basis points. However, as shown in figure three, this gap widened to approximately 700 basis points during the recession, and has not narrowed through the current recovery. As a result, although employment was growing, either those

jobs being created were only part-time jobs or the growth was not significant enough to reduce the number of discouraged workers in the labor market.

With the projected increase in employment of 1.6 percent, the unemployment rate is projected to continue to decline in 2014, decreasing from 7.4 percent in 2013 to 6.5 percent. However, whether or not this employment growth will reduce the gap between the unemployment rate and the underemployment rate is unclear.

Labor Force Participation

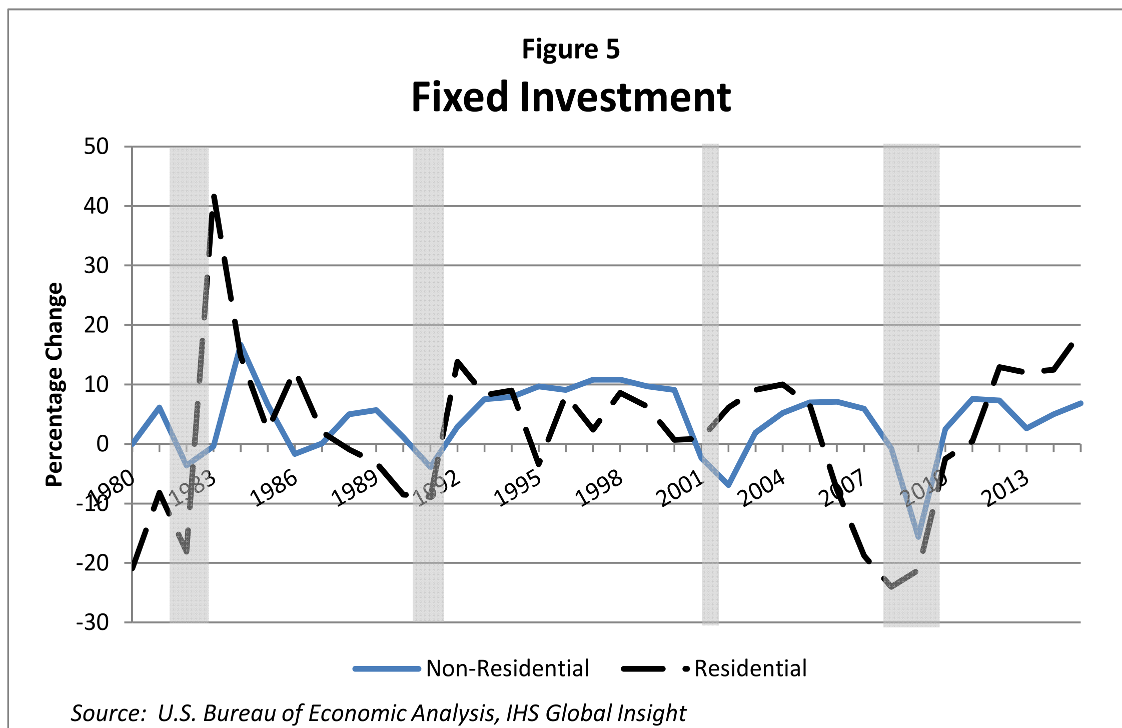
The labor force is the total employed and unemployed population. The labor force participation rate is the labor force as a percentage of the civilian population. As a result, the unemployment rate does not encompass the segment of the population that is not counted as part of the labor force. This segment of the population would include retirees, students, and workers who are underemployed, and those workers who have dropped out of the labor market altogether. Figure four shows the average annual population aged 16 and over not in the labor force as compared to the average annual labor market participation rate. As shown, the labor market participation rate has been declining since the Great Recession began at the end of 2007. Similarly, the population that is not in the labor force has steadily increased.



When looking at the labor force participation rate based on age, one would assume the increase in the population not in the labor force would be caused by a larger decline in the participation rate for the "baby boomer" generation – the population aged 55 and older – due to retirements. Similarly, the number of baby boomers not in the labor force should naturally increase as more retire. However, over the past ten years, while the population not in the labor force has increased, labor force participation for baby boomers has also increased. The increase in the population not in the labor force has been caused by an increase of those aged 25 to 54. In addition, those aged 25 to 54 saw a decline in their participation rate as well.

CAPITAL INVESTMENT

The other area that requires consistent growth in order to transition an economy from the recovery stage to expansion is capital investment – both non-residential and residential. When a business makes capital investments, whether in its facility or its equipment, it is usually doing so to increase its output and remain competitive in the marketplace. This, in turn, leads to increased jobs and increased profits for the company. Residential investment, whether the construction of a new home or an addition to an existing home, provides additional construction jobs and increased consumption of durable goods.



Unlike the labor market, which experienced fairly consistent growth rates after the 1981 recession, growth in both residential and non-residential fixed capital investments was erratic until the 1990 recession, as shown in figure five. Similar

to the labor growth that was realized between 1991 and 2001, growth in non-residential fixed investments remained fairly stable during the economic expansion. Growth in both of these areas allowed a fairly rapid recovery from the recession and a prolonged expansion. With the deflating of the high technology bubble in 2000, both non-residential fixed investments and residential investments declined and the economy went into recession in 2001.

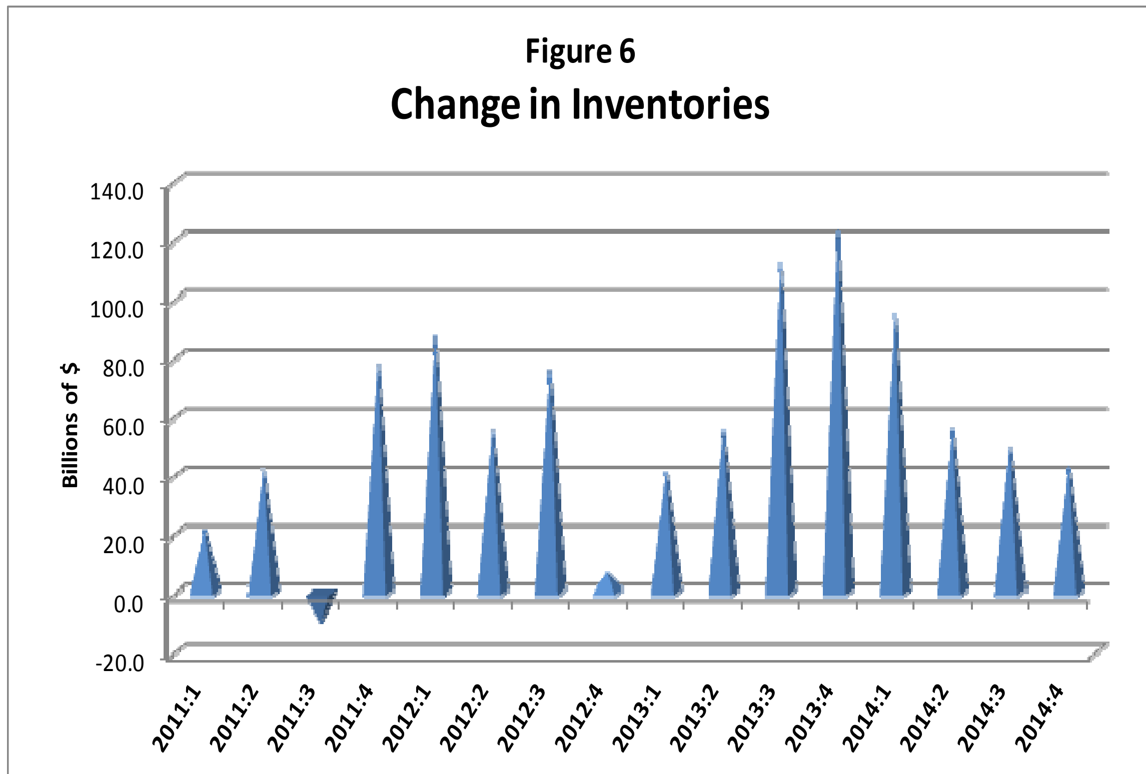
During the recovery from the 2001 recession, residential investments benefitted from the then low interest rate environment which allowed for faster growth. Due to shocks to the economy, primarily the corporate accounting scandals, which caused stock market declines, businesses were hesitant to increase their capital investments. Such investments started to grow as federal legislation was enacted to allow companies to accelerate their depreciation costs, commonly known as bonus depreciation. However, the authorization for the use of bonus depreciation expired in 2008.

In order to boost capital investments at the end of the Great Recession, the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act once again enacted bonus depreciation, increasing the amount from fifty percent to one hundred percent for the 2011 tax year. Bonus depreciation was then decreased to fifty percent in 2012. As a result, non-residential capital investments nearly returned to their pre-recession growth rates.

As part of the American Taxpayer Relief Act, bonus depreciation was extended once more but, was only extended for one year. With the extension of bonus depreciation for only one year, businesses were left with an investment decision to make in 2013, take advantage of the bonus depreciation rules or postpone such investments until the economy was stronger. As a result, growth in non-residential fixed investments slowed to 2.6 percent in 2013, from 7.3 percent in 2012. As the economy is projected to show stronger growth, non-residential fixed investments are projected to grow in 2014 as well, increasing by 5.0 percent, despite the expiration of bonus depreciation.

Inventories

Over the course of the current recovery, businesses were hesitant to make significant expenditures or to ramp up production even though their profits were growing. During the recession, businesses went through a period of inventory decumulation since consumer demand for their goods and services declined dramatically. When the economy started to grow again, businesses found themselves with depleted inventories and, as a result, needed to ramp up production.



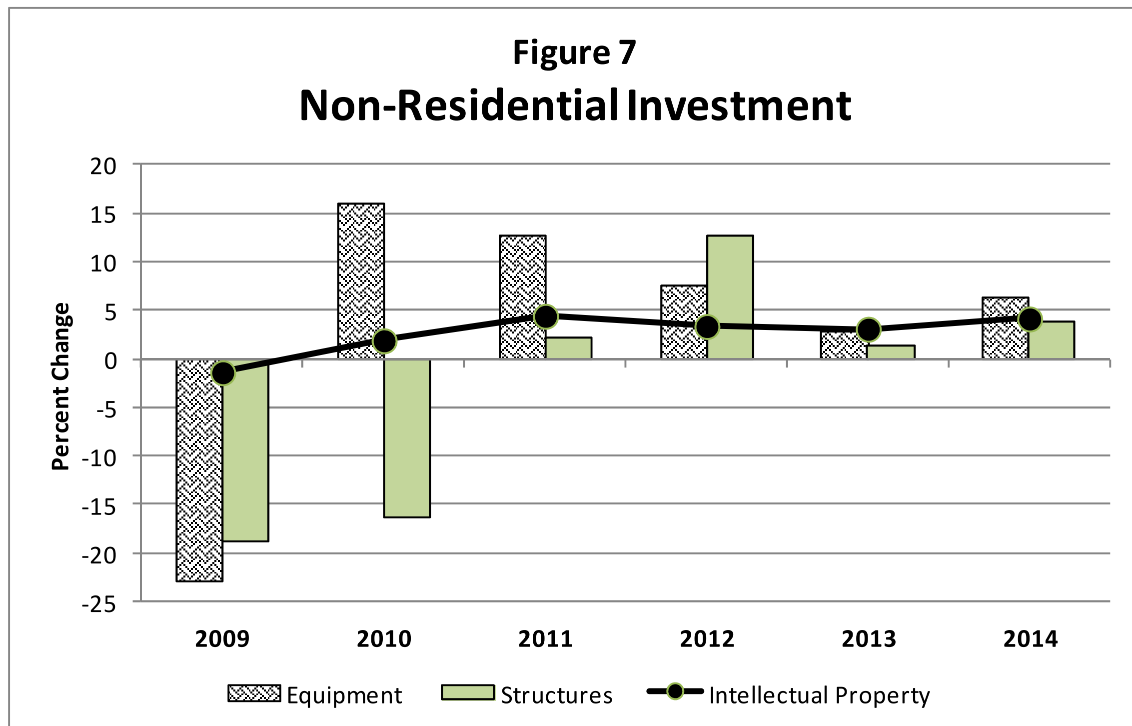
When economic growth started to slow at the end of 2010, businesses slowed down their production and their inventory growth. With the volatility in the economy over the course of 2011, inventory decumulation once again returned in the third quarter. However, unlike the significant inventory decumulation over the course of 2009, this business pessimism did not last long. Businesses were realizing increased sales in the fourth quarter and, as a result, had to increase their inventories to meet the demand.

Inventories continued to increase through the third quarter of 2012. A large part of this inventory accumulation was from the automotive industry. Due to declining wage and income growth over the course of the recession, people postponed large purchases, such as replacing their vehicles. As the economy

recovered and income growth occurred, people started purchasing again. This pent up demand for automobiles resulted in significant inventory growth. However, the drought in the Midwest resulted in a decumulation in farm inventories throughout 2012, muting inventory growth especially in the fourth quarter.

Inventory growth rebounded in 2013 as farmers replenished their stocks. However, the largest inventory accumulation was realized in the non-farm sector, especially in wholesale trade. The reason for this large inventory accumulation in the latter part of the year is unclear. As a result, inventories are projected to grow at a much slower rate in 2014.

Non-residential Fixed Investment



In July 2013, the Bureau of Economic Analysis (BEA) made comprehensive revisions to the National Income and Product Accounts. One of the revisions was to the components of non-residential fixed investment. Prior to these revisions, non-residential fixed investments were comprised of: (1) structures and (2) equipment and software. The revision created three categories of non-residential fixed investment: structures, equipment, and intellectual property. Where previously software was combined with equipment, it is now part of intellectual property. Intellectual property also includes: research and development and entertainment, literature, and artistic originals. Prior to the revision, research and development was considered an expense rather than an investment with a return.

Similar to the events of the previous economic recovery, businesses were holding on to their cash and making do with their current equipment and facilities. In addition, lackluster consumer demand and tight credit markets did not provide any incentives for investment.

Equipment purchases by businesses comprise a majority of the investment spending due the changes in technology and the shorter useful life of equipment. Although businesses need to maintain and renovate their facilities, capital investments in facilities have a much longer life.

When businesses were faced with the need to rebuild their inventories over the course of 2010, they were faced with the need to upgrade or replace their

equipment and software in order to support their increased production. This accumulation in inventories resulted in an increase in equipment spending of almost fifteen percent.

As mentioned previously, various pieces of federal legislation from 2009 to 2012 allowed for bonus depreciation, increasing capital investments by businesses. This bonus depreciation primarily affected purchases of equipment. As a result, growth in equipment investments were strong in 2010 and 2011.

Bonus depreciation was reduced from one hundred percent to fifty percent in 2012, resulting in a slowdown in the growth of equipment purchases from 12.7 percent to 7.6 percent. In addition, most of this growth was achieved in the final quarter of 2012 due to the uncertainty surrounding the "fiscal cliff" and whether bonus depreciation would be extended.

Even though bonus deprecation was extended as part of the American Taxpayer Relief Act in 2013, it was only extended for one year. With the spin-up in equipment purchases in the fourth quarter of 2012 and only a year extension on bonus depreciation, growth in equipment purchases slowed further, growing by only 2.9 percent. The fourth quarter of 2013, however, did see an increase in equipment purchases as some businesses took advantage of the bonus depreciation before it expired.

With bonus depreciation expiring at the end of 2013, equipment investments saw a minor spin up in the fourth quarter of 2013. However, the fourth quarter spin up will have little impact on equipment investment in 2014. With the projected stronger economic growth, these investments are projected to increase by 6.3 percent.

As previously stated, facilities and their associated capital improvements have a much longer useful life than equipment. Prior to the recession, when businesses were expanding, they had a need for additional facility space as well as renovations to their operations. As consumer demand for their goods and services declined and the workforce shrunk, there was no need for expanded facilities. Although interest rates were still low in 2010, the economy had not recovered enough to warrant additional investment in structures; resulting in continued declines in 2010.

In 2011, there was a turnaround in non-residential construction after two years of declines, with growth of 2.1 percent. This growth is mainly attributable to an increase in construction for the mining and petroleum sector. As a consequence of increased oil prices, the amount of drilling increased, resulting in this construction increase. All other businesses were content with the facilities they had.

Non-residential construction grew at a significantly stronger pace in 2012, growing by 12.7 percent. Unlike 2011, where all the construction growth was

concentrated in one business sector, all business sectors increased investments in their facilities in 2012, the largest growth coming from the power and communications and manufacturing sectors.

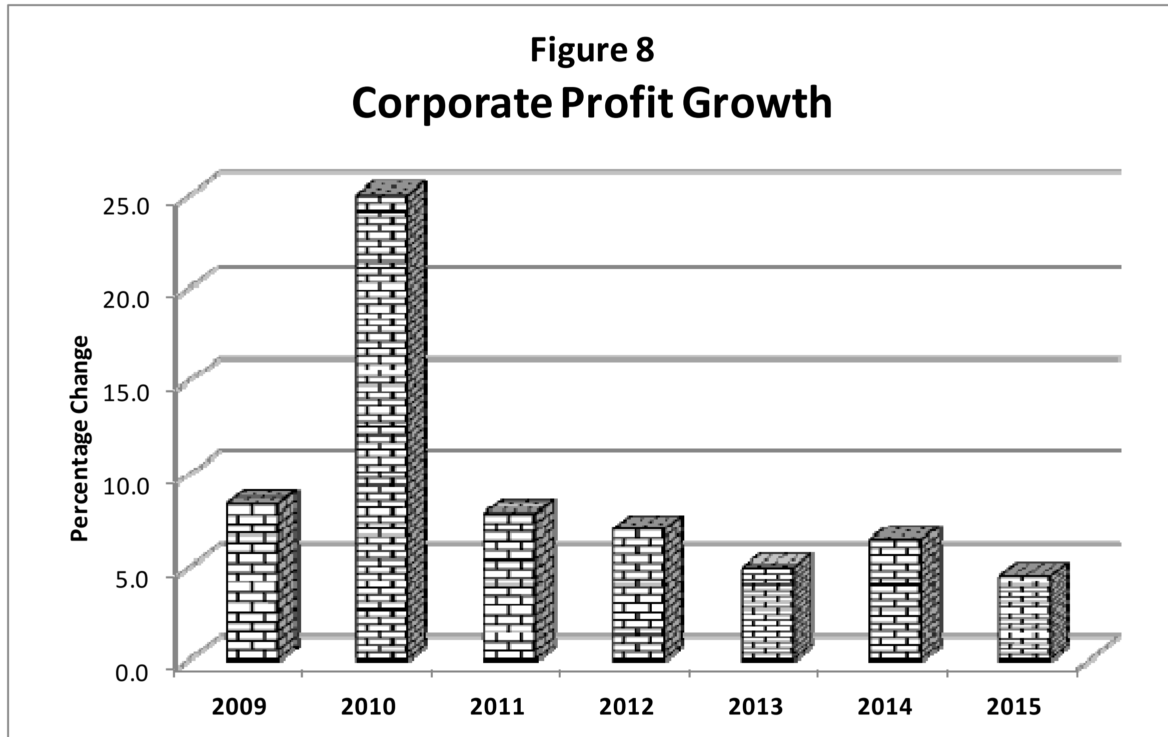
Besides the longer useful life of business structures and facilities as compared to equipment, the lead time for when the investment in structures results in increased production is much longer than equipment as well. Equipment can be put to use in production within weeks, or even days, of its purchase. The timing for structures can be years, depending on the size of the project. As a result, the growth of business investment in structures slowed in 2013, increasing by only 1.3 percent.

With the strong growth in investment in power and communications structures abating in 2013 and 2014, continued growth in the commercial and health care sector and the mining and petroleum sector outweighed this slowdown. As a result, overall business investment in structures is projected to continue to grow, increasing by 3.8 percent.

Corporate Profits

As the financial markets were the drivers of overall corporate profit decline in 2008, they were also a driver of corporate profit growth in 2009. The growth in the stock market and the infusion of the federal funds in the form of the TARP positively impacted their bottom lines. As the recession ended and the economy began to recover, other businesses became more profitable. In addition, since

businesses were realizing increased productivity with less workers, their profits increased significantly in 2010; corporate profits increased by approximately 25 percent.



As stock market volatility ensued in 2011, corporate profits weakened. Corporate profits for the non-financial sector increased by over ten percent in 2011. However, this growth was tempered by the weakness in financial sector profits. Overall, total corporate profits grew by 7.9 percent in 2011.

Corporate profit growth, as shown in figure eight, is the change in business' economic profits. Economic profits are defined as before tax profits adjusted by the inventory valuation adjustment and the capital consumption adjustment. The capital consumption adjustment reconciles the depreciation a business claims for

tax purposes with the depreciation associated with the use of the capital equipment for production of the business' goods during the year. This adjustment fluctuated in recent years due to bonus depreciation.

As machinery is used during the course of production, the value of that machinery diminishes as a result of that use. Businesses are allowed to claim such diminished value, or depreciation, as an expense, reducing their income for tax purposes. The amount of depreciation a business can claim as an expense depends upon the type of machinery.

In order to induce businesses to increase their capital investments, especially in times of economic weakness, bonus depreciation was used as a fiscal policy tool. When the business purchased a new piece of machinery and put it into production, the business was allowed to deduct an additional depreciation expense in the year of purchase, essentially accelerating the depreciation expense into the first year.

Prior to 2012, businesses were allowed to claim 100 percent of the cost of machinery as bonus depreciation. The amount of bonus depreciation was then reduced to fifty percent in 2012. As bonus depreciation was reduced, the impact of the capital consumption adjustment decreased corporate profits since businesses were no longer allowed to claim the full depreciation as an expense. Growth in corporate profits continued in 2012, but, at a slower pace of 7.0 percent due to the larger capital consumption adjustment.

Although the stock market grew to record levels in 2013, there was still volatility in the market due to the uncertainty coming out of Washington. In addition, the slow economic growth served to dampen corporate profits as well, increasing by 5.0 percent.

Similar to the impact on the capital consumption adjustment in 2012 with the reduction in bonus depreciation to fifty percent, the expiration of bonus depreciation at the end of 2013 is projected to increase the adjustment in 2014. However, the stronger projected economic growth will help increase corporate profits by 6.4 percent in 2014.

GOVERNMENT

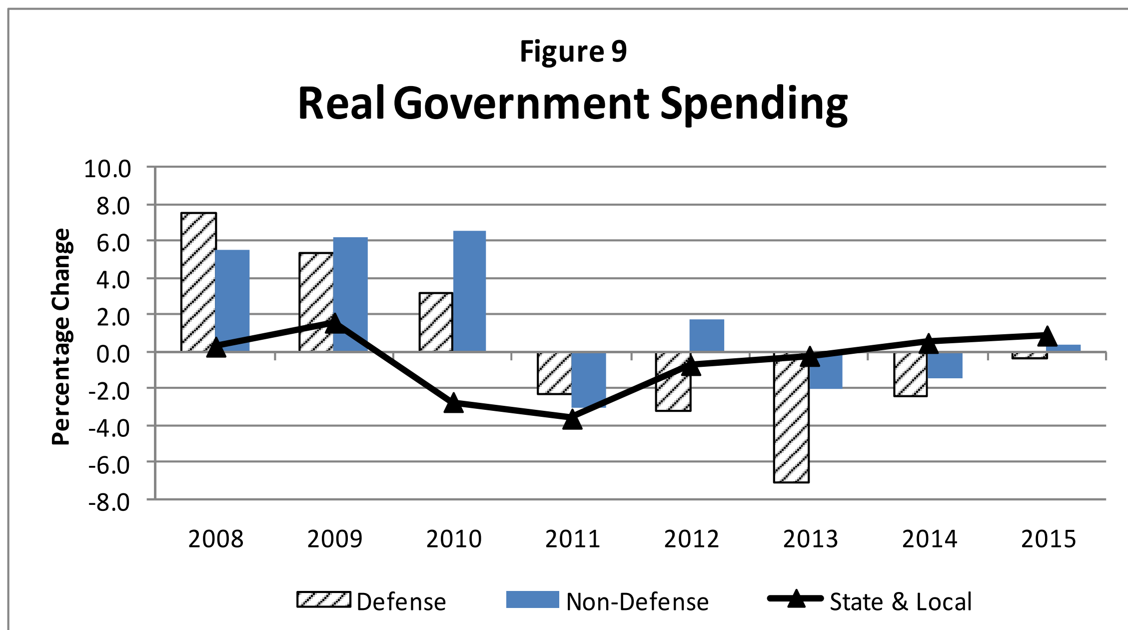
FISCAL POLICY

Government policies are employed in an attempt to influence the overall economy, whether it be to stimulate spending or to control inflation. Although the economy is cyclical in nature, the government tries to ensure that the economy does not expand too quickly –causing inflation to spin out of control – or to slow down too quickly –resulting in a recession. There are two mechanisms by which government intervenes in the economy – fiscal policy and monetary policy.

Fiscal policy entails directing the economy through tax policy or through government spending. When the Federal government, or state and local

governments, lower taxes, more money is put into the hands of the consumers and businesses to spend as they wish.

For 2013, the focus of the Federal government was on fiscal policy tightening, whether planned or unplanned. At the beginning of 2013, taxpayers were faced with tax increases as the result of the expiration of the payroll tax cut and the new Medicare taxes on investment income. In March, federal government spending was decreased due to the imposition of the spending sequestration which eliminated $85 billion in spending authority (approximately $66 billion in actual spending). In October, the federal government was shut down 16 days due to political deadlock relating to funding the government and suspending the debt ceiling, resulting in an inadvertent decrease in government spending in the fourth quarter.



As shown in figure 9, over the course of the recession, non-defense spending, which includes entitlement spending grew in both 2009 and 2010 as a result of increased spending on Social Security and healthcare as well as increased funding to support state and local government spending through the American Recovery and Reinvestment Act (ARRA). However, as the ARRA provisions expired and concerns over the budget deficit came to the forefront, non-defense spending declined in 2011.

In addition, defense spending was also declining. With the withdrawal of troops from Iraq in 2011, defense spending declined by 2.3 percent. As the operations in Afghanistan also abated, defense spending further declined by 3.2 percent in 2012.

As stated above, the budget sequestration was imposed in March and was in place until the beginning of 2014 when the new budget agreement was signed into law. The federal government shutdown also had an impact on 2013 spending, resulting in a decline in both defense and non-defense spending of 7.0 percent and 2.0 percent, respectively.

Although the budget agreement ended the sequestration, it also included spending cuts. In addition, the emergency unemployment benefits were allowed to expire. This resulted in a continued decrease in non-defense federal spending of 1.4 percent. With the final withdrawal of troops from Afghanistan set for 2014, defense spending is projected to decrease by an additional 2.4 percent.

Although spending by state and local governments accounts for a larger share of GDP than federal government spending, its contribution to economic growth varies widely due to their resources being more limited than those at the federal level. Primarily, state and local governments cannot deficit spend like the federal government.

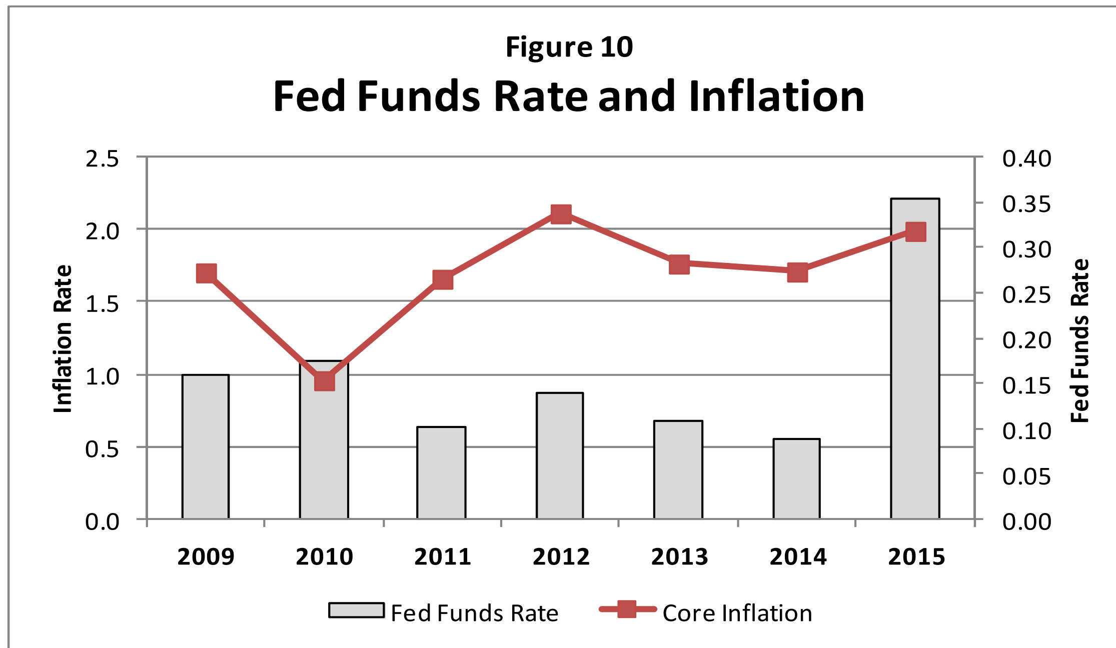
Although state and local governments had their revenues decline in 2009, their spending was bolstered by federal funding through ARRA. With the expiration of the ARRA provisions that temporarily boosted government spending, state and local governments were now relying on tax increases as well as spending decreases to balance their budgets.

The slow growth in the economy since the end of the recession resulted in slow growth in tax revenues for state and local governments. This, in turn, resulted in decreased spending. State and local government spending decreased by 0.2 percent in 2013. As the economy is projected to improve, tax coffers of state and local governments are projected to improve as well, resulting in a return to spending growth, 0.5 percent, in 2014.

MONETARY POLICY

Monetary policy, under the control of the Federal Reserve Board, involves the manipulation of interest rates and the money supply. One of the ways that the Fed manipulates rates is through the interest rate on Federal Funds which is the rate used when banks loan money to each other. The Fed Funds rate then becomes a basis upon which banks set their own loan rates such as mortgage rates and personal loan rates. When the economy is slow, the Fed will decrease interest rates to reduce the cost of capital in order to spur spending by consumers and businesses; thus boosting the economy. However, if the Fed thinks the economy is growing too fast and inflation is too high, it will increase interest rates to slow down spending and encourage saving.

In the recession of 2009, inflation was not a concern for the Fed. Instead, its concern was calming investors' fears and loosening the credit markets to allow money to flow through the economy. The Federal Reserve reduced the Fed Funds rate by approximately 400 basis points since the start of the recession in 2007. With the slow economic recovery and the volatility of the financial markets, the Federal Reserve has maintained the Fed Funds rate in the sub-0.25 percent range.



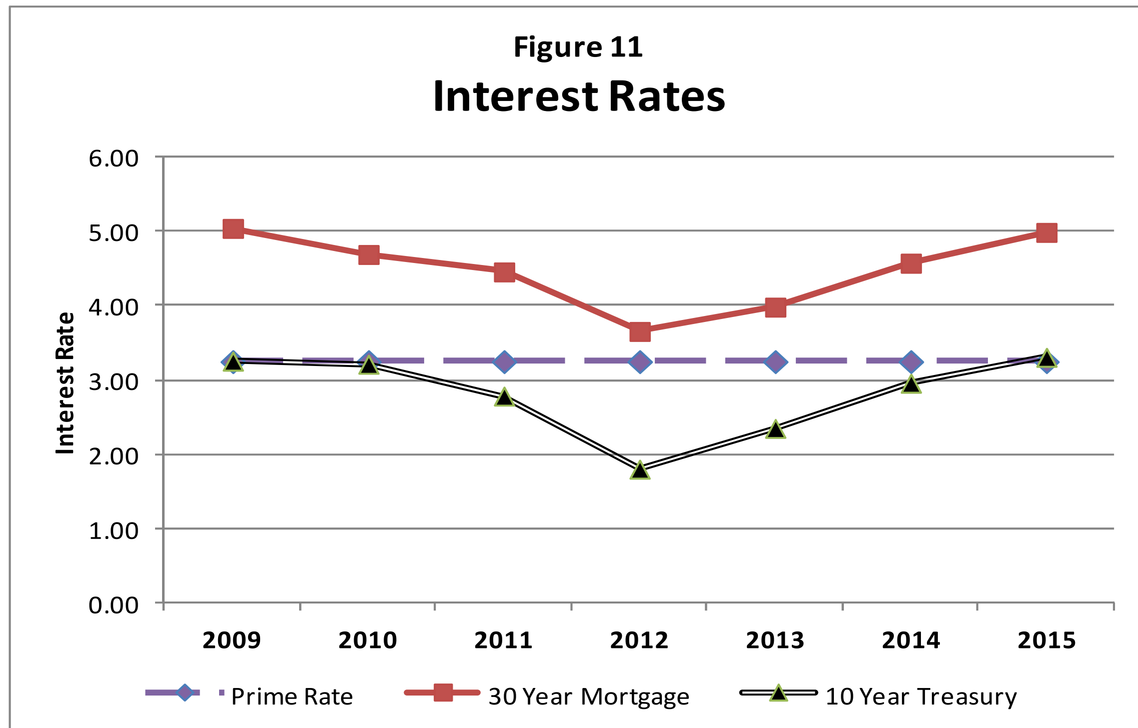
Another reason why the Federal Reserve has kept the Fed Funds rate low is that inflation has not been an issue. With continued low inflation, the Fed made a change in its policy regarding increasing interest rates. At the December 2012 meeting of the Federal Open Market Committee, the Fed stated that it would maintain interest rates at the current level until the unemployment rate fell to 6.5 percent. As a result, the Fed Funds rate is projected to stay below 0.25 percent for all of 2014.

The Fed also continued the use of quantitative easing in 2013. Quantitative easing is a monetary policy tool by which a central bank increases the money supply through the purchase of government securities or other securities from the market. The first quantitative easing program by the Federal Reserve was employed in 2008, also known as the Troubled Asset Relief Program (TARP). This program

allowed the U.S. Treasury to purchase mortgage backed securities from various financial institutions across the country. By purchasing these securities, the Treasury pumped liquidity, in the form of money supply, into the marketplace as well as improved the bottom line of the financial institutions. The increased liquidity allowed financial institutions that were hesitant to give out loans the ability to make new loans to spur spending growth. Under this program, the Federal Reserve also purchased Treasury bonds to inject additional money supply into the market and to keep interest rates low.

The Federal Reserve employed another round of quantitative easing, known as QE2, over the period of November 2010 to June 2011. Under QE2, the Treasury purchased up to $600 billion in long term treasuries, again injecting money into the market to suppress the value of the currency, which maintained low yields on treasuries. This, in turn, decreased interest rates on consumer loans and mortgages that are tied to those yields.

In September 2011, the Fed employed “Operation Twist”, which was similar to quantitative easing. The only difference was that instead of purchasing bonds directly, the Fed issued short term bonds to purchase long term bonds, essentially refunding the long term bonds into shorter term debt.

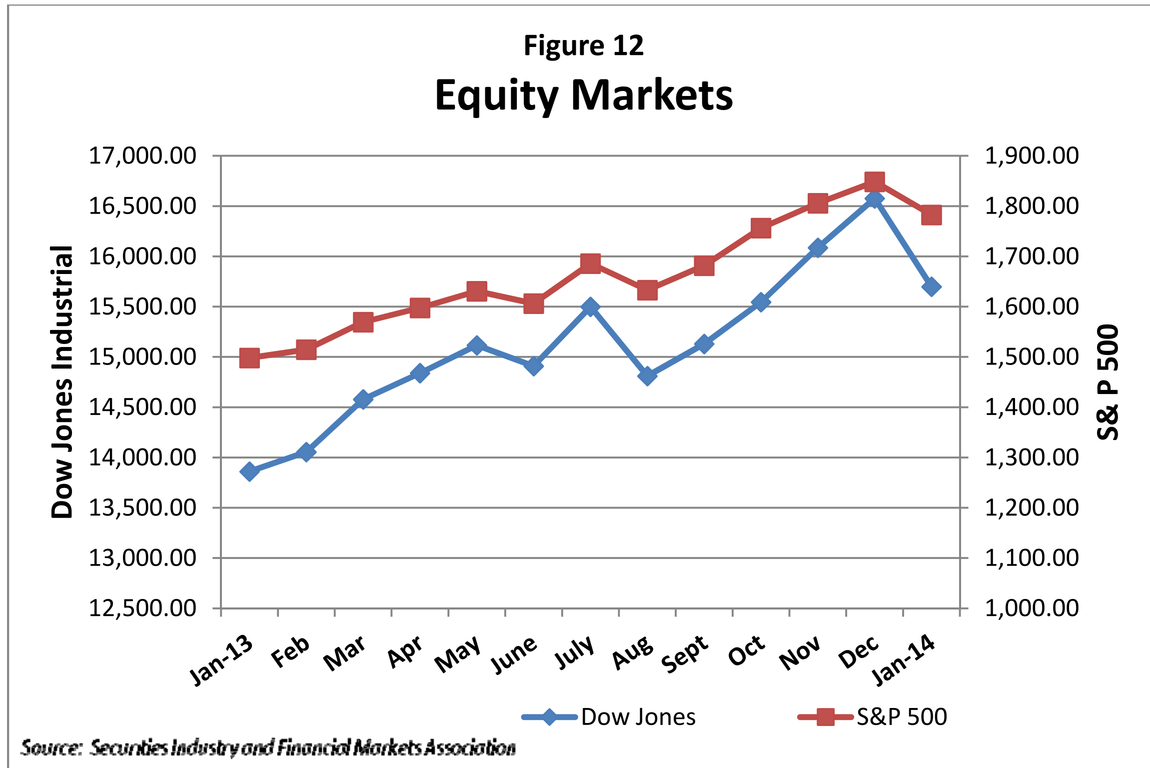


A third round of quantitative easing (QE3) was announced in November 2012 to replace Operation Twist. Under this program, the Treasury would purchase $40 billion per month in mortgage backed securities as well as purchase long term treasuries at a rate of $45 billion per month. However, unlike the first two rounds of quantitative easing, QE3 is open ended. That is, the Treasury will continue purchasing these securities until the economy and the labor market realize sustained improvement.

As shown in figure eleven, since quantitative easing has been employed, interest rates have declined to historic lows. Over the course of 2013, the Fed hinted at ending its quantitative easing as the labor market was showing signs of sustained growth. In December 2013, the Federal Reserve initiated its tapering of

quantitative easing, reducing its pace of bond buying from $85 billion per month to $75 billion per month. As a result, ten year treasury yields are projected to start to increase, increasing from 2.35 percent in 2013 to 2.96 percent in 2014.

FINANCIAL MARKETS



The stock market, as shown in figure twelve, began 2013 unscathed as the fiscal cliff issue was resolved. Even with the issues over the federal budget and the imposition of budget sequestration, there was other positive economic news to keep the stock market growing in the first half of the year.

In May and June, the news of the Federal Reserve's intention to taper its quantitative easing surfaced. This, coupled with weaker economic news, caused

the markets to react. Although the equities markets declined, the bond markets realized greater volatility.

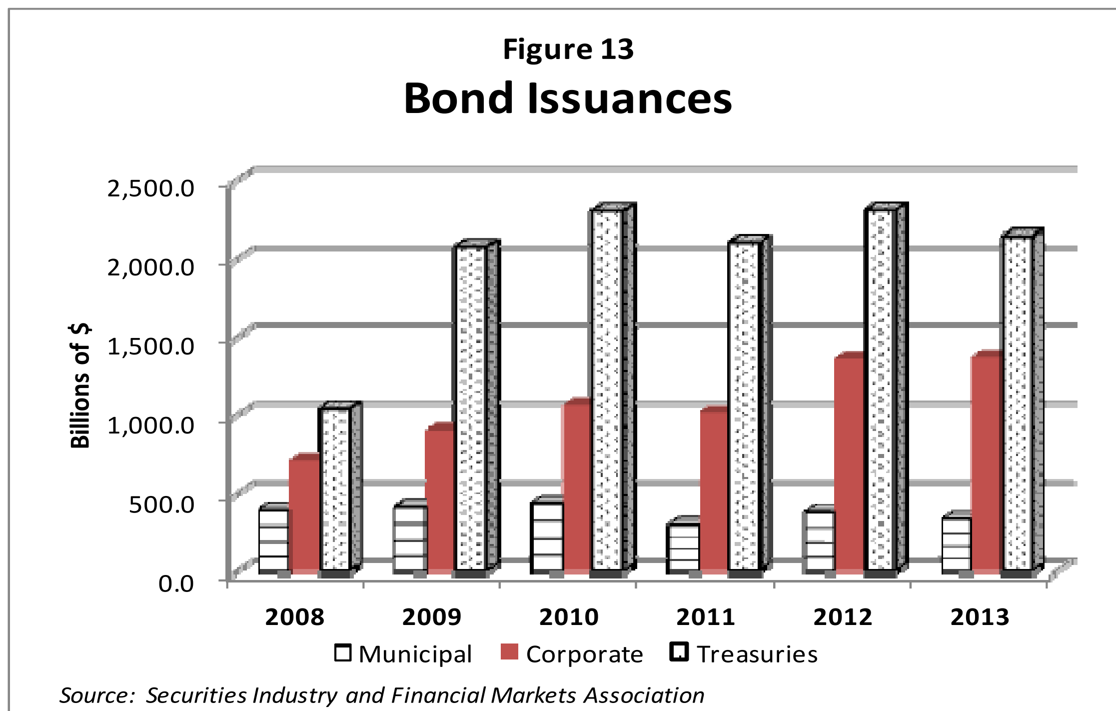
The equities market experienced greater volatility throughout the summer as good economic news was offset by unease over the timing and magnitude of the Fed's tapering. As the stock market would hit record highs, those gains would soon be lost. The federal government shutdown and the impending debt ceiling crisis added to the volatility.

As the federal government's issues were resolved and the tapering jitters eased, the stock market realized consistent growth through the end of the year. For 2013, the stock market, as measured by the S&P 500, grew by 19.1 percent.

As 2014 began, volatility re-emerged as a result of concern over the economies of the emerging markets. These economies realized strong economic growth while the U.S. realized an anemic recovery and the Eurozone remained in recession. The slower economic growth being experienced in these countries as well as rising inflation rattled the global markets, causing a drop in the Dow Jones Industrial Average of over 800 points. This volatility is projected to be short lived, with overall stock market growth projected at 11.7 percent in 2014.

When the sub-prime mortgage market collapsed, the credit markets tightened up. Buyers of municipal and corporate bonds purchased only highly rated bonds;

imposing high premiums on the lower rated ones. With the "flight to safety" during the credit crisis, investors increased their purchases of treasury bonds while the amount of corporate and municipal bonds being sold declined. Investors continued this "flight to safety" in 2011 as stock market volatility remained throughout the year. The Federal Reserve's policy of quantitative easing also caused the issuance of treasuries to grow exponentially, as shown in figure thirteen.



During the credit crisis, a bonding program, Build America Bonds, was created to allow state and local government broader access to the capital markets through the issuance of taxable bonds. In order to offset the increased debt service costs resulting from the issuance of taxable bonds, the Federal government provided a

subsidy to the municipal governments equal to the interest rate differential between taxable and tax exempt bonds.

Upon expiration of the Build America Bond program in 2010, municipalities reverted to the tax exempt bond market which serves a narrower set of investors. In addition, with the slow economic growth and the housing market still in recession, local governments were faced with budget deficits as a result of declining revenues. Some local governments were then forced to reduce their spending while others faced rating downgrades and defaults. With the narrower market access and ratings downgrades, municipal bond issuances declined in 2011.

As the interest rate environment remained low in 2012, many state and local governments reduced their debt service costs by refinancing their higher cost debt. Although municipalities were still struggling with deficits and ratings downgrades, the refinancings were the primary factor in the growth of municipal bond issuances in 2012.

With rising interest rates and municipal bankruptcies on the rise, the bond market became extremely volatile in 2013. While many municipalities exhausted the ability to achieve debt service savings, the number of bond refundings fell. With the news of the quantitative easing pushing Treasury yields higher and, as a result,

municipal bond yields higher, only the highest rated municipalities were able to access the market.

GLOBAL ECONOMY

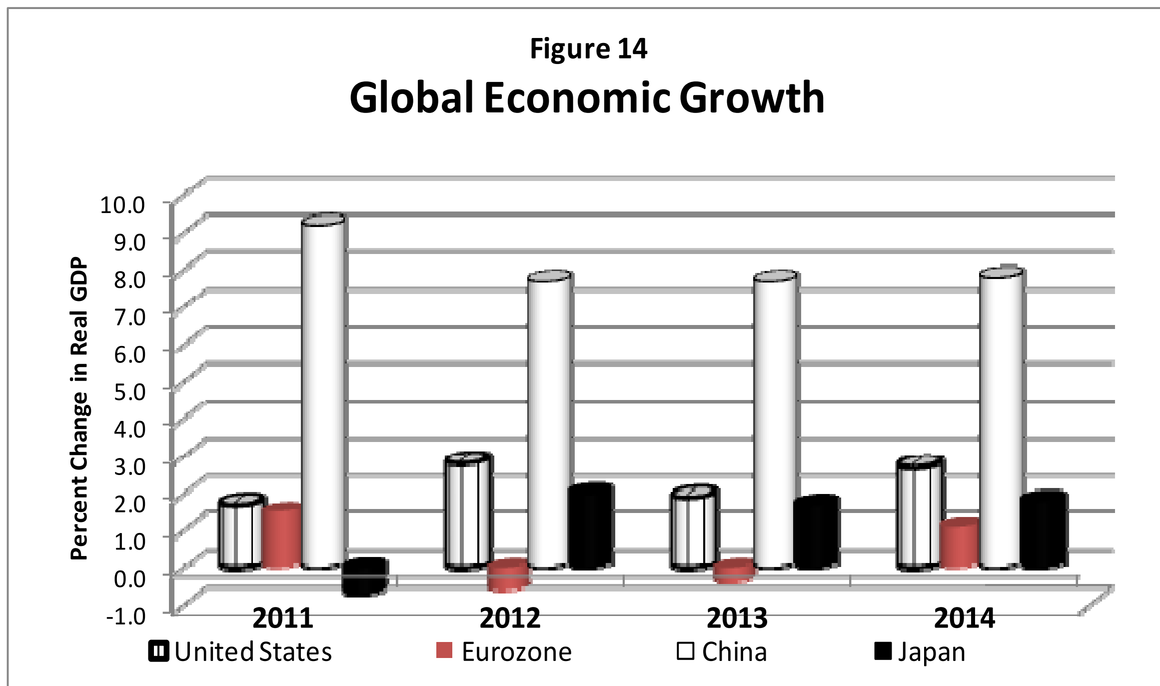
Any changes in the global economy can have a significant impact on the national economy even though trade is not a major contributor to overall national economic growth, as measured by GDP. This is due to the increased participation of both businesses and investors in the economies of countries around the world. In the past couple of years, various international events, such as the debt crisis in the Eurozone and the Arab Spring, created uncertainty in the economy, especially in the financial markets. The impact of these changes is reflected not only in relation to value of the dollar compared to other currencies but with the strengths or weaknesses of other national economies which primarily impacted the amount of imports and exports into and out of the United States.

Another result of economic strength in other countries is increased competition for resources. Prices for these resources increase, fueling inflation. This has been evident in relation to oil prices. China, for example, has an increasingly stronger economy whose demand for energy has grown significantly. That demand causes large increases in oil prices as the world supply of oil is increasingly limited.

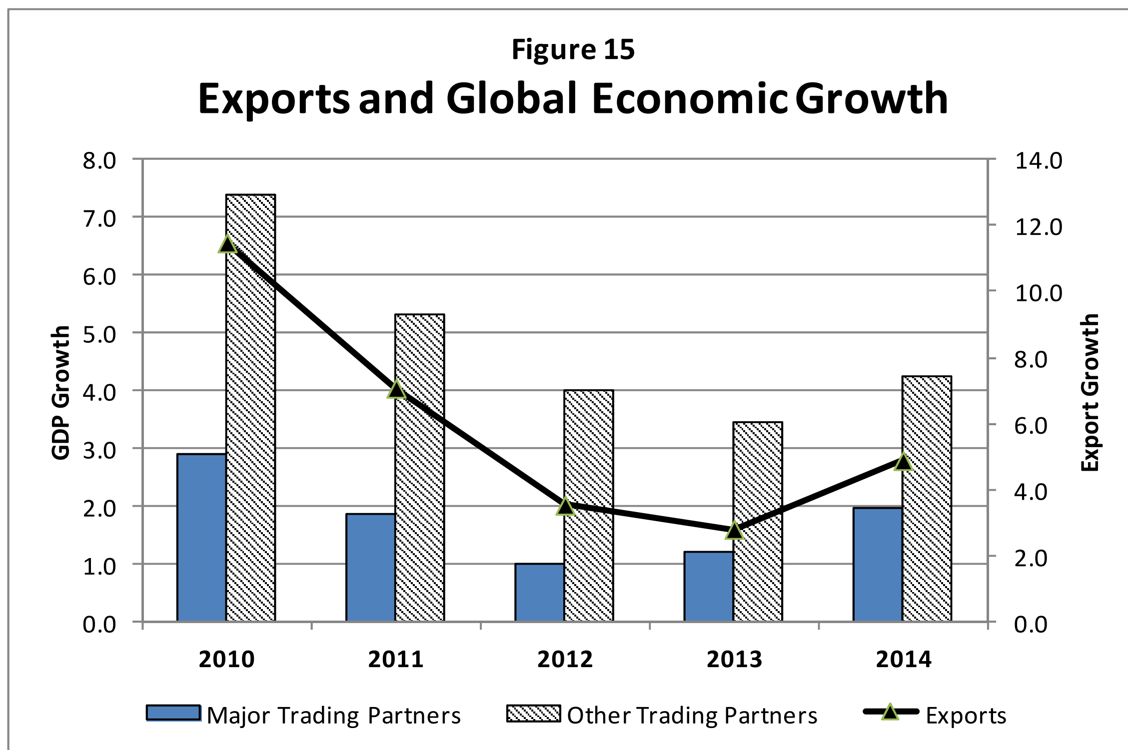
As shown in figure 14, the United States was not the only country to experience slow economic growth after the end of the recession. The natural disasters in

March 2011 pushed Japan's economy into another recession. However, the rebuilding effort spurred economic growth of 2.0 percent in 2012. Continued unrest in the Eurozone caused it to slip back into recession at the end of 2011 and the economy remained in recession throughout 2012. China, although exhibiting economic growth of over eight percent, experienced a slowdown in its economy as it faced the deflation of its own housing market bubble.

In 2013, although the issues with the sovereign debt crisis abated somewhat, the Eurozone remained in recession. Greece, while remaining in the Eurozone, was still struggling to regain economic growth. With the end of increased activity due to the rebuilding effort, Japan's economy realized slightly weaker economic growth of 1.7 percent. China, on the other hand, is projected to continue to continue strong growth, increasing by 7.8 percent.



The strength of any nation's economy will have an impact not only on the demand for their domestic goods but, on the demand for other countries' goods as well. In addition, as the supply of business inputs has become more globalized, a change in business spending and production in one country can impact business production in another. As the global economy came out of the recession in 2009, products and services exported out of the United States grew by over eleven percent in 2010. However, as global economic growth has slowed, so too did export growth. The projected growth in the global economy is projected to provide additional export growth in 2014, increasing from 2.8 percent to 4.9 percent.



The value of a nation's currency also helps or hinders export and import growth. When the value of the currency increases, the price of domestic goods increases;

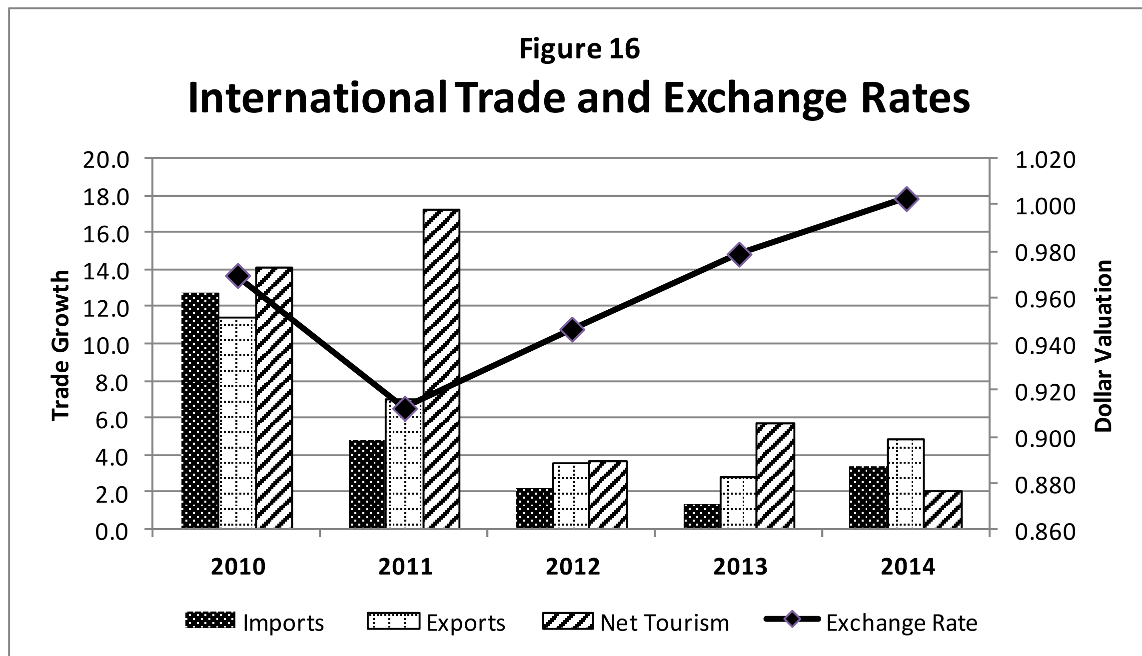
making them more expensive compared to imported goods. Conversely, when the value of the currency declines, domestic goods become less expensive.

As the volatility in the financial markets abated and global economic growth returned in 2010, especially in the emerging markets, the dollar depreciated. In addition, as the Federal Reserve employed the monetary policy of quantitative easing, it increased the U.S. money supply which, in turn, also caused the dollar to depreciate. However, as the sovereign debt crisis spread through the Eurozone in 2011, dollar denominated assets were once again in demand. In addition, long term interest rates in the US were higher than interest rates in its major trading partners increasing the demand for the dollar and causing it to appreciate.

When the value of a currency declines, that nation also becomes more attractive to foreign travelers. Not only are the goods less expensive but services, such as hotel rooms, are less expensive as well. Shown in figure 16, as the dollar depreciated, the net trade of tourism services (exports less imports) increased; more foreign travelers were visiting the United States. As the dollar appreciated and the Eurozone crisis continued in 2012, tourism slowed as well. Although the dollar continued to appreciate in 2013, it was still valued less than the currencies of the major trading partners of the U.S., making its goods and tourism still attractive. As a result, growth in imports remained low and net tourism increased.

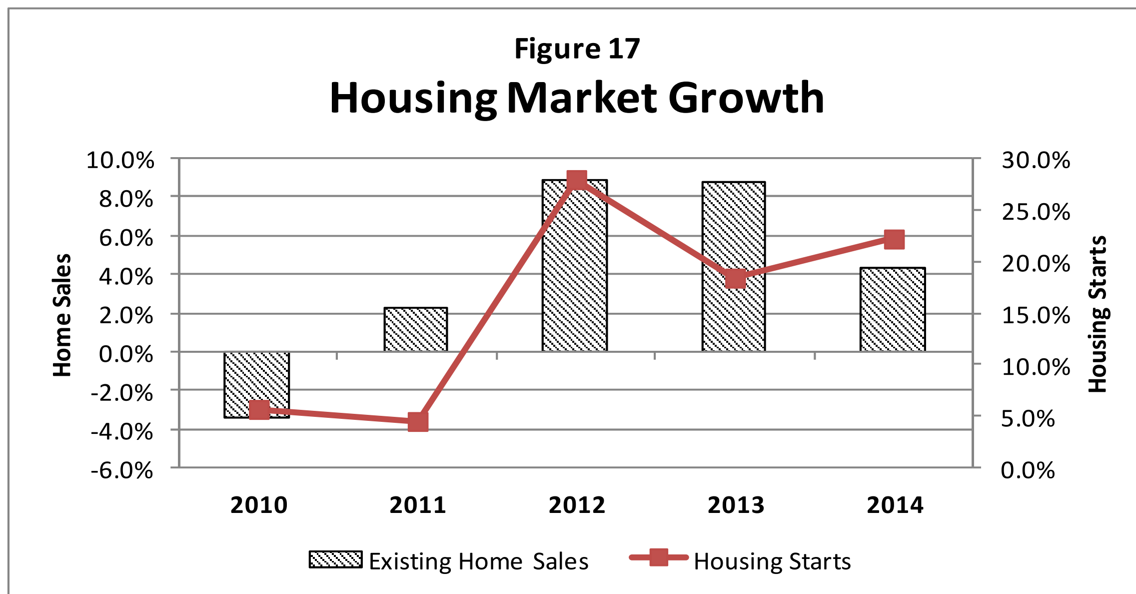
In 2014, the dollar is projected to continue to appreciate. While a portion of this appreciation is due to increased economic growth, it is also due to the tapering of the quantitative easing. As mentioned above, quantitative easing served to maintain lower interest rates in the market. As the level of bond buying is reduced, interest rates increase. Higher interest rates, in turn, make investments in the U.S. more attractive.

Although the dollar appreciation will make U.S. products more expensive in other countries, the projected global economic growth, especially with the Eurozone expected to come out of recession, will support stronger growth in 2014. However, the stronger U.S. economy will also result in stronger import growth as these products become cheaper and consumer demand increases.



HOUSING MARKET

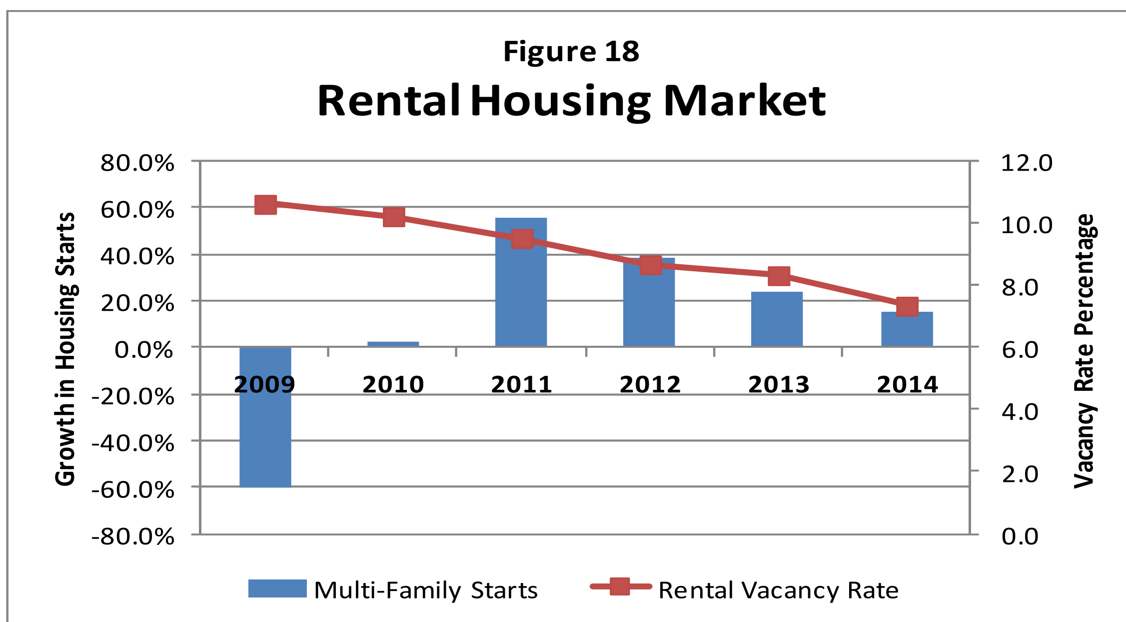
Prior to the recession, as interest rates started to rise and the economy began to slow, the housing bubble began to deflate. Then, with the collapse of the subprime mortgage market in 2008, all aspects of the housing market experienced significant declines. As part of the American Recovery and Reinvestment Act of 2009, a first time homebuyer's tax credit was enacted and was in effect until the first quarter of 2010. This tax credit was able to spur growth in home sales, however, that growth was short lived. Once the tax credit expired, home sales declined in 2010, as shown in figure seventeen. In 2011, mortgage rates remained at historical lows and sales of existing homes grew, but only by two percent.



As a result of the subprime mortgage crisis, there was increased scrutiny on the part of lenders and credit was not easily accessible. The demand for rental housing increased as those people who were willing to enter the housing market were now focusing on renting rather than home ownership. Shown in figure 18, as

the rental vacancy rates were declining, the number of multi-family housing starts were increasing in order to meet this new demand.

In addition, as housing demand turned toward renting rather than owning, multi-family housing starts as a percentage of total housing starts began to increase. Prior to the bursting of the housing market bubble, multi-family housing starts were less than 20 percent of total housing starts. However, in 2011, multi-family housing starts grew by over fifty percent and comprised approximately 30 percent of the housing starts in that year.

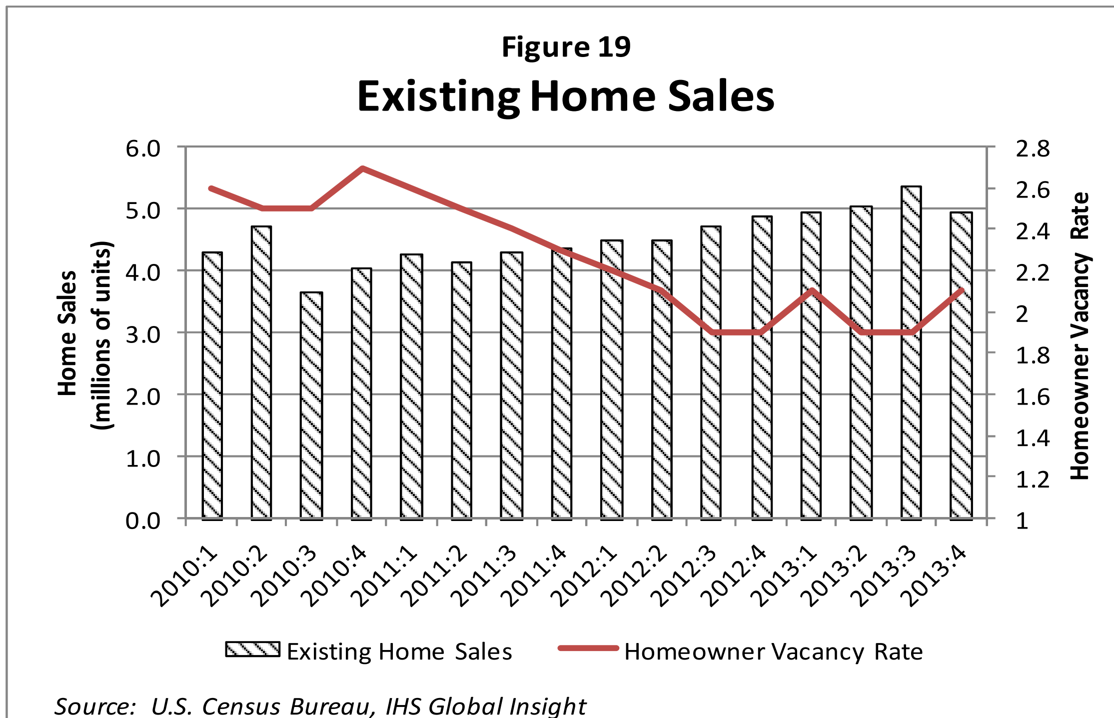


This trend continued in 2012 and 2013. In fact, as compared to the year before, there were approximately the same number of additional multi-family housing developments built as there were single family houses in both years.

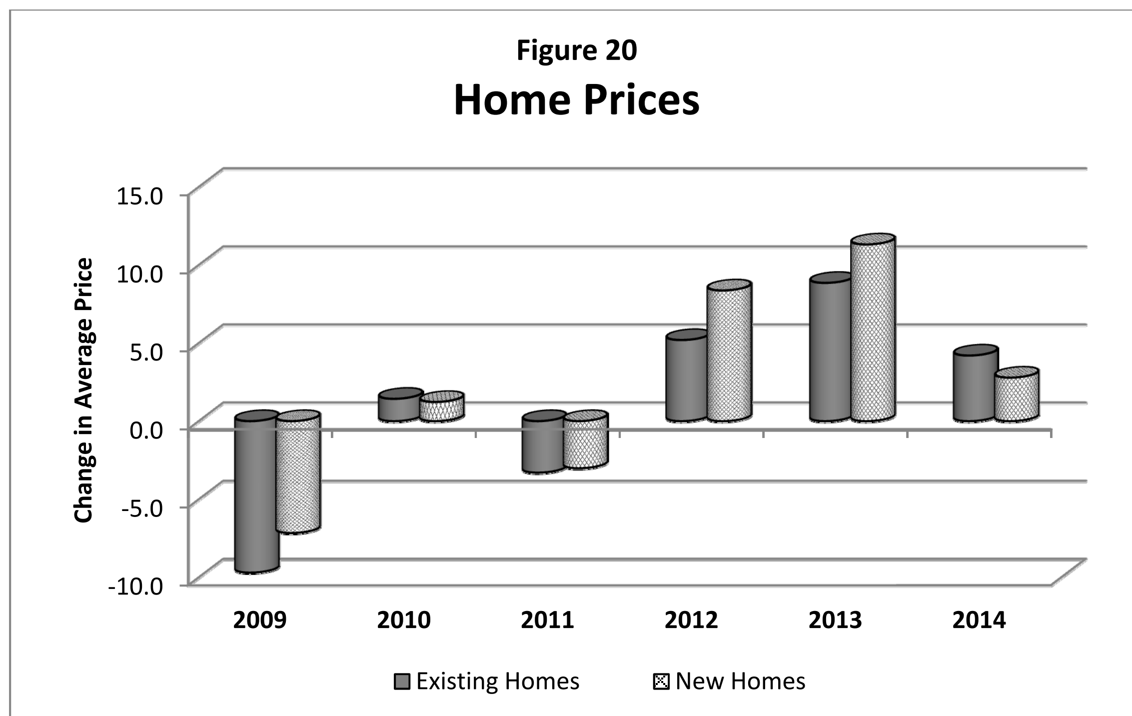
However, as the housing market becomes stronger in 2014, this trend is projected to be reversed. Growth in single family housing starts is projected to outpace multi-family housing starts, increasing by 26 percent and 15 percent, respectively.

Although the growth in home sales in 2011 was a positive sign that the housing market was finally in recovery, this growth did little to decrease the homeowner vacancy rate which is the proportion of the homeowner inventory that is vacant and for sale. As the sales of existing homes started to grow in the second quarter of 2011, the homeowner vacancy rate began to decline.

Throughout 2012, the existing home sales continued to exhibit growth, causing the homeowner vacancy rate to continue to decline. At the beginning of 2013, the impact of the expiration of the payroll tax reduction resulted in a slowdown in the number of home sales, increasing the vacancy rate. Sales growth resumed in the second and third quarters. However, the federal government shutdown coupled with increasing interest rates and adverse weather caused home sales to slow once again in the fourth quarter, increasing the vacancy rate once again.



Even with the increased number of home sales in 2011, there was still a large inventory of homes in the marketplace. As a result of this over-supply, home prices continued to decline. With the increase in home sales in 2012, the inventory of homes on the market was diminished. With this diminished supply as well as increased demand due to the historically low mortgage rates, home prices started to increase once again.



As mortgage rates began to rise over the course of 2013, the demand for housing grew as people sought to take advantage of the lower rates. This increased demand pushed home prices higher, increasing by 8.9 percent and 11.3 percent for existing homes and new homes, respectively.

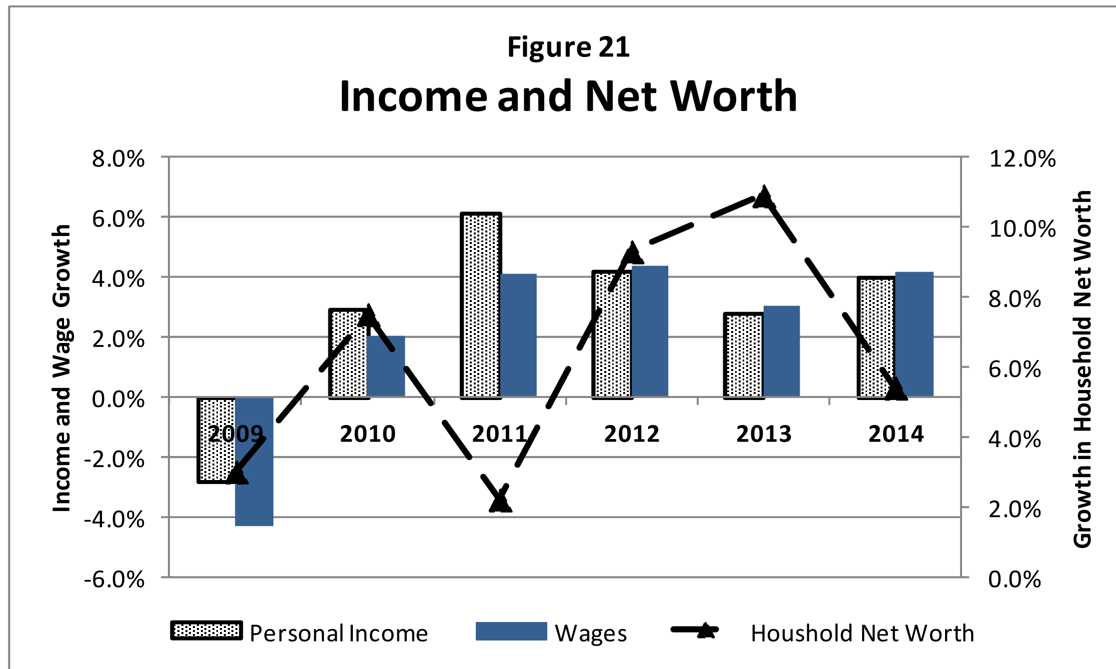
Although the economy is projected to strengthen in 2014, the projected increase in mortgage rates will cause growth in the housing market to slow. As a result, the growth in both home sales and home prices is projected to slow to approximately 4 percent.

CONSUMER SPENDING

The beginning of the report stated that in order for an economy to expand, it requires consistent growth in the labor market and the capital market. Of importance in achieving this growth is consumption; whether or not the consumer is an individual or a business. Consumption of goods and services allows businesses to remain in operation, create jobs, and make capital investments. For the individual consumer, his wages and property income (i.e. net worth) as well as the price of goods and services control his level of consumption in the economy.

As job losses mounted in 2009, both wages and personal income decreased. However, household net worth exhibited growth even though the housing market was depressed. This increase was a result of growth in the value of a household's equity holdings. In addition, as the credit markets tightened, consumers were not increasing their household debt.

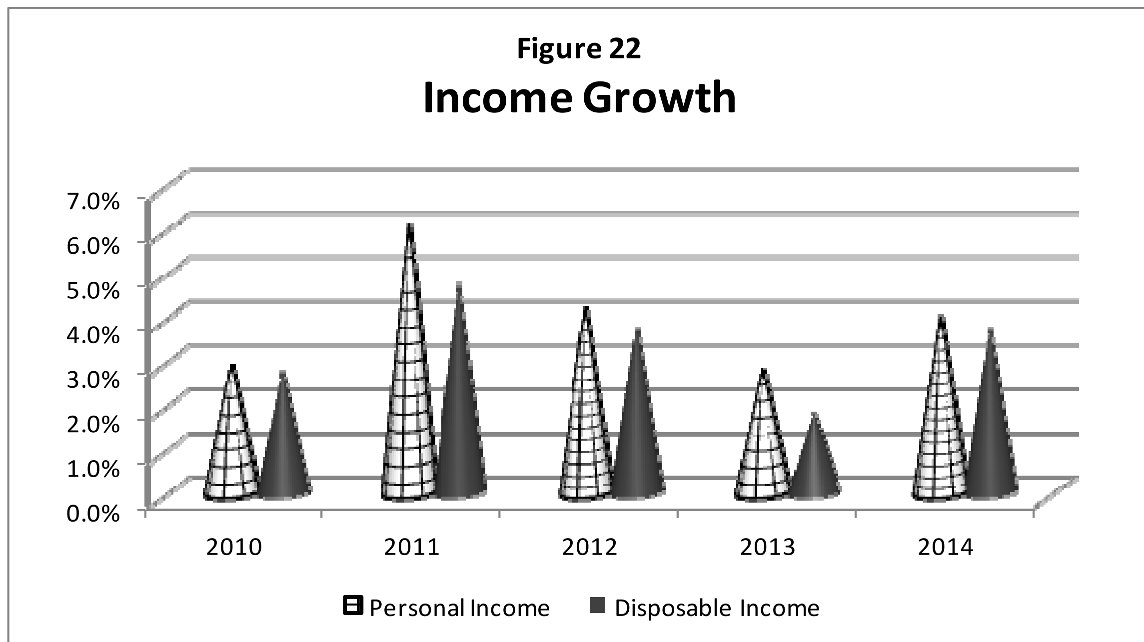
Although job losses continued to mount in 2010, wages did manage some growth, growing by two percent. Personal income fared better in 2010 due to the stock market gains that increased dividend income and growth in proprietor's income. With job growth in 2011, wages increased at a stronger pace of 4.1 percent. Besides the growth in wages, personal income benefitted from the payroll tax cut that was enacted as part of the Job Creation Act of 2010. In addition, dividend income continued to grow as well as proprietor's income.



As the labor market strengthened in 2012, wages increased 4.3 percent from 2011. Personal income growth in 2012 also benefitted from approximately $26.4 billion in special dividends being paid in December of 2012 ahead of the new Medicare tax on investments that went into effect on January 1, 2013 and increased capital gains realizations in anticipation of the potential expiration of the Bush era tax cuts.

Employment growth continued in 2013 but, at a slightly slower pace than in 2012. This slower employment growth resulted in slower wage growth; wage growth increasing by 3.0 percent. Personal income growth slowed as well, increasing by 2.8 percent. Along with the slower wage growth, personal income growth was impacted by the “spin up” of dividends and capital gains into 2012.

With the projected strengthening of the economy, the labor market is projected to continue to expand in 2014, increasing by 1.6 percent. With this increase in employment, wage growth is projected to accelerate to 4.2 percent. However, personal income is projected to grow at a slower rate of 4.0 percent, reflecting slower growth in proprietor's income.



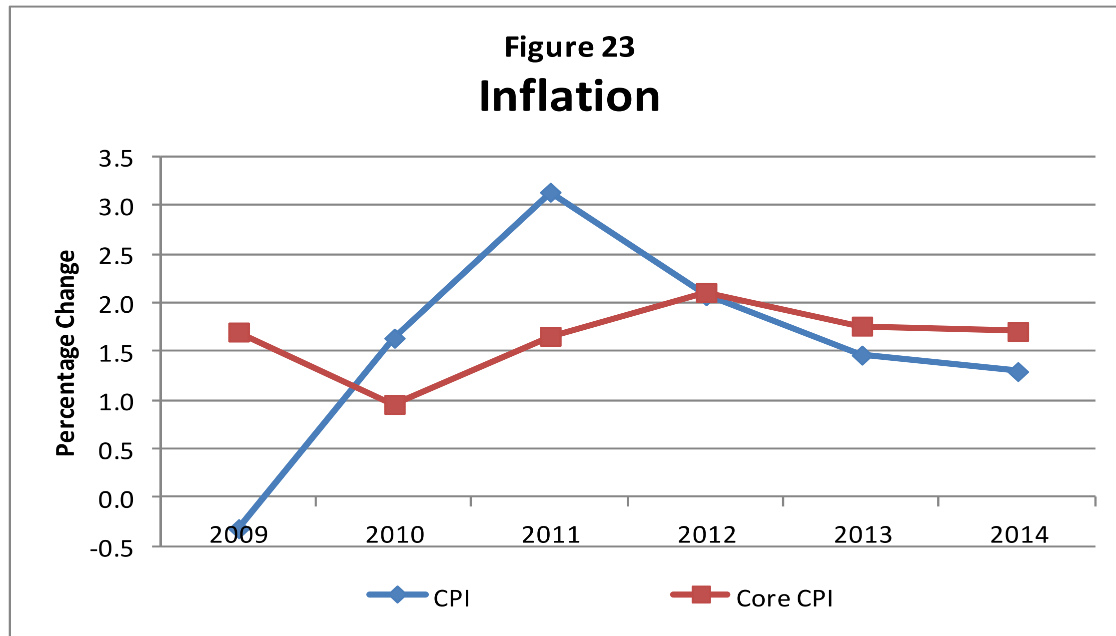
Personal income, also known as a person's gross income, is the total amount of wages and property income received by the consumer. However, the actual amount the consumer has available to spend in the economy is his disposable income – his personal income less tax payments. Due to the temporary nature of tax benefits since 2010, the amount of the consumer's disposable income has fluctuated. As shown in figure 22, the growth in disposable income mirrored personal income growth in 2010. In 2011, disposable income growth lagged

personal income growth primarily as a result of the expiration of the Making Work Pay tax credit which provided consumers with an additional $400.

In 2012, disposable income growth was once again virtually the same as personal income growth. However, as the payroll tax reduction expired and the new Medicare taxes were imposed, disposable income growth once again lagged personal income growth in 2013, growth of 1.9 percent versus growth of 2.8 percent.

Although the emergency unemployment benefits expired at the end of 2013, this will not have a significant impact on disposable income growth in 2014. As a result, disposable income is projected to grow by 3.8 percent as compared to personal income growth of 4.0 percent.

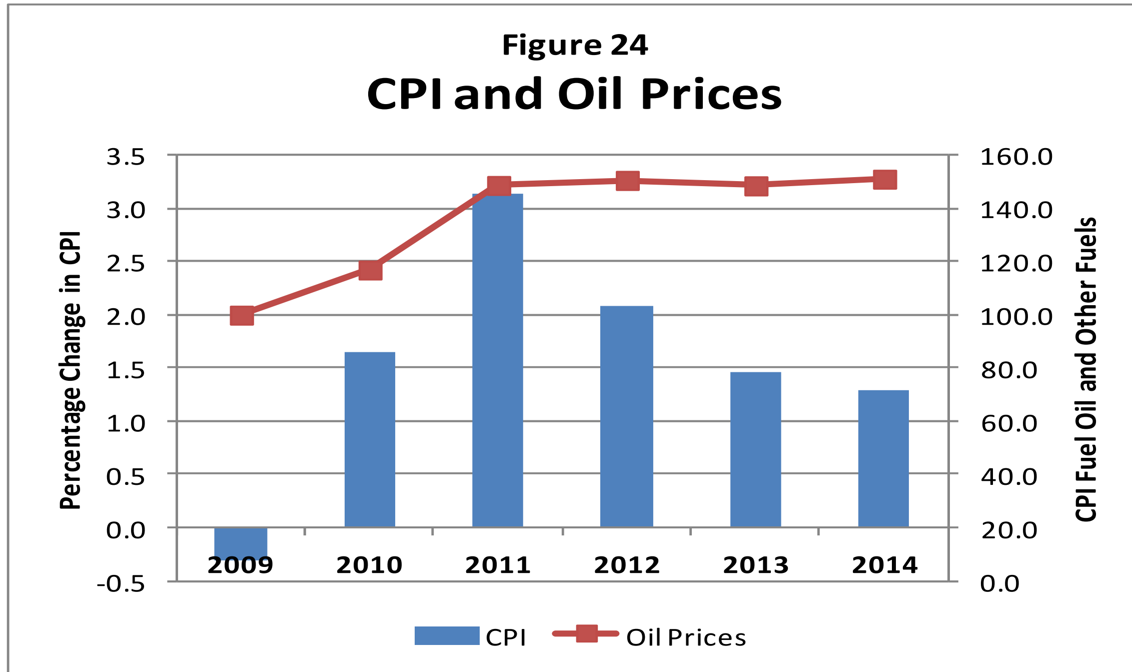
While income and wages are a major factor influencing consumption, the rate at which prices are increasing, also known as inflation, is a significant influence. This is especially true in relation to the prices of necessities, such as food and energy. Increases in the prices of theses goods limits the amount of money a consumer has for discretionary spending. In addition, increases in energy costs impacts the price of finished goods as businesses take the cost of energy in the production process into account when pricing their goods.



With the global recession, there was a period of deflation in 2009, as shown in figure 23. However, when excluding food and energy prices, core inflation decreased but, was still positive during the same time period. This difference between the two indices was due to a large decrease in oil prices which are excluded in the calculation of core inflation. As the economy began to grow in 2010, prices began to increase, thus, increasing inflation.

Figure 24 shows the relationship between the inflation rate and oil prices. As mentioned above, oil prices decreased significantly in 2009 which, in turn, caused a drop in the Consumer Price Index, the measure of inflation. With the subsequent rise in oil prices during the recovery, inflation has also risen. Although there continued to be unrest in the Middle East which impacted oil production, growth in oil prices was relatively flat, resulting in a slower rate of

inflation. Although oil prices are projected to increase in 2014, the increase is only projected to be small. This is projected to keep inflation in check, increasing by 1.3 percent.



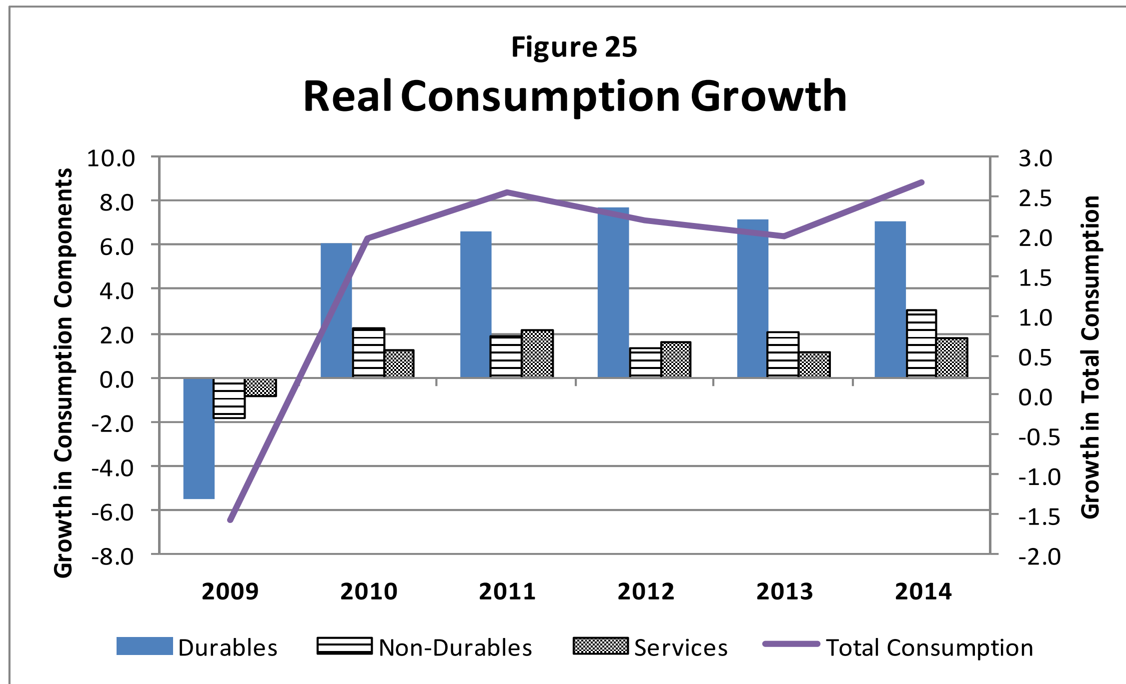
Oil prices are not the only factor that causes the significant, and sometimes, erratic, inflation growth. Food prices, especially farm products, fluctuate year to year, especially due to weather impact on crops. For example, in the first quarter of 2011, the southern portion of the country, specifically Florida, experienced extremely cold weather which impacted the orange crop. In 2012, extreme drought conditions in the Midwest had a negative impact on crops as well as livestock. As a result of these adverse weather conditions, food prices increased by 3.7 percent and 2.6 percent in 2011 and 2012, respectively. With the absence

of these weather impacts, the increase in food prices slowed to 1.4 percent in 2013 and are projected to continue at this pace in 2014.

With the slow growth in the economy and increases in the prices of food and energy, businesses were hesitant to pass on the increased price of inputs into the prices of their finished goods. As shown, core inflation continued to decrease in 2010 even though the recession had ended. As job creation returned in 2011 and increased labor costs were factored in to prices, core inflation accelerated from 1.0 percent to 1.7 percent.

Even though food prices were impacted by the weather conditions, the flat growth in oil prices enabled the overall inflation rate to decline from 3.1 percent in 2011 to 2.1 percent in 2012. In addition, businesses started to pass along a portion of their increased costs in their prices. As a result, the core inflation rate, while increasing from 1.7 percent, was the same as the overall inflation rate.

In 2013, both core inflation and overall inflation slowed. However, overall inflation increased at a slower rate than core inflation, increasing by 1.5 percent and 1.8 percent, respectively. This inversion is primarily the result of a decrease in energy prices and slow growth in food prices. This phenomenon is projected to continue in 2014, inflation and core inflation increasing by 1.3 percent and 1.7 percent, respectively.



The consumption of services accounts for approximately two thirds all consumption expenditures. Services include not only personal services, restaurant meals and travel, but also include a consumer's housing expenses, utility expenses, and health care.

The next largest component of consumption is the consumption of non-durables, comprising approximately 22 percent of total consumption. The main components of non-durable goods are clothing, food, and fuel. As a result, growth in these components as well as services drive consumption growth.

With the enactment of the American Recovery and Reinvestment Act, the federal government tried to spur consumer spending through a variety of tax incentives. The Making Work Pay credit, along with the sales tax deduction for new vehicles,

restrained the drop in consumption in 2009. In 2010, there was the return of wage growth as well as personal income growth, In addition, some of the ARRA provisions enacted in 2009 were realized in consumers' annual personal income tax returns. As a result, consumption was positively impacted in 2010.

Consumption growth accelerated in 2011 due to strong wage growth and personal income growth. Due to this income growth, consumers were able to release some of their pent up demand, especially for durable goods. Similar to the increase in inventories, the consumption of automobiles increased. Consumers were now willing to make the vehicle purchase that they had postponed over the course of the recession.

With the housing market in recovery, growth in the consumption of durable goods accelerated in 2012, increasing by 7.7 percent. However, as consumers purchased higher priced durable goods, their increased consumption of non-durables and services slowed. This resulted in a slowdown in overall consumption from 2.5 percent in 2011 to 2.2 percent in 2012

As stated above, the expiration of the payroll tax reduction coupled with new Medicare taxes on payrolls of high income earners and on investment income caused a decline in consumers' disposable incomes. As a result, their spending on goods and services was impacted. In addition, the federal government shutdown

in October reduced the incomes of those impacted workers. This caused consumption growth to slow down again in 2013, increasing by 2.0 percent.

With projected wage and income growth as well as continued low inflation, consumption growth is projected to accelerate in 2014, increasing by 2.7 percent. With continued growth projected for the housing market, the consumption of durables is projected to continue to grow at a rate of 7.0 percent. This growth is augmented by increased growth in the consumption of both non-durables and services as well.

RISKS TO THE FORECAST

At the end of 2013, there was no "fiscal cliff" facing the economy and the impact of the budget sequestration was eliminated with the Bipartisan Budget Act. However, the debt ceiling discussion is still open. As seen from the experience in October, any prolonged debate over the debt ceiling could have adverse effects on the financial markets.

Even though the Federal government has been tightening fiscal policy since the expiration of the American Recovery and Reinvestment Act (ARRA), the spending cuts in the current budget agreement, the tax increases that took effect at the beginning of 2013, and the expiration of emergency unemployment benefits at the beginning of 2014 tightened fiscal policy further. In addition, the Federal Reserve started tightening its monetary policy with the tapering of quantitative

easing. With this policy of both fiscal and monetary tightening, there is the risk interest rates could rise too quickly causing the housing market to slow and decreasing capital investments. With an increased tax bill, both consumers and businesses could decrease their spending, resulting in slower economic growth.

As shown in the volatility in the financial markets at the beginning of the year, the economic status of the emerging markets would be a risk. Previously experiencing strong economic growth, there has recently been a slowdown in such growth. An increased slowdown in these economies would result in weaker export growth, impacting business growth nationally.

Although the economy of the Eurozone is improving, there are still sovereign debt worries. If these sovereign debt issues escalate, the Eurozone could return to recession, causing volatility in the financial markets.

Any volatility due to Eurozone or emerging market concerns could cause investors to employ a "flight to safety" strategy and increase their purchases of U.S. Treasuries. In addition, the credit markets could tighten once again, putting downward pressure on the housing market and dampening consumer confidence.

Although oil prices are projected to stay flat, a resurgence of unrest in the Middle East could interrupt oil supplies resulting in a spike in oil and gasoline prices. This would result in higher than projected inflation and the Federal Reserve may be forced to increase interest rates ahead of schedule even if the unemployment targets are not met. Increases in oil prices and their impact on the costs of

producing and transporting goods as well as the impact on the consumer's discretionary spending are also a major concern.

New York State Economic Outlook
Calendar Year
(Dollar Figures in Billions of Dollars)

	2013	2014	2015	2016
Gross State Product	**$1,242**	**$1,286**	**$1,342**	**$1,404**
Percent Change	3.0	3.5	4.4	4.6
Real Gross State Product	**$1,064**	**$1,082**	**$1,109**	**$1,140**
Percent Change	2.1	1.7	2.5	2.8
Nonagricultural Employment, Thousands	**8,901**	**8,987**	**9,104**	**9,214**
Percent Change	1.1	1.0	1.3	1.2
Unemployment Rate	**7.7**	**6.7**	**6.4**	**5.8**
Personal Income	**$1,064**	**$1,104**	**$1,154**	**$1,209**
Percent Change	2.1	3.7	4.5	4.8
Wages and Salaries	**$565**	**$586**	**$612**	**$639**
Percent Change	2.2	3.8	4.5	4.3
Retail Sales	**$259**	**$267**	**$277**	**$287**
Percent Change	3.5	3.4	3.5	3.7
Housing Starts, Thousands	**26.8**	**31.0**	**33.2**	**34.6**

Source: IHS Global Insight New York State Economic Forecast, February 2014

New York State Economic Outlook

Fiscal Year

(Dollar Figures in Billions of Dollars)

	2013	2014	2015	2016
Gross State Product	**$1,221**	**$1,265**	**$1,313**	**$1,374**
Percent Change	2.7	3.7	3.8	4.6
Real Gross State Product	**$1,050**	**$1,075**	**$1,096**	**$1,127**
Percent Change	1.3	2.3	2.0	2.9
Nonagricultural Employment, Thousands	**8,852**	**8,944**	**9,045**	**9,146**
Percent Change	1.2	1.0	1.1	1.1
Unemployment Rate, percent	**8.2**	**7.6**	**7.0**	**6.7**
Personal Income,	**$1,053**	**$1,089**	**$1,136**	**$1,187**
Percent Change	3.2	3.4	4.4	4.5
Wages and Salaries	**$560**	**$577**	**$601**	**$627**
Percent Change	3.6	3.0	4.1	4.3
Retail Sales	**$254**	**$263**	**$272**	**$282**
Percent Change	4.1	3.6	3.4	3.6
Housing Starts, Thousands	**24.0**	**30.0**	**31.9**	**34.8**

Source: IHS Global Insight New York State Economic Forecast, February 2014

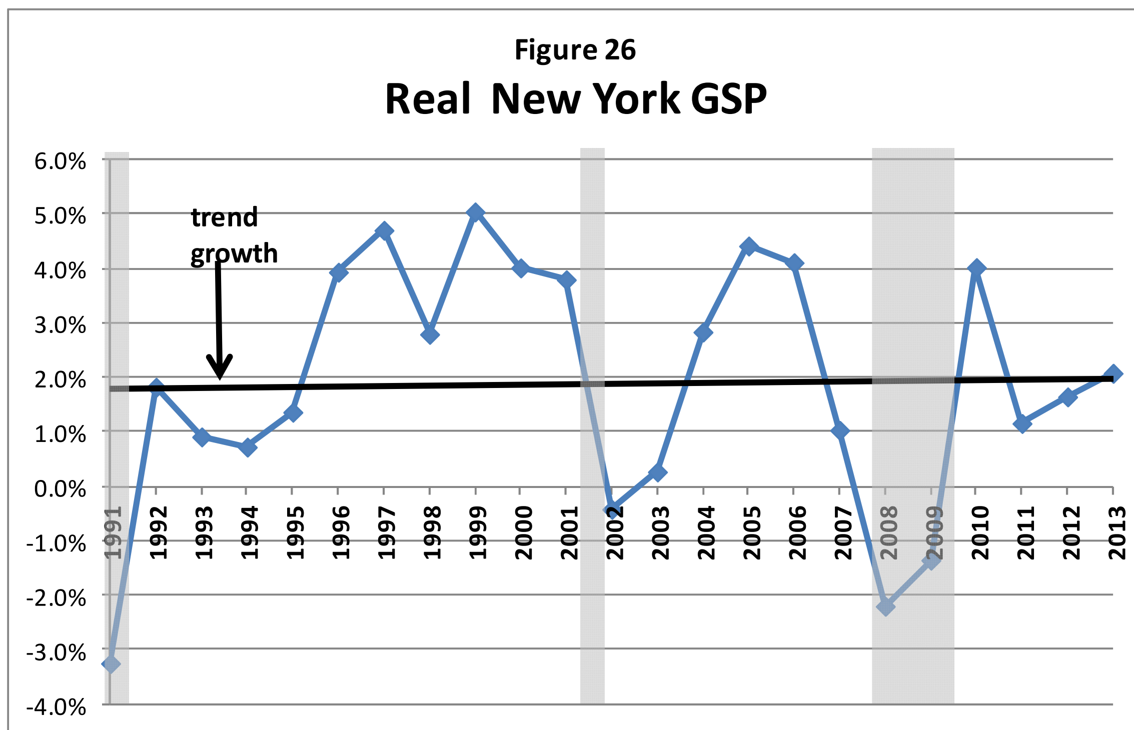
The New York Economy

Gross Domestic Product is the total amount of output of goods and services produced in the country. Similarly, Gross State Product (GSP) is the output of the various industries within a state since products made in the state are utilized and consumed both in the state as well as other states. The output of all these industries are then combined to determine the aggregate GSP.

Similar to the transition from economic recovery to economic expansion at the national level, in order for the New York economy to expand, it needs to experience GSP growth at a pace in excess of its trend growth rate. As shown in figure 26 (recession periods represented by shaded areas), the New York economy took much longer than the nation to recover from the 1991 recession and transition into the expansion phase, four years in the recovery phase as opposed to one year at the national level.

Since the recession in 2001 primarily impacted the financial markets through the bursting of the high technology bubble and the September 11 terrorist attacks, the economic recovery followed a similar timetable to the economic recovery at the national level, economic expansion occurring in 2004, three years after the end of the recession. However, New York realized stronger economic growth during this time period.

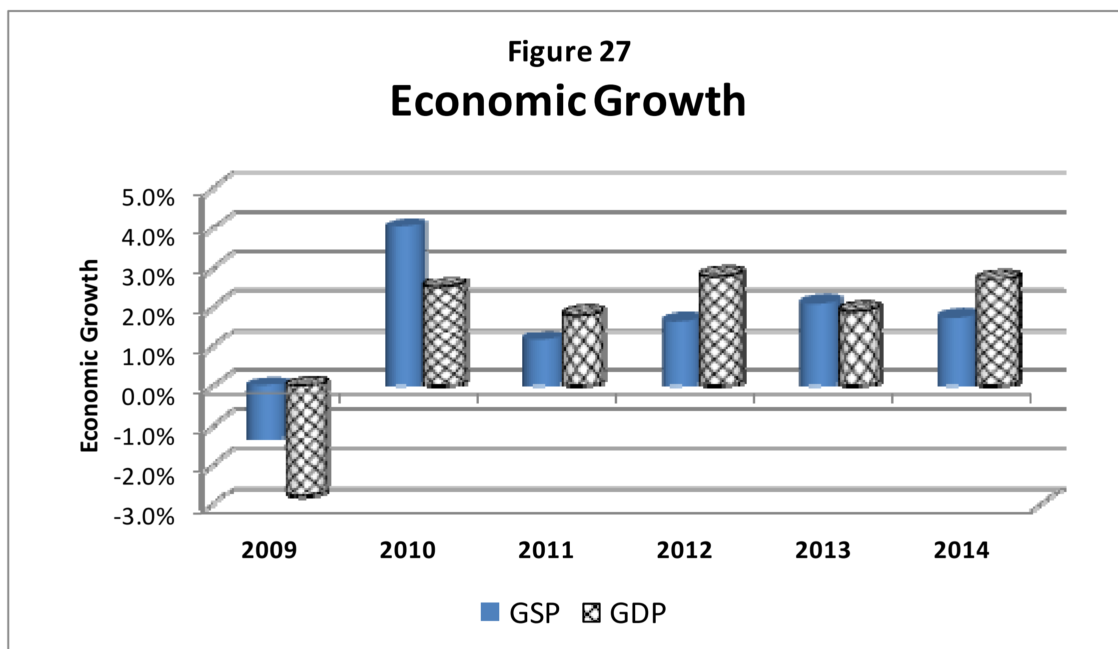
In relation to the current recovery, the New York economy seemed to recover and go into expansion within a year after the end of the Great Recession. However, this strong economic growth was temporary. The Federal government attempted a stimulus, the American Recovery and Reinvestment Act, the impact of which was short lived stimulus. As the stimulus disappeared, the New York economy reverted to below trend growth in 2011, back to the recovery phase similar to the national economy.



Most factors that impact the national economy also impact the New York economy. The changes in some of these factors may have only a small impact on the New York economy while others will have a significant impact. For example, interruptions in oil supplies from the Middle East may result in increased drilling domestically, resulting in job and revenue growth in states such as Texas or

Alaska. However, the impact on oil prices will affect the level of the New York consumer's discretionary income, impacting consumption within the State.

With New York City's position as the financial capital, events that impact the financial markets have a significant impact on the New York economy. This was particularly apparent in 2009 as shown in figure 27. The stock market was still showing volatility and the S&P Index declined by over 22 percent. Corporate profits were also continuing to decline. As a result, the New York economy declined by 3.0 percent.



However, since the financial markets were a beneficiary of the fiscal and monetary policies employed by the Federal government in 2009 and 2010, New York's economy was able to recover at a much stronger pace than the nation. In addition, even though the financial services industry was decreasing employment, it was able to increase the productivity of the remaining employees. Another factor that

contributed to this stronger growth was the fact that the New York housing market as a whole was not as adversely impacted by the housing market decline as in other parts of the country.

Although the financial markets were volatile due to the Eurozone debt crisis and other economic news in 2011, the stock market increased by over eleven percent. However, in August and September, Hurricane Irene and Tropical Storm Lee caused significant damage to the Eastern and Central portions of the state, disrupting economic production in those areas. This caused economic growth in New York to lag national growth.

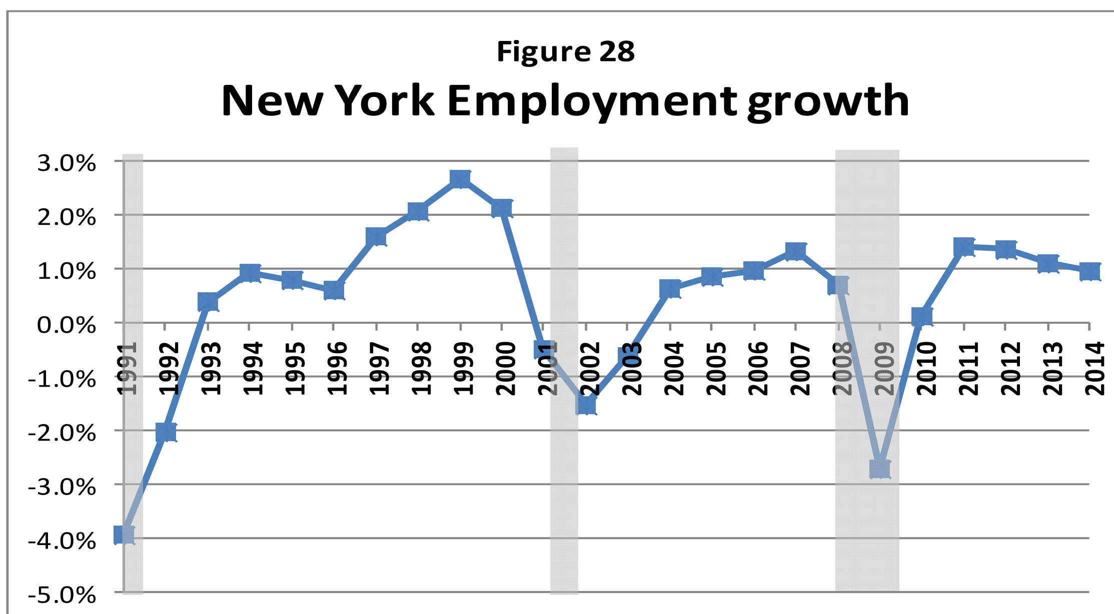
The uncertainty in the Eurozone continued to cause volatility in the financial markets in 2012. At the end of October, Hurricane Sandy caused significant damage to Long Island, New York City, and the downstate area. This storm destroyed homes and businesses, shut down transit systems, and shut down the stock market for two days. Growth in the New York state economy was 1.6 percent, slower than national growth of 2.8 percent.

Although federal workers in New York were impacted, New York was not significantly impacted from the federal government shutdown. However, the significant growth in the stock market, despite the volatility from the debt ceiling impasse and emerging market concerns, as well as the rebuilding effort from

Super Storm Sandy bolstered economic growth in 2013, increasing by 2.1 percent as compared to 1.9 percent growth in GDP.

However, unlike the projected acceleration in national economic growth, economic growth is projected to slow in 2014, increasing by 1.7 percent. This is primarily due to projected slower growth in the financial markets as well as slower employment growth.

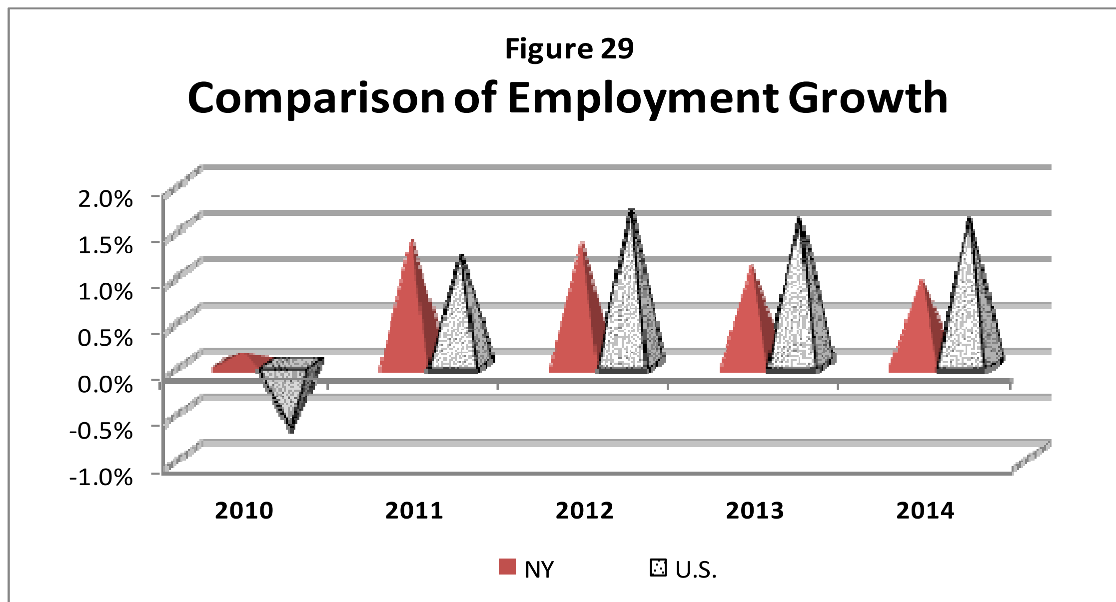
LABOR MARKET



Because overall economic growth is dependent upon growth in the labor market, the rate at which job growth returns after a recession determines the rate at which the economy transitions from recovery to expansion. As seen by economic growth after the 1991 recession, the New York economy had a slow recovery. As shown in figure 28, this was partially due to the slow employment growth during that

recovery period. On the other hand, after the 2001 recession, job growth in New York was similar to job growth nationally, both suffering from the jobless recovery.

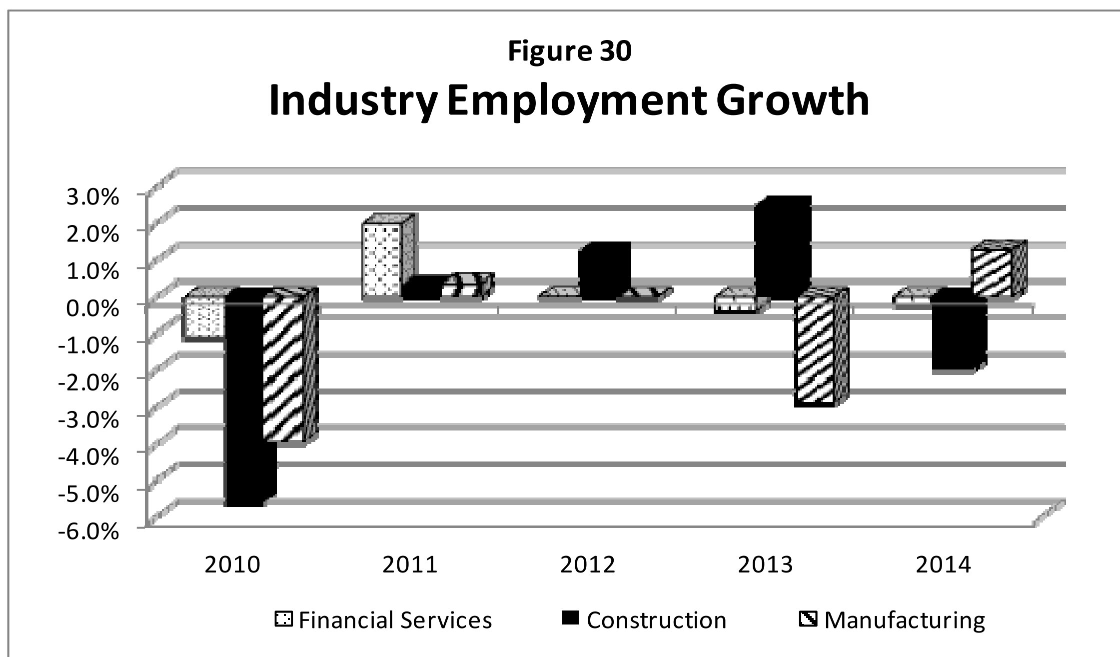
During the current recovery, since the housing market in New York was not as adversely affected as in other parts of the country, the loss of construction jobs was not as great. As a result, while the national economy was still shedding jobs in 2010, New York realized job growth, albeit at a 0.1 percent rate. Figure 29 compares job growth in New York and nationally over the course of the current recovery.



As employment recovered in 2011, job growth also returned to New York, growing by 1.4 percent, slightly higher than national job growth of 1.2 percent.

However, since 2011, job growth in New York has been outpaced by national job growth. In 2012 national employment increased by 1.7 percent whereas job growth in New York remained the same at 1.4 percent. In 2013, national job growth continued at approximately the same pace, growing by 1.6 percent. Conversely, New York's job growth slowed, increasing by only 1.1 percent.

In 2014, national job growth is projected to continue to outpace job growth in New York. National employment is projected to be sustained at the rate of 1.6 percent while New York employment is projected to slow again, increasing by 1.0 percent.



Profits earned by Wall Street firms, as reported by the Securities Industry and Financial Markets Association, realized significant growth during the economic expansion of the last decade. In addition, all of the jobs that had been lost in the financial services industry during the recession of 2001 were recouped. However,

as the economy began to slow in 2007, so did the profits and employment growth of these firms. As the credit crisis hit in 2008, the financial institutions began realizing significant losses. With these revenue losses, employment in the financial activities sector started to decline, declining by 1.5 percent in 2008. In the next two years, the industry continued shedding jobs, with declines of 6.9 percent and 0.9 percent, respectively.

In 2011, the financial services industry was growing and jobs were being created. However, this job creation was realized primarily in the first half of the year. As market volatility continued in the second half of the year and the profits of Wall Street firms diminished, hiring was put on hold.

Even though the profits of the Wall Street firms increased significantly in 2012, this did not translate into a significant increase in jobs. With the continued volatility in the financial markets, employment in the financial services industry remained flat.

With volatility in the bond market sector and restrained growth in profits, the financial services industry shed jobs in 2013, decreasing employment by 0.4 percent. This decrease in jobs is projected to continue in 2014, decreasing by 0.2 percent.

The other industry that was significantly impacted by the economic downturn was the construction industry. With the decline in the housing market and tight credit conditions, the construction industry started to realize significant declines in employment, decreasing by almost ten percent in 2009. Although the housing market did start to recover in 2010, especially in relation to multi-family housing starts, construction job losses continued, decreasing 5.6 percent.

Over the course of the current recovery, employment in the construction industry has gotten stronger, exhibiting growth from 0.3 percent in 2011 to 2.5 percent in 2013. However, a portion of the growth in construction employment in 2013 is due to the rebuilding efforts to repair the damage from Hurricane Sandy. As the rebuilding efforts subside, the demand for construction jobs will diminish, resulting in a decline of 2.0 percent in 2014.

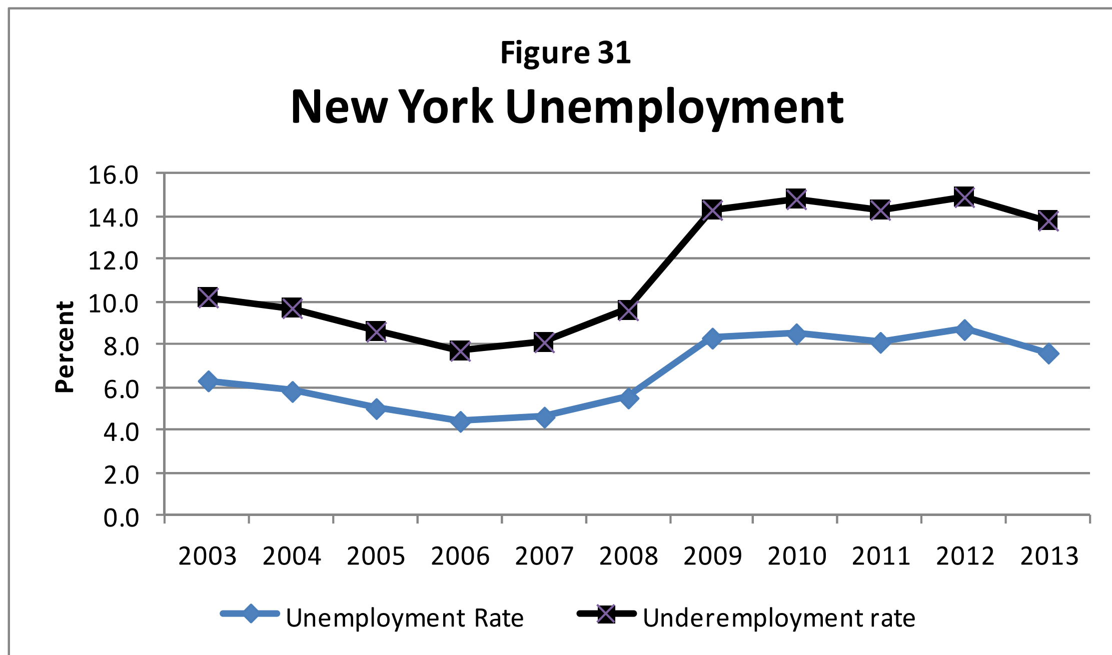
Employment in the manufacturing sector is not only influenced by the demand for goods domestically but, the demand for goods globally. The strength of the global economy as well as the value of the dollar as compared to other currencies impacts the manufacturing sector.

Similar to the construction industry, manufacturing employment suffered significant declines at the end of the recession. With the housing market still depressed and credit markets tight, there was little demand for durable goods. In addition, with little job growth, consumers had limited discretionary spending.

Even as the economy started to strengthen in 2011 and 2012, manufacturing employment in New York did not, only increasing by 0.3 percent over the two years. The manufacturing sector continued to struggle in 2013, employment decreasing by 2.9 percent. With stronger economic growth projected, especially at the national level, manufacturing employment is projected to rebound in 2014, increasing by 1.3 percent.

LABOR UTILIZATION

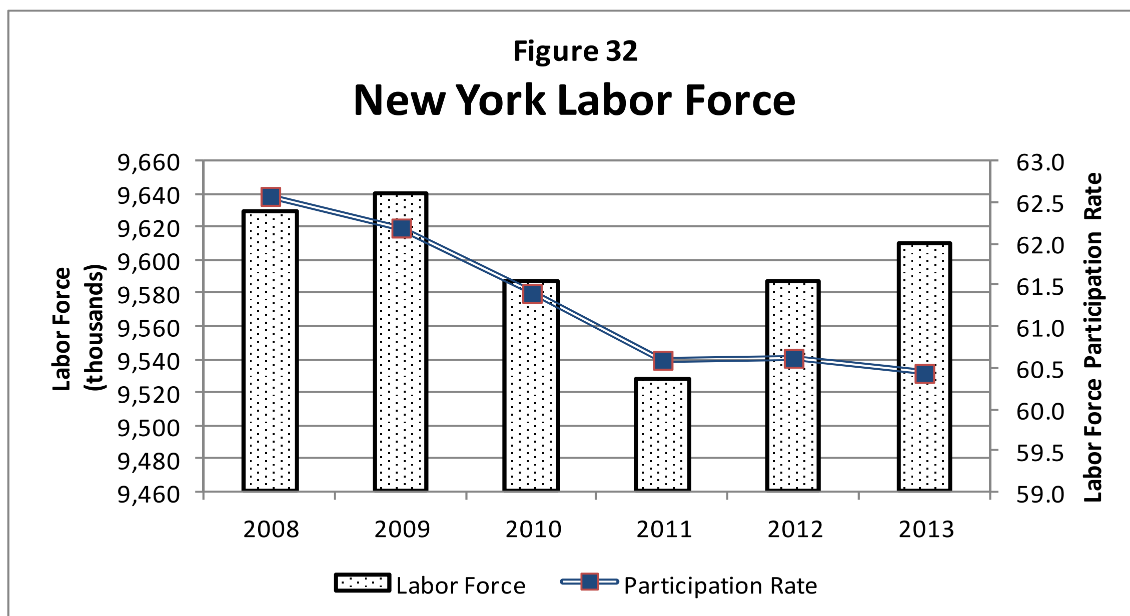
As stated above, in order for an economy to expand, whether at the national level or state level, the labor market needs to grow. However, this growth also needs to ensure that the labor market is used to its fullest potential.



Following the same pattern as the gap between the unemployment rate and the underemployment rate at the national level, the New York underemployment rate exceeded the unemployment rate by an average of 360 basis points prior to the

start of the Great Recession. As job losses ensued, this gap widened, resulting in a difference of 630 basis points. However, unlike the national economy, where both the unemployment rate and the underemployment rate have been decreasing during the recovery, there has been little fluctuation in these rates in New York. Similarly, the gap between the unemployed and underemployed has been narrowing at the national level where the gap has remained the same in New York.

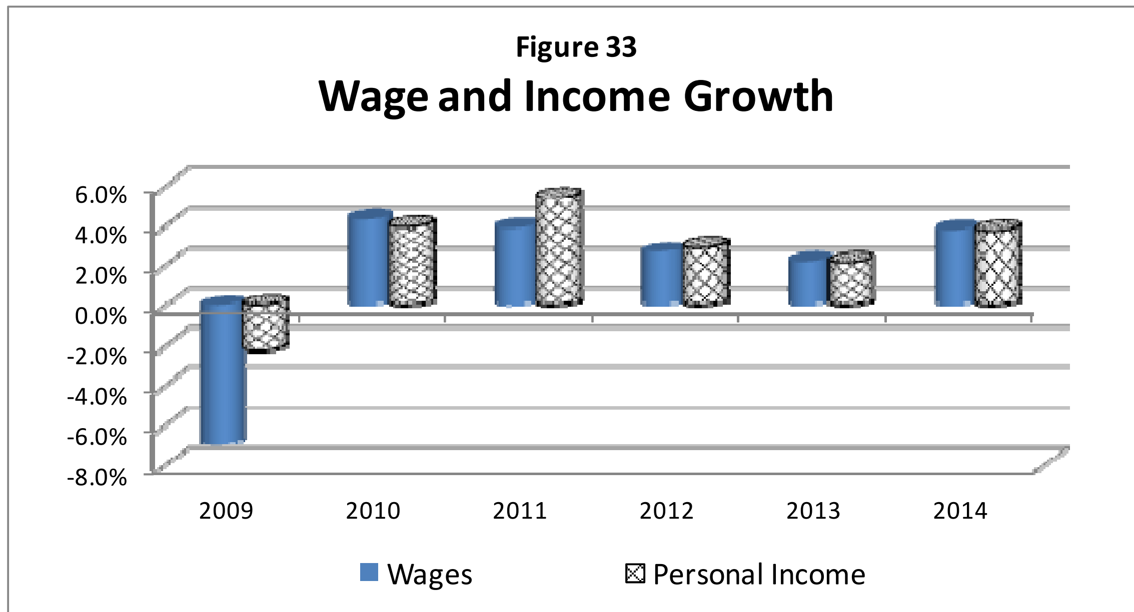
Stated previously, the labor force is the total employed and unemployed population, with the definition of unemployed population including only the number of unemployed looking for work in the past four weeks. It does not include the underemployed. The labor force participation rate is the labor force as a percentage of the civilian working age population.



As shown in figure 32, even though the labor force has been growing in New York over the course of the recovery, the labor force participation rate has not. This

decline in the labor force participation rate results from growth in the population of underemployed, retirees, students, and homemakers being stronger, resulting in a labor market that is still underutilized.

WAGES AND INCOME



The payment of year-end bonuses by the financial services industry plays an important part in New York's wage and income growth. Due to the timing of the payment of Wall Street bonuses which are usually paid in the first quarter of the succeeding year, wage growth in New York is influenced by the performance of the industry in the previous year. The financial markets recorded large revenue losses in 2008 and bonuses that year declined by forty-seven percent, however, wages did not exhibit large declines until 2009 due to the timing of the bonus payments. Similarly, wage growth in 2010 reflected not only the economic recovery but also the increase in bonuses from 2009.

Due to the public and political backlash over the payment of large bonuses during the financial market crisis and the subsequent bailout by the Federal government, there was a change in the method by which bonuses were paid. A larger percentage of bonus compensation is being paid with stock options by which the recipient must hold the stock for a specified number of years to exercise the options. As a result, wage growth is negatively impacted by these changes, increasing by 3.9 percent in 2011.

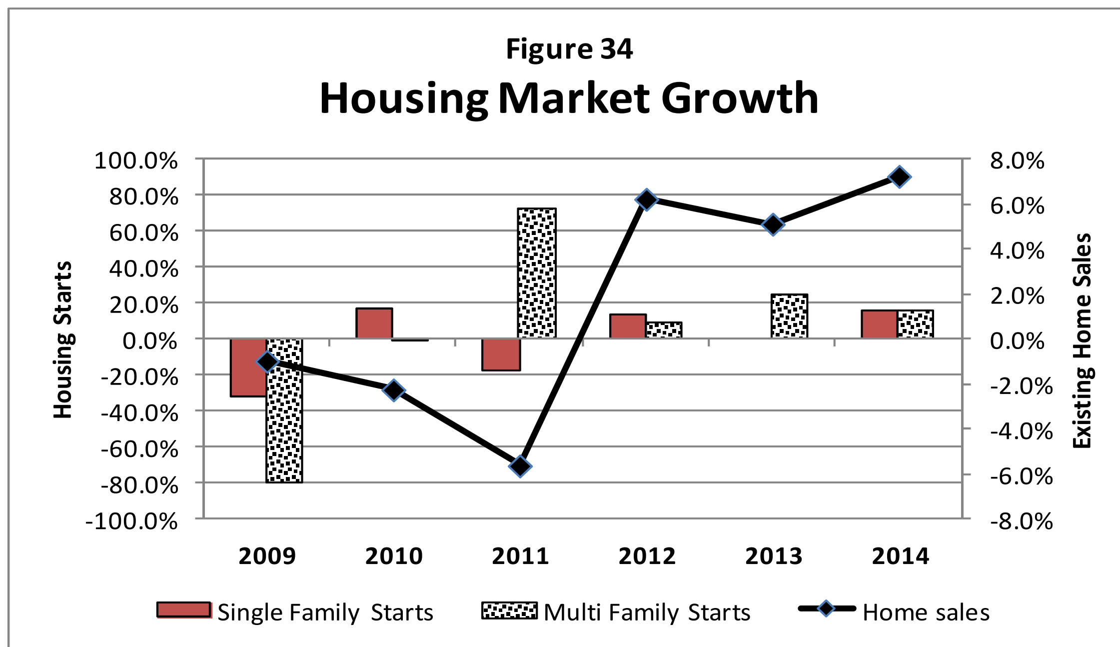
Along with the change in the payment of bonuses, the amount of bonuses paid for 2011 decreased by twenty percent. Even with this decline, wages grew by 2.7 percent in 2012. Although part of this increase is due to increased employment over the course of the year, this increase is also the result of bonuses for the 2012 calendar year being paid in December to avoid Federal tax increases.

Along with the 2.7 percent wage growth in 2012, personal income grew by 2.9 percent. While growth in personal income tends to closely coincide with wage growth, the growth in 2012 is also due to the payment of special dividends in December as well as increased capital gains realizations. These actions were done to avoid the new Medicare tax on investment income that began in January 2013 as well as to avoid any tax increases resulting from the expiration of the Bush era tax cuts prior to the enactment of the American Taxpayer Relief Act (ATRA) which reinstated many, but not all, of the Bush era tax cuts.

Due to the slowdown in employment growth in 2013 and the spin-up of dividend income and capital gains realizations into 2012, wage and personal income growth slowed in 2013, increasing by 2.2 percent and 2.1 percent, respectively.

Although employment growth is projected to slow, both wage growth and personal income growth are projected to increase at a faster rate in 2014 as compared to 2013. This is the result of the one year impact of the spin-up in bonus payments and capital gains realizations as well as growth in proprietors' income.

HOUSING MARKET



In 2009, as the full impact of the recession was felt, both single family and multi-family housing starts declined. In addition, while the first time homebuyer's tax credit boosted existing home sales throughout the nation, it had a less positive impact in New York. Home sales continued to decline in 2010 and 2011.

Similar to the rebound in housing starts at the national level, housing starts were growing in 2010. Although a portion of the national growth was attributable to growth in multi-family housing starts, New York's growth in 2010 was primarily concentrated in the single family sector.

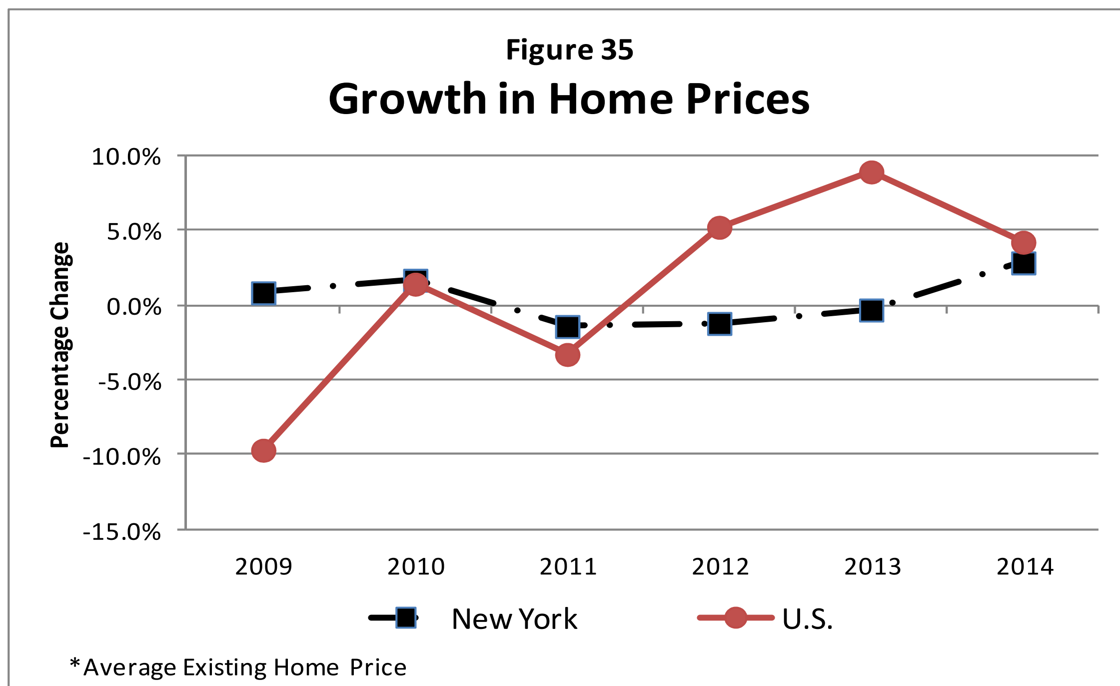
In 2011, economic growth returned but, the growth was slow and there was a significant amount of pessimism in relation to the sustainability of this growth. The demand for housing increased, however, that demand was focused primarily in the rental market. Despite low mortgage rates, New York residents were opting to rent rather than buy. As a result, multi-family housing starts increased by over 70 percent while single family housing gave back the growth that was achieved in 2010.

The improving economy in 2012 allowed growth in both existing home sales and single family housing starts in New York. After the significant growth in multi-family housing starts in 2011, the large demand for more rental units was appeased, resulting in lower growth in 2012. Overall, the total number of housing starts increased by approximately 23,000.

The housing market continued to grow at a slower pace in 2013. In relation to housing starts, multi-family housing once again exhibited the most growth; over 3,000 starts occurring in 2013. However, single family housing starts remained at

the 2012 level of 9,900. Growth in single family starts is projected to return in 2014, increasing at approximately the same rate as multi-family starts.

Existing home sales realized strong growth in 2012 and 2013 after three years of declines, growing by 6.2 percent and 5.1 percent, respectively. This strong growth is projected to continue into 2014, growing by 7.2 percent.



Average home prices, on the other hand, did not decline as significantly as they did at the national level. While the average, existing home price at the national level declined by close to ten percent in 2009, the average price in New York was relatively flat, actually increasing by 0.8 percent. Although the economy improved in 2010, housing prices in New York did not change significantly, increasing by 1.7 percent.

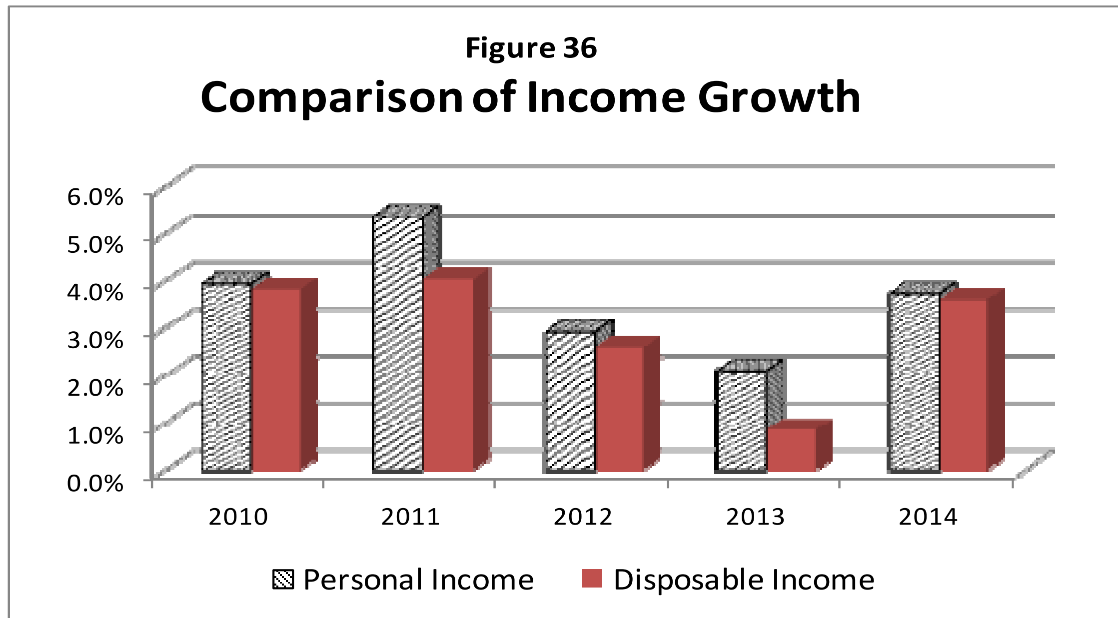
In 2011, the federal tax incentives for first time homebuyers expired and the demand for housing focused on the rental market. Home prices in New York realized their first decline since the bursting of the housing market bubble, decreasing by 1.4 percent.

In 2012 and 2013, while national home prices were experiencing growth, homes prices in New York continued to decline, decreasing by 1.2 percent and 0.3 percent, respectively. This trend is projected to be reversed in 2014 as home prices are projected to increase by 2.8 percent. However, this still lags behind the projected growth rate of 4.2 percent for the nation as a whole.

CONSUMPTION

Consumption, as a component of the Gross Domestic Product, is comprised of the consumption of goods as well as services, including housing, health care, and utilities. While not a perfect proxy for consumption at the national level, the change in the amount of retail sales in New York reflects how the changes in the economy have impacted the consumer's spending behavior.

Similar to the consumer at the national level, the New York consumer was realizing fluctuations in his disposable income due to fiscal policy actions of the federal government. In addition, the fluctuations were also the result of fiscal policy actions of the state government as well.

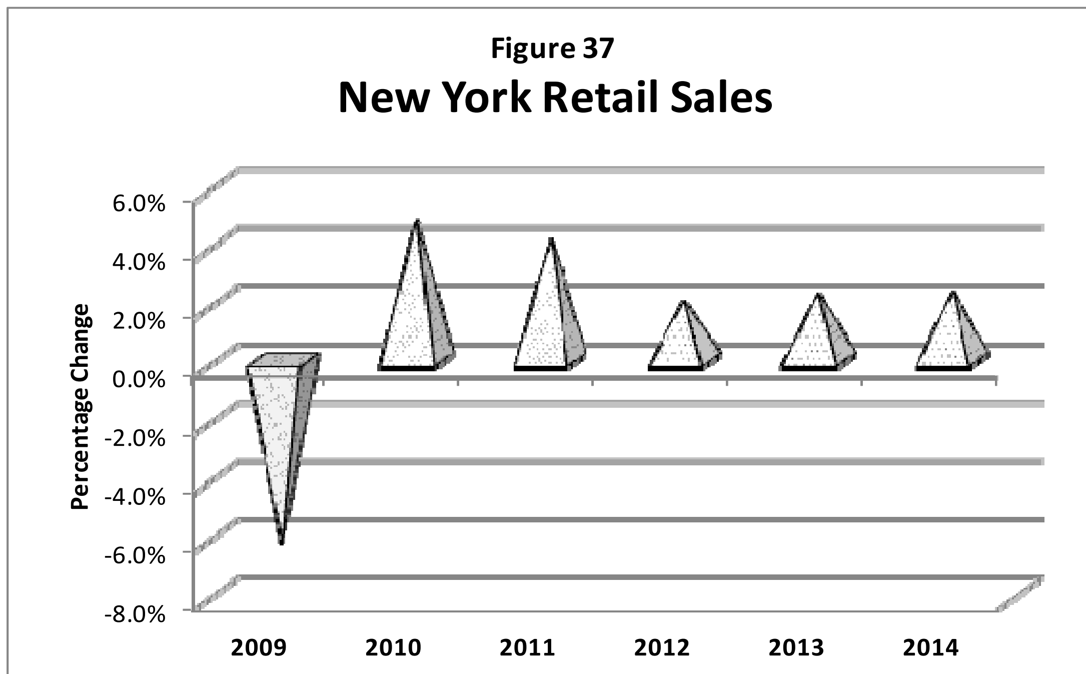


As shown in figure 36, growth in disposable income in 2010 was essentially equal to growth in personal income due to the reduction in the federal payroll tax. However, in 2011, disposable income growth lagged behind personal income growth due to the expiration of the Making Work Pay tax credit. As the impact of the elimination of this tax credit goes away, the disparity between personal income and disposable income growth narrowed in 2012. Also mitigating this disparity was the reduction in New York personal income tax rates enacted at the end of 2011.

As the payroll tax reduction expired at the end of 2012, disposable income growth declined in 2013. However, unlike the elimination of the Making Work Pay credit, which had the same impact on disposable income at both the national and New York level, the imposition of the new Medicare taxes that went into effect in January 2013 had a greater impact on New York disposable income than national

disposable income. This was due to the population of taxpayers impacted by these new taxes being concentrated more in New York.

While these tax changes impact the level of disposable income going forward, their impact on growth is only realized in one year. As a result, disposable income growth is projected to narrow in 2014.



Similar to consumption growth at the national level, retail sales rebounded in 2010 as both wages and personal income grew. These sales also benefitted from the large increase in financial sector bonuses in the first quarter of the year as well as the payroll tax reduction which helped boost the overall disposable income of consumers.

As the global economy grew in 2010 and the dollar depreciated, foreign travelers realized greater buying power in relation to the cheaper U.S. dollar. Tourism

spending increased over five percent at the national level. As New York is a top travel destination, this growth in tourism spending translated into retail sales growth in New York as well.

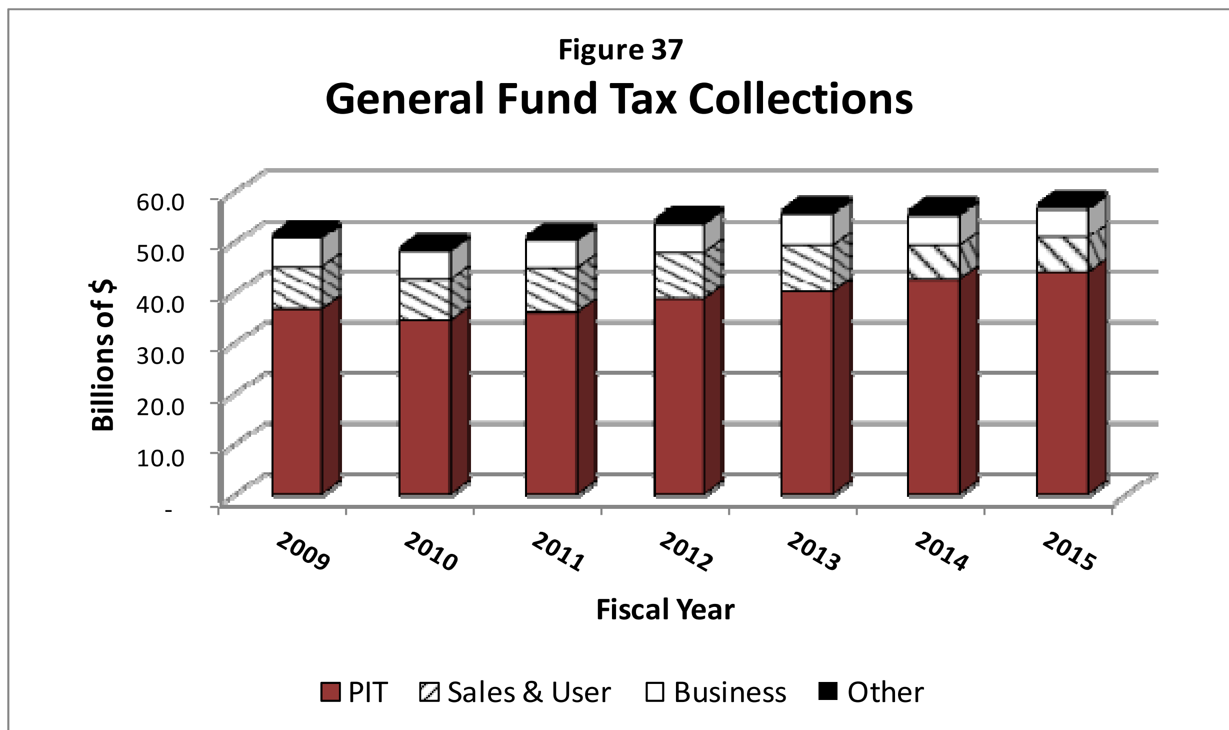
Even though the global economy was also showing signs of slowing, the dollar was still depreciating and tourism grew, albeit at a slower pace than in 2010. As a result, the growth in retail sales slowed slightly, decreasing from 4.8 percent in 2010 to 4.2 percent in 2011.

The significant slowdown in wages and personal income in 2012 was due to the decline in financial industry bonuses for 2011. With the slowdown in the global economy and the appreciation of the dollar, tourism also became a drag on retail sales. As a result, the growth in retail sales slowed to 2.0 percent.

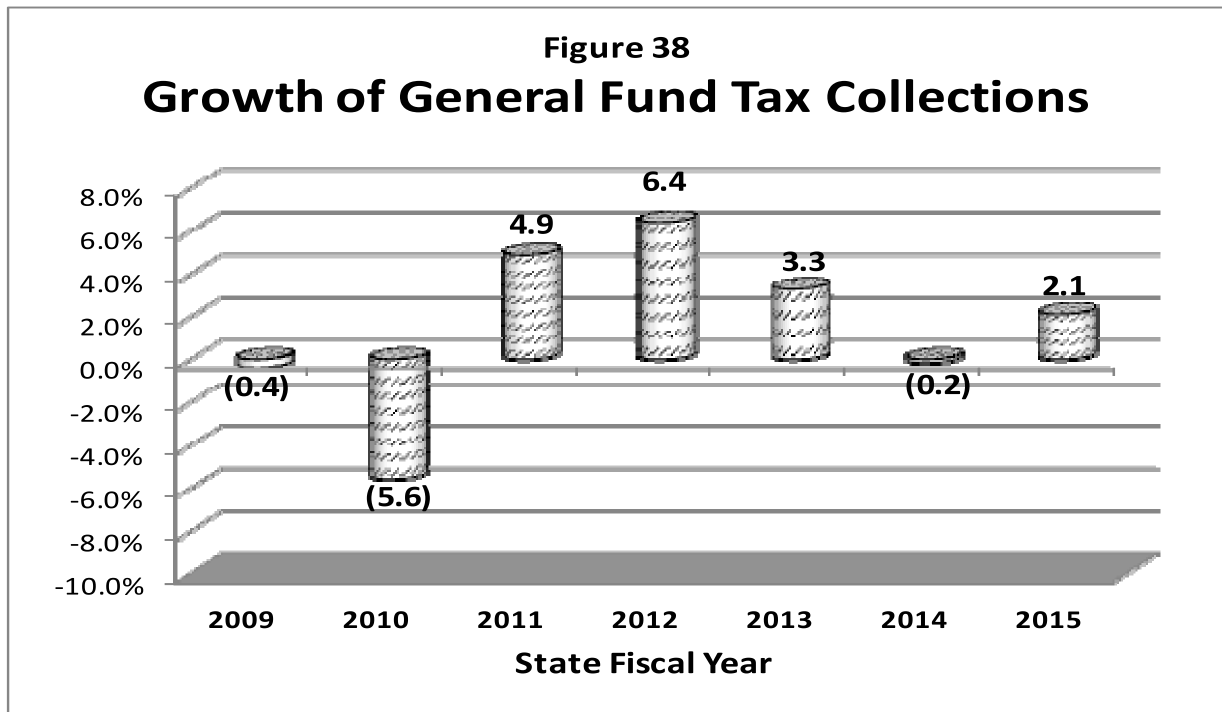
In 2013, with the impact of expiration of the payroll tax reduction and the imposition of the new Medicare taxes, disposable income growth declined. Offsetting this decline was the growth in 2012 bonus payments which resulted in retail sales growth of 2.3 percent. With income growth projected for 2014 as well as stronger economic growth, retail sales are projected to grow by 2.4 percent, similar to consumption growth at the national level.

Revenue Outlook

The New York State Senate Finance Committee generates its revenue estimates using IHS Global Insight's forecasts of national and state economic growth. The economic data is utilized in the New York State Tax Revenue and Economy Model (NYSTREM) – an econometric model developed and operated by IHS Global Insight – to generate the Committee's independent revenue estimates. As summarized in the Appendix of this report, NYSTREM is designed to capture historical and the latest forecast information on the US economy, the New York State economy, and New York State tax revenues and use that information to generate a forecast for each State tax revenue stream.

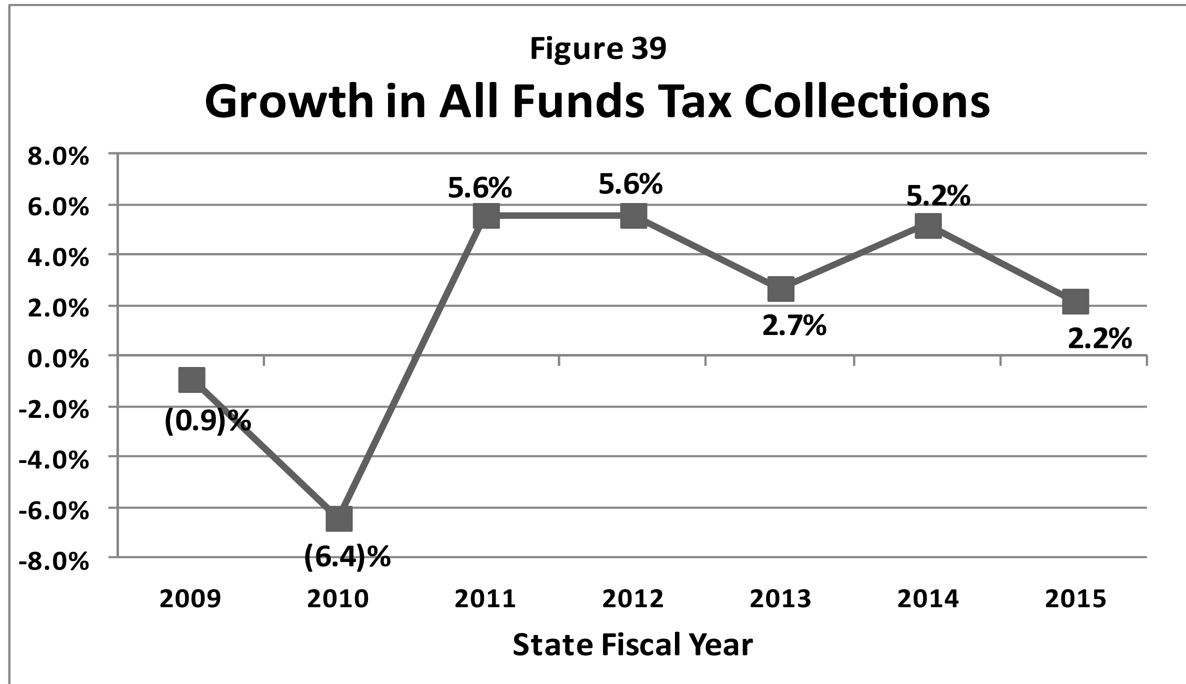


Using the NYSTREM model, the Senate Finance Committee estimates gross General Fund tax collections in FY 2014, excluding the deposits to the STAR and Revenue Bond Tax Fund, to decrease by 0.2 percent to $56.5 billion. This decrease is primarily the result of legislation enacted in FY 2014 which diverted one cent of the State's four cent sales tax for the new Sales Tax Revenue Bond Program. Without this change, General Fund tax collections would have increased by 5.1 percent, to $59.6 billion. On an All Funds basis, gross collections are expected to increase by 5.2 percent to $69.4 billion in FY 2014. These increases are primarily the impact of the spin-up of capital gains realizations on personal income tax returns for the 2012 tax year.



In FY 2014, the Senate Finance Committee projects that General Fund tax collections, excluding special revenue transactions, will increase by 1.9 percent to

$57.7 billion. All Funds collections will increase by 2.2 percent to $71 billion. This increase reflects absence of the spin-up of capital gains realizations offset by the continued projected growth in the economy.

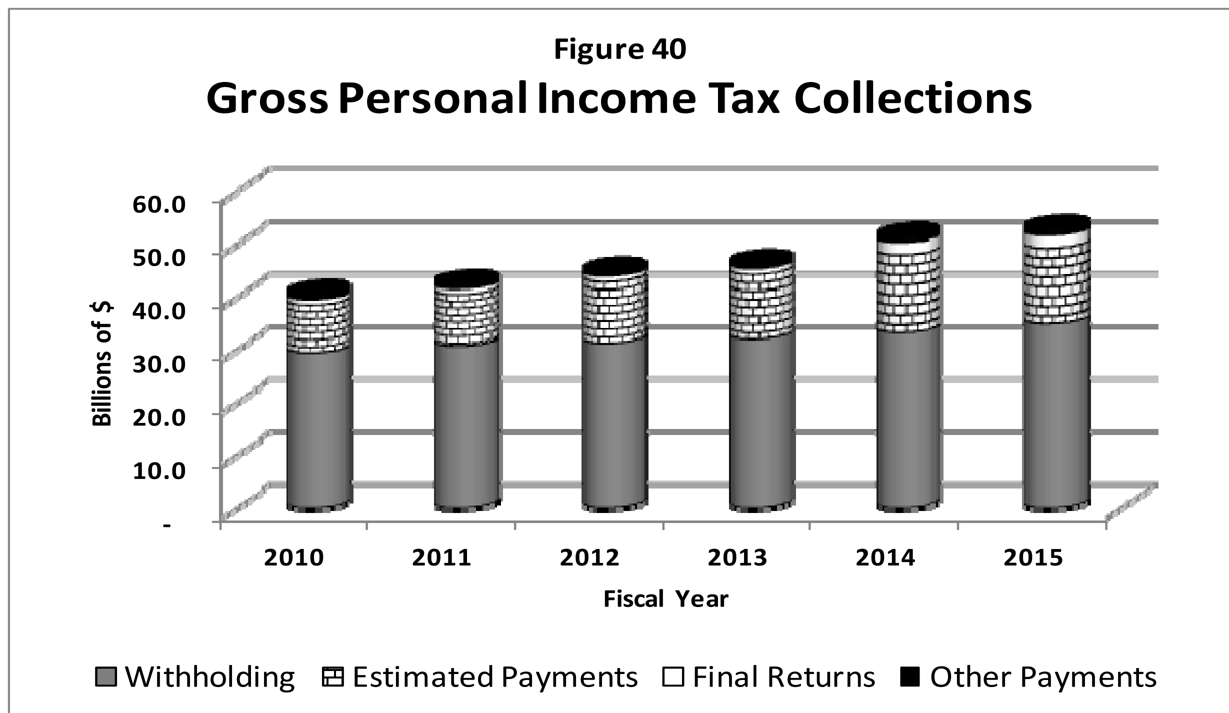


Personal Income Tax

Personal income tax collections account for over half of all New York tax collections and over two thirds of General Fund tax collections (net of reserves). The personal income tax is imposed on all types of income a person may receive (e.g. wages, interest income, dividends, and capital gains). In addition, the personal income tax is imposed on the income of New York's small businesses, such as sole proprietorships, partnerships, and limited liability companies. This income is subsequently offset by certain deductions as enumerated in either the Internal Revenue Code or the New York State Tax Law. For FY 2014, total

General Fund personal income tax collections, net of $14.1 billion in reserve transactions, are estimated to increase by 6.3 percent. This increase reflects the impact of the spin up in capital gains realizations on payments made with final returns and filing extension requests.

In FY 2015, total personal income tax collections, net of $14.5 billion in deposits to the reserve funds, are projected to increase by 3.4 percent to $44.2 billion. This increase is a result of the projected wage and personal income growth in 2014.



PIT Components

The withholding tax and estimated payments are methods by which the taxpayer can equalize his personal income tax payments over the course of the tax year as opposed to being liable for one, lump sum payment. When a person receives income, primarily wages, the appropriate tax is withheld and remitted to the State at the time the income is received. Withholding tax collections in the current fiscal year are estimated to increase by 3.9 percent to $33.2 billion.

Withholding collections in the fourth quarter of the fiscal year historically have accounted for over thirty percent of total withholding for the year. This is due to the payment of bonuses by the financial services industry for their performance in the previous calendar year. In addition, the compensation structure of financial services employees has changed since the public backlash over bonuses being paid to financial companies who had received government support through the TARP. Many businesses in the industry have changed the method by which bonus compensation is paid by either: paying bonuses in the form of stock options by which the recipient must hold the stock for a specified number of years to exercise the options or incorporating into wages what they would have paid their employees in bonuses.

The fourth quarter of FY 2013 realized large growth in withholding due to the realization of income prior to the implementation of higher taxes on investment

income. Even with this spin up of income, wage and personal income growth in FY 2014 resulted in the continued growth in collections. Withholding collections in FY 2015 are projected to increase by 5.0 percent resulting from the projected increase in employment and wage growth.

Another method by which the State collects the personal income tax throughout the tax year is through estimated payments. These payments are made when a taxpayer does not pay the income tax through withholding, such as a self employed individual, and/or has a significant amount of non-wage income not subject to withholding but subject to the personal income tax. These payments are made quarterly throughout the fiscal year. These collections are the most volatile portion of the personal income tax due to the fact that a taxpayer must "forecast" his tax liability for the year.

Estimated tax payments are also made when a taxpayer requests an extension for the submission of his annual return. Upon the request of the extension, the taxpayer estimates what his final tax liability will be for the previous tax year and remits the estimated tax, net of any withholding or previous estimated tax payments.

The most common form of income that is paid through estimated tax payments is capital gains, which are incurred through the sale of an asset. Most people associate capital gains with the stock market. However, as a result of the

significant growth in the housing market, the real estate market had been a major contributor to capital gains realizations during the economic expansion. As the housing market declined, there has been less speculation in real estate by investors which decreased its contribution to capital gains realizations.

Another contributor to the strength or weakness of estimated payment growth is proprietor's income. This type of income includes all the self-employed businesses who earn their money through their business profits and not through the traditional withholding of wages.

Estimated tax payments are estimated to be 20.2 percent higher in FY 2014; an increase of approximately $2.5 billion. This growth reflects an increase in the amount of estimated payments paid with taxpayers' requests for extensions to file their annual tax returns. As stated previously, this increase reflected the increased capital gains realizations and increased dividend payments in 2012.

In FY 2015, estimated payments are projected to decline by 2.5 percent, to $14.3 billion. This decrease primarily reflect the decrease in estimated payments made with extension payments. However, a portion of this decrease is offset by growth in proprietors' income in 2014.

The personal income tax is also collected through the annual returns taxpayers must file. The annual return is essentially a reconciliation of a taxpayer's taxable

income (gross income less deductions) and taxes paid through withholding or estimated payments throughout the preceding calendar year. As such, additional tax liability due or refunds are considered the "settlement" of a taxpayer's personal income tax. Payments made through the filing of annual returns are estimated to increase by 9.8 percent in FY14. Since final return payments are based on a taxpayer's income for the previous calendar year, this increase is primarily the result of strong personal income growth in 2012. In FY 2015, collections from final returns are projected to increase by 2.7 percent, to $2.4 billion. This increase is a result of the increased personal income growth in 2013 offset by the absence of increased capital gains.

The amount of refunds to be paid to taxpayers is estimated to be 19.7 percent higher in FY 2014. The increase in refunds is primarily due to the planned increase in the amount of current year refunds paid in the fourth quarter of the current fiscal year. The amount of refunds paid in the final quarter of the fiscal year is constrained in order to maintain cash flow between fiscal years. Due to the advent of electronic filing, there have been a larger amount of refunds being claimed in the January to March period. In order to ensure that taxpayers receive their refunds in a timely manner, the amount of refunds to be issued was capped at $1.75 billion. In the current fiscal year, the amount of refunds is increased by $310 million, to $2.06 billion.

For FY 2015, refunds are projected to remain flat, decreasing by $3 million. The zero growth in refunds is primarily due to the payment of the Family Relief Tax Credit enacted in FY 2014 offset by the spin-up of refunds from April to March as mentioned above and the subsequent spin-down of refunds in 2014 as the cap on refunds paid in the final quarter are reduced to $1.75 billion once again.

Lastly, personal income tax collections are composed of assessments imposed upon taxpayers as a result of the audit process and filing fees imposed on limited liability companies. Assessments not only consist of any overdue taxes but the interest and penalties imposed upon such liability. Other collections are estimated to increase by 4.2 percent to $1.2 billion in FY 2014. In FY 2015, other payments are projected to continue to increase by 9.6 percent, to $1.3 billion.

A portion of income tax collections are deposited to a special revenue fund and a debt service fund. The STAR reserve is a special revenue fund that receives a portion of personal income tax collections to reimburse school districts for the reduction in their property tax collections as a result of the STAR program.

The Revenue Bond Tax Fund (RBTF) is a debt service fund into which twenty-five percent of personal income tax receipts (net of refunds and the STAR deposit) are deposited. This fund is used to pay the debt service on the State’s PIT revenue bonds. Any funds in excess of the required debt service payments are transferred back to the General Fund. Deposits to the RBTF are estimated to increase by 6.3

percent in FY 2014, reflecting the projected growth in personal income tax collections during the year. Deposits into the RBTF are projected to be 3.4 percent higher in FY 2015. This increase is due to higher projected personal income tax receipts as a result of personal income and wage growth.

User Taxes and Fees

User taxes, also known as consumption taxes, are what their name implies - taxes on the use or consumption of different items in the State. These taxes consist of the sales and use tax, the auto rental tax, the cigarette tax, the motor fuel tax, alcoholic beverage taxes, the highway use tax and the MTA taxicab surcharge. Some of these taxes are only deposited to the General Fund; some are deposited only to special revenue funds; while others are deposited to a combination of funds.

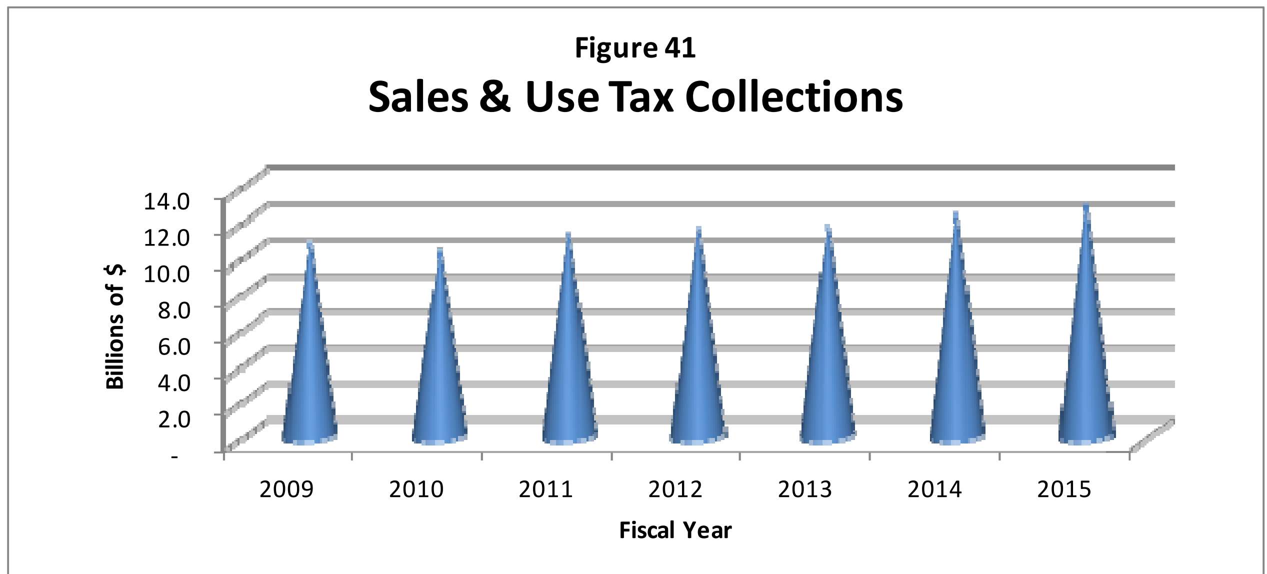


Figure 41
Sales & Use Tax Collections

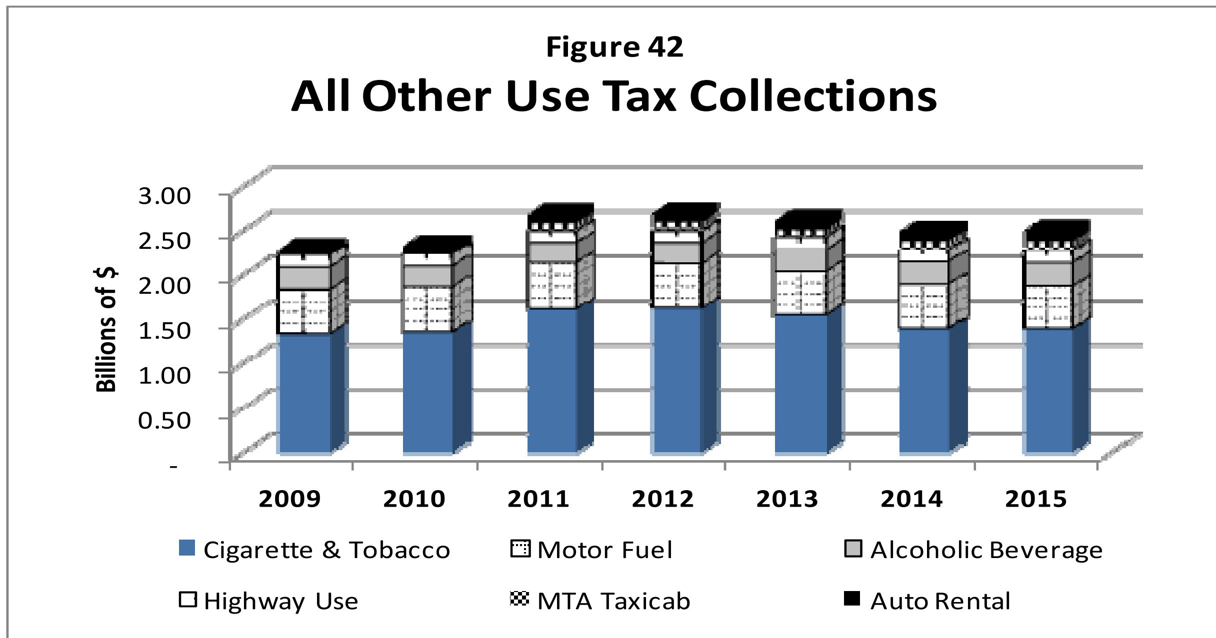
Sales and use tax collections comprise a large portion of the tax collections in this category. Receipts from this tax are deposited into the General Fund, a Special Revenue fund (the Metropolitan Transportation Operating Account), and a debt service fund (the Local Government Assistance Tax Fund). In FY 2014, General Fund receipts are estimated to decrease by 29.9 percent, to $5.9 billion. This decrease reflects the dedication of one cent of the four cent state sales tax to the newly created Sales Tax Revenue Bond Tax Fund. Similar to the Revenue Bond Tax Fund, the portion of the sales tax pays the debt service on the new sales tax revenue bonds. Any deposits in excess of these debt service costs get transferred back to the General Fund.

On an All Funds basis, sales and use tax collections are estimated to increase by 5.4 percent to $12.6 billion in FY 2014. The increase in collections reflect growth in consumption as well as income growth.

In FY 2015, General Fund receipts are projected to increase by 4.1 percent to $6.1 billion. All Funds sales and use tax receipts are projected to increase by 4.1 percent. Both the increase in General Fund and All Funds collections reflect the projected consumption and income growth for 2014.

Receipts from the cigarette tax are deposited to the General Fund and the HCRA funds while receipts from the tobacco tax are deposited solely to the General Fund. General Fund collections for cigarette and tobacco taxes in FY 2014 are estimated

to decrease by 12.9 percent primarily due to a large amount of refunds paid in the fourth quarter due to a court case that changed the method by which the tobacco tax is administered. All Funds collections for FY 2014 are estimated to decrease by 9.0 percent.

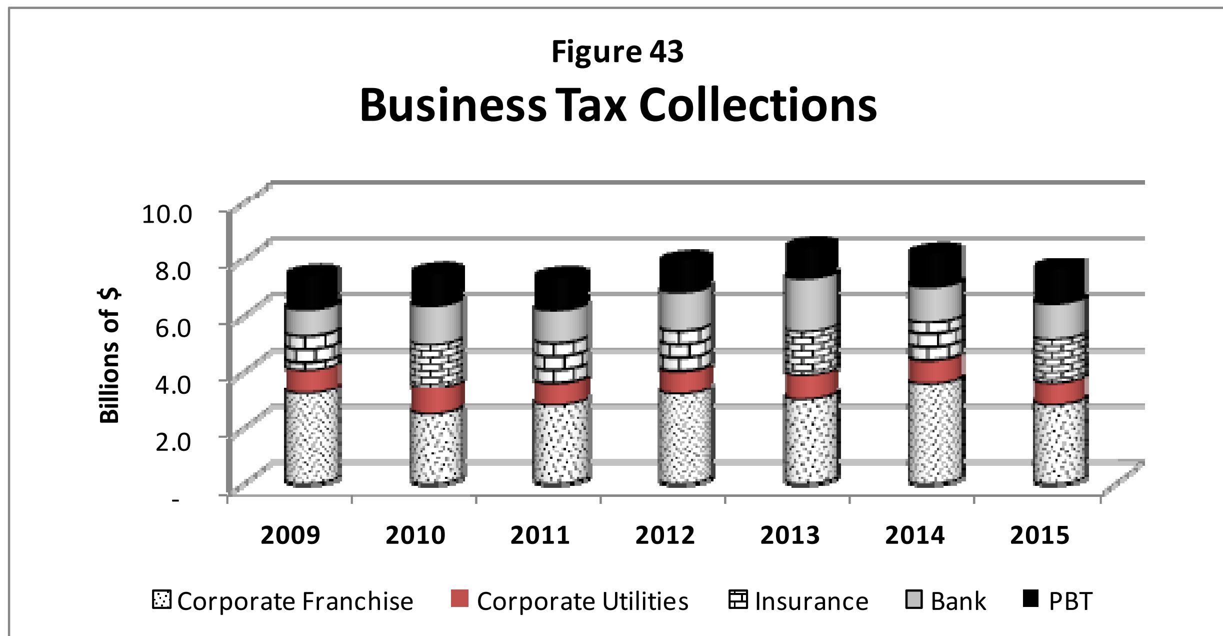


In FY 2015, General Fund cigarette and tobacco tax collections are projected to increase by 1.0 percent. This increase reflects the absence of the increased refunds and the new administration of the tobacco tax. All Funds cigarette and tobacco tax collections are projected to decrease by 2.9 percent in FY 2015, reflecting the continued decline in consumption.

The only other user tax that is deposited to the General Fund is the Alcoholic Beverage Tax which is estimated to increase by 3.3 percent to $254 million in FY 2014. In FY 2015, these tax collections are projected to increase by 1.6 percent, increasing to $258 million.

All Funds collections of the remaining user taxes are estimated to decrease by 1.2 percent to $816 million in FY 2014. For FY 2015, collections from these other taxes are projected to increase by 1.8 percent, increasing to $831 million.

Business Taxes



Business taxes in New York are imposed on various aspects of a business' income. The corporate franchise tax and the bank tax are imposed on a business' entire net income; the corporate utility tax is imposed on the gross receipts of the business;

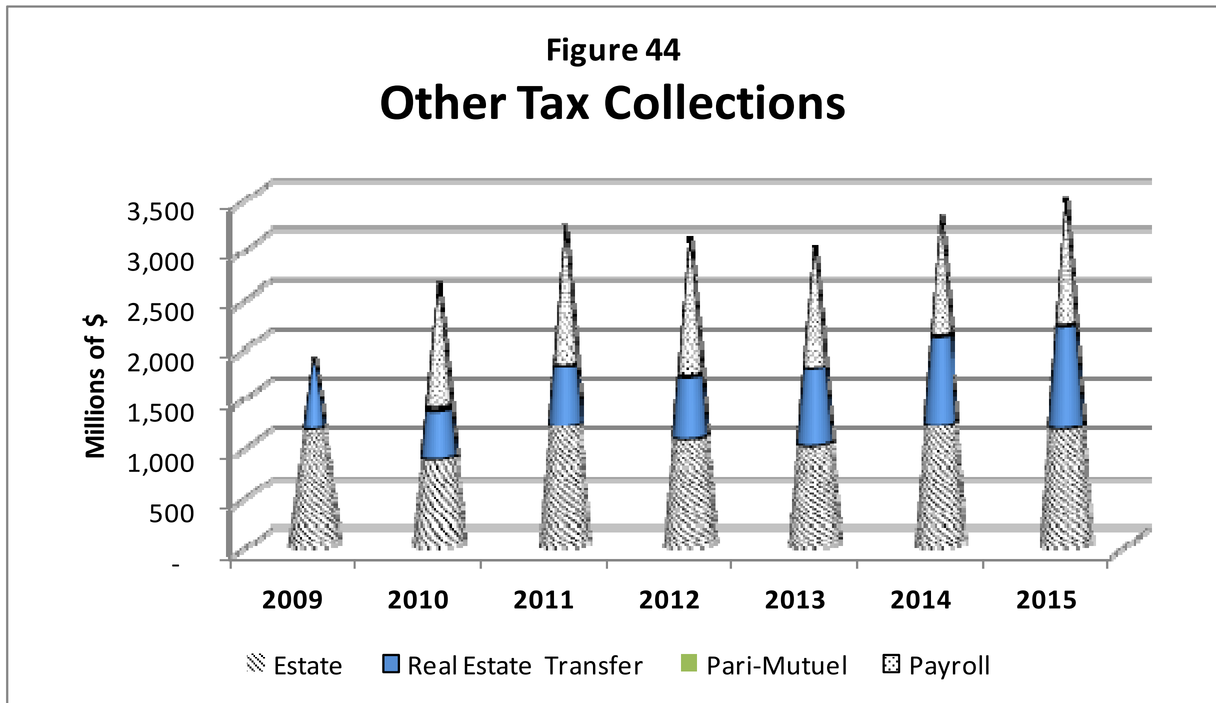
and the insurance tax is imposed on premiums. The petroleum business tax is imposed on the gross receipts from the sale of various petroleum products by the business. However, any increase/decrease in liability for the petroleum business tax is pegged to an inflation index.

General Fund business tax collections are estimated to decline by 3.3 percent to $6.05 billion in FY 2014. This decline is due to the decrease in audit collections under the bank tax and a large refund under the corporate utilities tax. These decreases are partially offset by corporate profit growth. On an All Funds basis, business taxes are estimated to increase by 0.6 percent to $8.2 billion. This increase is due to an increase in collections from the petroleum business tax as a result of the five percent indexing increase in the tax rate which occurred in January 2013 offset by the factors stated above.

General Fund and All Funds business taxes in FY 2015 are projected to decline by 9.8 percent to $5.45 billion and by 7.2 percent to $7.64 billion, respectively. This decrease reflects the projected decrease in audit collections under the corporate franchise tax, the first year of the repayment of the deferred credits, and the fiscal impact of the proposed corporate tax reform.

Other Taxes

Other taxes consist of the estate tax, the real estate transfer tax, the pari-mutuel tax, the boxing and wrestling exhibitions tax and the MTA payroll tax. Both the real estate transfer tax and the MTA payroll tax are deposited solely to special revenue funds while the remainder of the taxes are deposited solely to the General Fund.



General Fund receipts of these taxes are estimated to increase by 20.3 percent to $1.24 billion in FY 2014. This increase is primarily due to growth in household net worth as well as an increase in the number of super large estates settled in the current fiscal-year. In FY 2015, General Fund receipts are projected to decline

by 3.3 percent to $1.2 billion; reflecting the elimination of the super large estate collections offset by increased household wealth.

All Funds collections of other taxes are estimated to increase by 10.6 percent to $3.3 billion in FY 2014 and are projected to increase by 4.7 percent to $3.5 billion in FY 2015. The increase in the current fiscal year is attributable to strong real estate transfer tax collections as well as the increased estate tax collections. The increase in other tax collections in FY 2015 is due to increased collections from the MTA payroll tax as a result of projected wage growth and increased real estate transfer tax collections due to continued growth in the housing market.

APPENDIX

THE NEW YORK STATE TAX REVENUE AND ECONOMY MODEL

Technical Characteristics

This report represents a continuation of the long-standing relationship between the Senate Finance Committee and IHS Global Insight. Prior to 1995, IHS Global Insight (formerly WEFA) produced both the economic and revenue forecasts and issued a final report to the Senate Finance Committee. Under a relationship now in its twelfth year, IHS Global Insight continues to produce the economic and tax revenue forecasts using the New York State Tax and Revenue Model (NYSTREM) and serves in an advisory capacity to the Senate Finance Committee in the development of revenue forecasts.

The New York State Tax Revenue and Economy Model (NYSTREM) was developed for the New York State Senate by IHS Global Insight to provide forecasts of quarterly tax revenues, by tax category, on a timely basis with the greatest accuracy possible. The model captures the latest historical and forecast information of the U.S. economy, the New York State economy, and New York State tax revenues.

The model and forecasting procedures have the following characteristics and considerations:

- the model is based on economic theory and tax revenue accounting relationships;
- tax variables are first seasonally adjusted to obtain consistency with other seasonally adjusted national and New York State data in modeling and forecasting processes, and are transformed back into non-seasonally adjusted variables to reflect the seasonality of tax collections;
- the New York State economy part of the model belongs to the system of IHS Global Insight's Quarterly State Econometric Model. This system is composed of 51 state and D.C. models, which is further linked to IHS Global Insight's national social and economic forecasting system;
- all of the expertise of the IHS Global Insight Regional Economics Group is embedded in the modeling and forecasting processes;
- the Senate Finance Committee has access to the latest historical data and IHS Global Insight's forecast of the U. S. economy each month; and
- NYSTREM is implemented in AREMOS, IHS Global Insight's proprietary, state-of-the-art, econometric, PC-based software, providing the New York Senate Finance Committee with the ability to carry out simulations of the model as needed.

Equations in the model were estimated with the most appropriate methods that econometrics theory suggests based on the availability and characteristics of

the data. Because state tax revenue is determined by the state, as well as the national economy, many U.S. and New York State economic and social variables must be used to provide an explanation of New York State tax revenue. Therefore, besides forecasting New York State's tax revenue, NYSTREM also forecasts the State's following variables:

- 2-digit manufacturing (26 components) and 1-digit non-manufacturing employment (29 components);
- 13 components of real income;
- 15 components of nominal income;
- 25 components of population by age;
- 1 component of net migration by age;
- 8 components of household by age and sex of head;
- 2 components of retail sales;
- housing starts, sales and prices;
- passenger motor vehicle registration;
- pari-mutuel racing attendance;
- total retail sales; and
- alcoholic beverage sales volume.

IHS Global Insight needs to process hundreds of endogenous and exogenous data series for estimating equations in the model and producing the forecasts.