New York State Senate Majority

Finance Committee

economic and revenue review

FY 2017

GLOBAL INSIGHT

Senator John J. Flanagan
Temporary President of the Senate
Majority Leader
Coalition Leader

Senator Jeffrey D. Klein
Independent Democratic Conference Leader
Coalition Leader

Senator Catharine M. Young
Chair, Finance Committee

Michael Paoli
Secretary to the Finance Committee

FEBRUARY 2016

NEW YORK STATE ECONOMIC AND REVENUE REVIEW

FISCAL YEAR 2016-17

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Secretary to the Finance Committee

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In conjunction with:
IHS GLOBAL INSIGHT

FEBRUARY 2016

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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 2017. Based upon IHS Global Insight's February economic forecast, the Senate Finance Committee projects All Funds tax revenues to be $498 million above the Executive for FY 2017. This amount is enhanced by the estimate of tax revenues for the remainder of the FY 2016 which is $253 million above the Executive estimate. This results in a two year All Funds tax revenue forecast that is $751 million above the Executive projection.

The Senate Finance Committee projects $585 million in General Fund revenues (inclusive of miscellaneous receipts and transfers) above the Executive Budget forecast for FY 2017. This amount is enhanced by the estimate for the remainder of FY 2016, which is $344 million above the Executive estimate. Therefore, the two year General Fund receipts forecast is $929 million above the Executive forecast.

The major influences on the national economy currently are the steep drop in oil prices, appreciating dollar, strong consumer spending, and strong wage growth. Low oil prices mean low gas prices at the pump for consumers resulting in consumers spending on

average $750 less on gas in 2015 as compared to 2014 and $380 less in 2016 as compared to 2015.

Economic growth improved in 2015 due in large part to growth in consumer spending, wage growth, and the rebounding housing market. However, unlike the projected acceleration in national economic growth, economic growth in New York improved at a slower rate, increasing 1.5 percent in 2015. This is primarily due to national job growth outpacing New York job growth. This same trend is projected to continue into 2016, with economic growth projected to increase 1.8 percent, still slower than national economic growth, which is projected to increase by 2.4 percent.

As outlined in the following tables, total All Funds tax collections are estimated at $75.3 billion in FY 2016. This estimate is $253 million above the Executive Budget forecast. For FY 2017, All Funds tax revenues are expected to increase by $2.8 billion to $78.1 billion or $498 million above the Executive's projections.

Estimates for the remainder of the current fiscal year reflect strong personal income tax collections due to strong wage and salary growth in 2015. These estimates also reflect strong sales tax and real estate tax collections resulting from increases in disposable income and the stronger housing market. IHS Global Insight's forecast of the overall

national economy in 2016 is similar to the economic forecast presented by the Executive, with stronger wage, corporate profit growth, consumption, and overall economic growth. The forecast for the State economy in 2016 is slightly stronger than the economic forecast presented by the Executive, with stronger wages and employment.

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. While the price of oil has dropped significantly since 2014 and is projected to continue to decrease through 2016, any actions on the part of Organization of the Petroleum Exporting Countries (OPEC) to decrease production sooner would have a significant impact on not only consumers discretionary income, but could increase inflation earlier than expected. In addition, while it is expected that interest rates will be increased this year, increases too soon could lead to reduced consumer spending.

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 2016 General Fund Tax Collections
(Millions of Dollars)

	Senate Finance	Executive Budget	Variance
Personal Income Tax	**32,099**	**31,982**	**117**
Withholding	36,774	36,706	68
Estimated Payments	16,122	16,088	34
Final Returns	2,658	2,633	25
Other Payments	1,281	1,292	(11)
Gross Collections	56,834	56,719	115
Refunds	(9,601)	(9,626)	25
STAR	(3,337)	(3,337)	0
RBTF	(11,797)	(11,774)	(24)
User Taxes and Fees	**6,866**	**6,781**	**86**
Sales and Use	6,302	6,220	83
Cigarette / Tobacco	309	307	2
Alcoholic Beverage	255	254	1
Business Taxes	**6,139**	**6,202**	**(63)**
Corporate Franchise	4,259	4,325	(66)
Corporate Utilities	585	589	(4)
Insurance	1,395	1,388	7
Bank Tax	(100)	(100)	0
Other Taxes	**1,472**	**1,466**	**6**
Estate and Gift	1,453	1,446	7
Pari-mutuel Taxes	18	18	(1)
Other	2	2	0
Total General Fund Taxes	**46,576**	**46,430**	**145**
Miscellaneous Receipts	5,820	5,820	0
Transfers	18,239	18,040	199
Total General Fund Receipts	**70,635**	**70,290**	**344**

Note: totals may not add due to rounding

FY 2017 General Fund Tax Collections
(Millions of Dollars)

	Senate Finance	Executive Budget	Variance
Personal Income Tax	**34,338**	**34,242**	**96**
Withholding	38,438	38,525	(87)
Estimated Payments	16,771	16,591	180
Final Returns	2,785	2,720	65
Other Payments	1,394	1,358	36
Gross Collections	59,388	59,194	194
Refunds	(9,291)	(9,234)	(57)
STAR	(3,228)	(3,228)	0
RBTF	(12,531)	(12,490)	(41)
User Taxes and Fees	**7,152**	**7,089**	**63**
Sales and Use	6,560	6,483	77
Cigarette / Tobacco	332	348	(16)
Alcoholic Beverage	259	258	1
Business Taxes	**5,957**	**5,776**	**181**
Corporate Franchise	3,932	3,703	229
Corporate Utilities	555	579	(25)
Insurance	1,298	1,321	(23)
Bank Tax	173	173	0
Other Taxes	**1,003**	**986**	**18**
Estate and Gift	983	965	18
Pari-mutuel Taxes	18	18	0
Other	2	3	(1)
Total General Fund Taxes	**48,450**	**48,093**	**358**
Miscellaneous Receipts	2,642	2,642	0
Transfers	18,275	18,047	228
Total General Fund Receipts	**69,366**	**68,781**	**585**

Note: totals may not add due to rounding

FY 2016 All Funds Tax Collections
(Millions of Dollars)

	Senate Finance	Executive Budget	Variance
Personal Income Tax	**47,233**	**47,093**	**140**
Withholding	36,774	36,706	68
Estimated Payments	16,122	16,088	34
Final Returns	2,658	2,633	25
Other Payments	1,281	1,292	(11)
Gross Collections	56,834	56,719	115
Refunds	(9,601)	(9,626)	25
User Taxes and Fees	**15,817**	**15,641**	**176**
Sales and Use	13,483	13,318	165
Cigarette / Tobacco	1,232	1,224	8
Alcoholic Beverage	255	254	1
Motor Fuel Tax	492	491	1
Highway Use Tax	156	155	1
Auto Rental	125	126	(1)
MTA Taxicab	73	72	1
Medical Marihuana	1	1	0
Business Taxes	**8,335**	**8,406**	**(71)**
Corporate Franchise	4,992	5,069	(78)
Corporate Utilities	762	767	(5)
Insurance	1,565	1,557	8
Bank Tax	(92)	(92)	0
Petroleum Business	1,109	1,105	4
Other Taxes	**2,629**	**2,613**	**16**
Real Estate Transfer	1,156	1,147	9
Estate and Gift	1,453	1,446	7
Pari-mutuel Taxes	18	18	(0)
Other	2	2	0
Payroll Tax	**1,322**	**1,331**	**(9)**
Total All Funds Taxes	**75,336**	**75,084**	**253**

Note: totals may not add due to rounding

FY 2017 All Funds Tax Collections
(Millions of Dollars)

	Senate Finance	Executive Budget	Variance
Personal Income Tax	**50,097**	**49,960**	**137**
Withholding	38,438	38,525	(87)
Estimated Payments	16,771	16,591	180
Final Returns	2,785	2,720	65
Other Payments	1,394	1,358	36
Gross Collections	59,388	59,194	194
Refunds	(9,291)	(9,234)	(57)
User Taxes and Fees	**16,248**	**16,135**	**113**
Sales and Use	14,031	13,877	154
Cigarette / Tobacco	1,171	1,226	(55)
Alcoholic Beverage	259	258	1
Motor Fuel Tax	495	488	7
Highway Use Tax	82	84	(2)
Auto Rental	133	128	5
MTA Taxicab	73	70	3
Medical Marihuana	4	4	0
Business Taxes	**8,232**	**8,018**	**214**
Corporate Franchise	4,764	4,487	277
Corporate Utilities	730	762	(32)
Insurance	1,458	1,484	(26)
Bank Tax	203	203	0
Petroleum Business	1,077	1,082	(5)
Other Taxes	**2,174**	**2,124**	**50**
Real Estate Transfer	1,171	1,138	33
Estate and Gift	983	965	18
Pari-mutuel Taxes	18	18	0
Other	2	3	(1)
Payroll Tax	**1,373**	**1,388**	**(15)**
Total All Funds Taxes	**78,123**	**77,625**	**498**

Note: totals may not add due to rounding

United States Economic Outlook

(Dollar Figures in Billions of Dollars)

	2015	2016	2017	2018
GDP	$17,937.9	$18,624.1	$19,502.9	$20,418.8
Percent Change	3.4%	3.8%	4.7%	4.7%
Real GDP	$16,342	$16,727	$17,200	$17,647
Percent Change	2.4%	2.4%	2.8%	2.6%
Consumption Expenditures	$11,211	$11,539	$11,898	$12,227
2009 Dollars, Percent Change	3.1%	2.9%	3.1%	2.8%
Government Expenditures	$2,860	$2,920	$2,934	$2,945
2009 Dollars, Percent Change	0.8%	2.1%	0.5%	0.4%
Investment Expenditures	$2,740	$2,851	$3,016	$3,161
2009 Dollars, Percent Change	4.0%	4.1%	5.8%	4.8%
Change in Inventories	$2,258	$2,292	$2,332	$2,386
2009 Dollars, Percent Change	4.4%	1.5%	1.8%	2.3%
Exports	$2,109	$2,149	$2,260	$2,378
2009 Dollars, Percent Change	1.1%	1.9%	5.1%	5.2%
Imports	$2,657	$2,747	$2,936	$3,108
2009 Dollars, Percent Change	5.0%	3.4%	6.9%	5.9%
CPI - All Urban, Percent Change	0.1%	0.7%	2.3%	2.7%
CPI - Core, Percent Change	1.8%	1.7%	1.7%	2.2%
Pretax Corporate Profits	$2,020	$2,085	$2,170	$2,196
Percent Change	-2.6%	3.2%	4.1%	1.2%
After-tax Corporate Profits	$1,657	$1,654	$1,715	$1,666
Percent Change	4.2%	-0.2%	3.7%	-2.8%
Personal Income	$15,357	$15,960	$16,722	$17,564
Percent Change	4.5%	3.9%	4.8%	5.0%
Wages and Salaries	$7,839	$8,216	$8,618	$9,035
Percent Change	4.8%	4.8%	4.9%	4.8%
Nonagricultural Employment, Millions	141.8	144.3	145.9	147.4
Percent Change, Seasonally Adjusted	2.1%	1.8%	1.1%	1.0%
Unemployment Rate	5.3%	4.8%	4.9%	4.9%
Interest Rates				
T-Bill Rate, 3 Month	0.05%	0.5%	1.35%	2.34%
T-Note Rate, 10 Year	2.14%	2.2%	2.57%	3.13%
T-Bond Rate, 30 Year	2.84%	2.9%	3.20%	3.62%
Standard and Poor's 500 Stock Index				
Percent Change	6.8%	-3.0%	6.1%	4.3%

Source: IHS Global Insight US Macroeconomic Forecast: February 2016

The National Economy

The weak real GDP growth of 2015 will begin to strengthen in mid-2016. There have been many bright spots in the economy; including strong consumer spending, the rebounding housing market and strong wage growth, which have only been overshadowed by the continuing appreciation of the dollar. As the dollar begins to depreciate in mid-2016, real GDP growth is projected to accelerate, with weak exports, and weak non-residential investments and inventories rebounding once again.

Consumers are growing accustomed to the low gas prices since mid-2014, which is expected to result in consumer spending stabilizing in 2016, increasing by 2.9 percent, nearly the same as 2015. In addition, growth in wages, improvements in consumer confidence, the continued housing recovery, and continued strong growth in light vehicle sales are expected to be contributing factors in the growth of consumer spending, partially offset by consumers expected to continue to save and pay down debt.

It is expected that the Feds will increase interest rates mid-year, but factors such as oil prices not stabilizing, the dollar continuing to appreciate, and the volatility in the financial markets increase the possibility that interest rates will not be increased until the end of the year, if at all. However, increasing the interest rates too soon could lead to reduced consumer spending, which has been one of the bright spots in the economy.

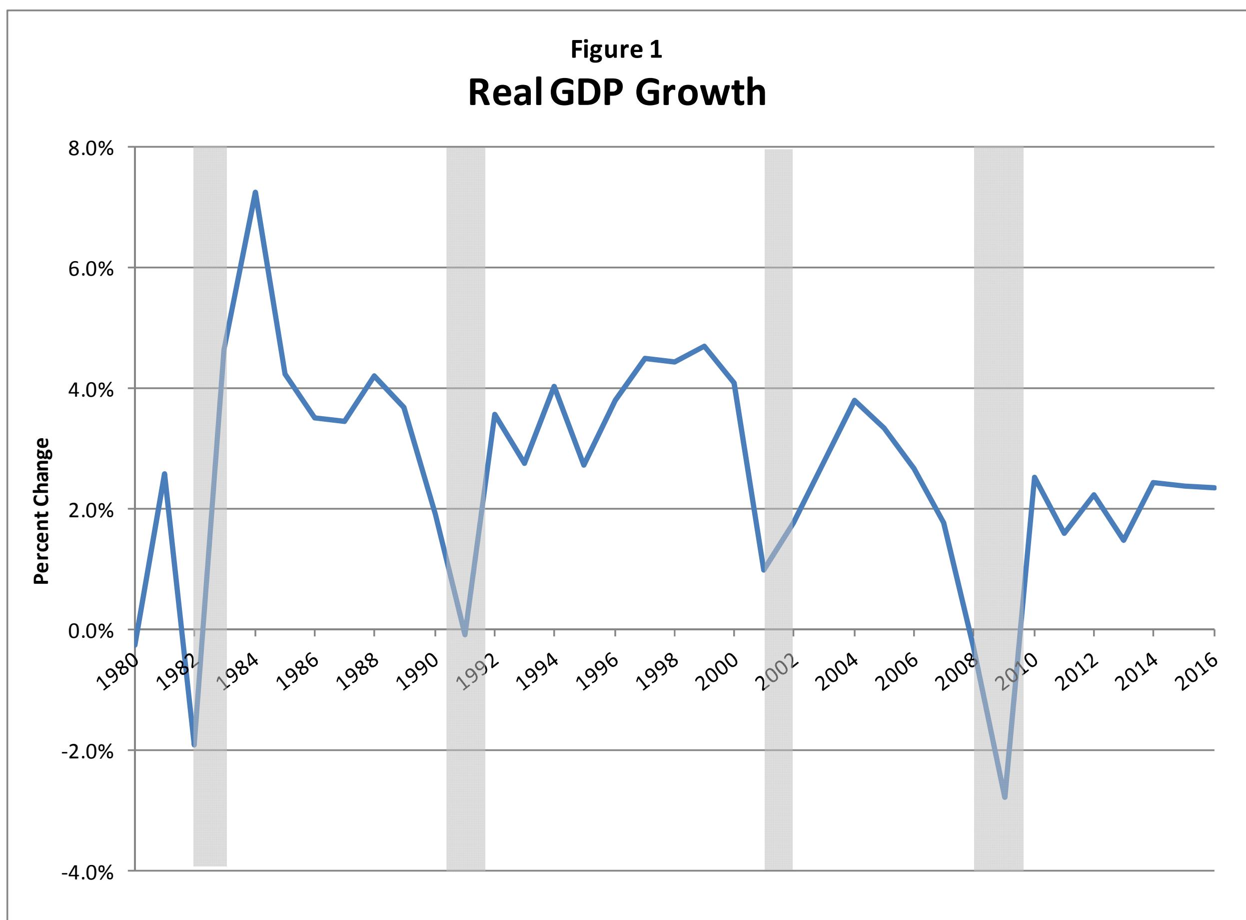
ECONOMIC GROWTH

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 the result of productivity from participation in the labor market and investments in capital. 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 other is in decline or is 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. Of importance in achieving this growth is consumption; whether or not the consumer is an individual or a business.

The recovery and expansion phases from the last two recessions are shown in Figure 1 (the recessions are represented by the shaded areas). The recovery from the 2001 recession lasted longer than previous recessions, not reaching the expansion phase until 2004. However, the recovery from the Great Recession has been much slower; with 2015 marking the sixth year of economic expansion.



The weak real GDP growth that has been defining 2015 will begin to strengthen in mid-2016. This is as the positive effects of strong consumer spending and the rebounding housing market that are continuing to be negated by weak exports and weak non-residential investments and inventories due to the appreciating dollar. The appreciating dollar reduces exports as U.S. goods become more expensive in other countries.

Correspondingly US producers increase imports of less expensive foreign raw material. As the dollar begins to depreciate in mid-2016, real GDP growth is projected to accelerate by 3.16 percent in the third quarter and 3.18 in the fourth quarter.

LABOR MARKET

As stated above, one of the factors that contribute 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 is occurring. This results in a reduction in the need for additional employment and the possibility of layoffs. Over the last few years, similar to the previous recoveries, employment growth has remained at less than two percent.

The recovery from the Great Recession has been a jobless recovery, with employment growth not returning until 2011. Similar to the previous recovery, employment growth

has remained at less than two percent in 2013, growing at 1.6 percent. Although job growth continued in 2014, the pace of such growth was only 1.9 percent, creating 2.56 million jobs with no change in productivity.

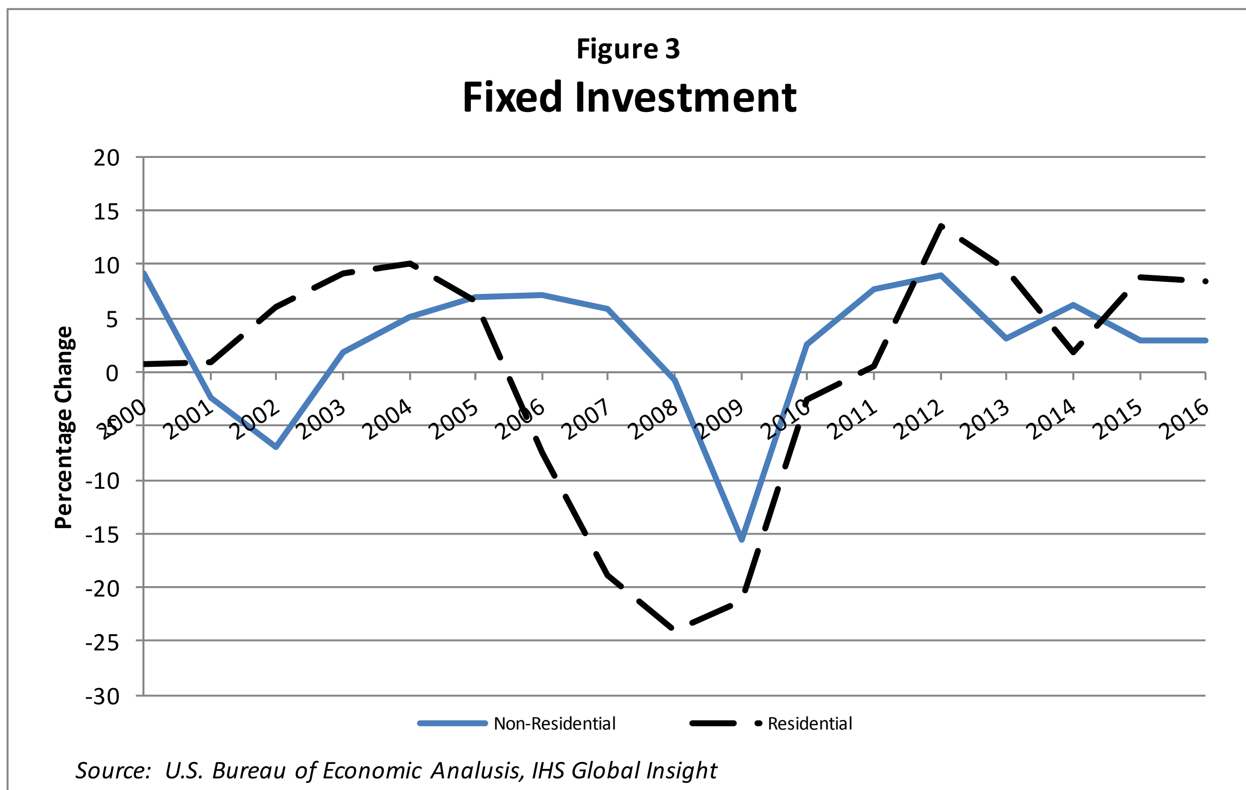
Employment growth in 2015 as compared to 2014 was positive, but weaker and more volatile, creating 2.89 million jobs, with a monthly average of 240,000 jobs created. In 2015, productivity increased by 0.6%, leading to weaker job growth as an increase in productivity meant fewer workers were needed for the same output. Weakness in corporate profit growth, due to weak and uneven economic growth, has caused employers to find ways to increase worker productivity in order to cut costs. The weaker year-to-

year job growth is also partially hindered by global trade and slowing of inventory building in the second half of the year.

Employment growth is expected to increase again in 2016, albeit slower, growing by 1.7 percent, creating 2.5 million jobs. The average monthly job gains for 2016 are projected to be between 200,000 and 220,000. Similar to 2015, productivity is projected to increase by 1.0%.

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.



With the deflation 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 existing low interest rate environment which allowed for faster growth. Due to shocks to the economy, primarily the corporate accounting scandals that resulted in 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 reduced 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, only extended for 2013. With the one year extension of bonus depreciation, businesses were left with an investment decision to make, either take advantage of the bonus depreciation rules or postpone such investments until the economy was stronger. Many businesses chose to wait and as a result, growth in non-residential fixed investments slowed to 3.0 percent in 2013, from 9.0 percent in 2012.

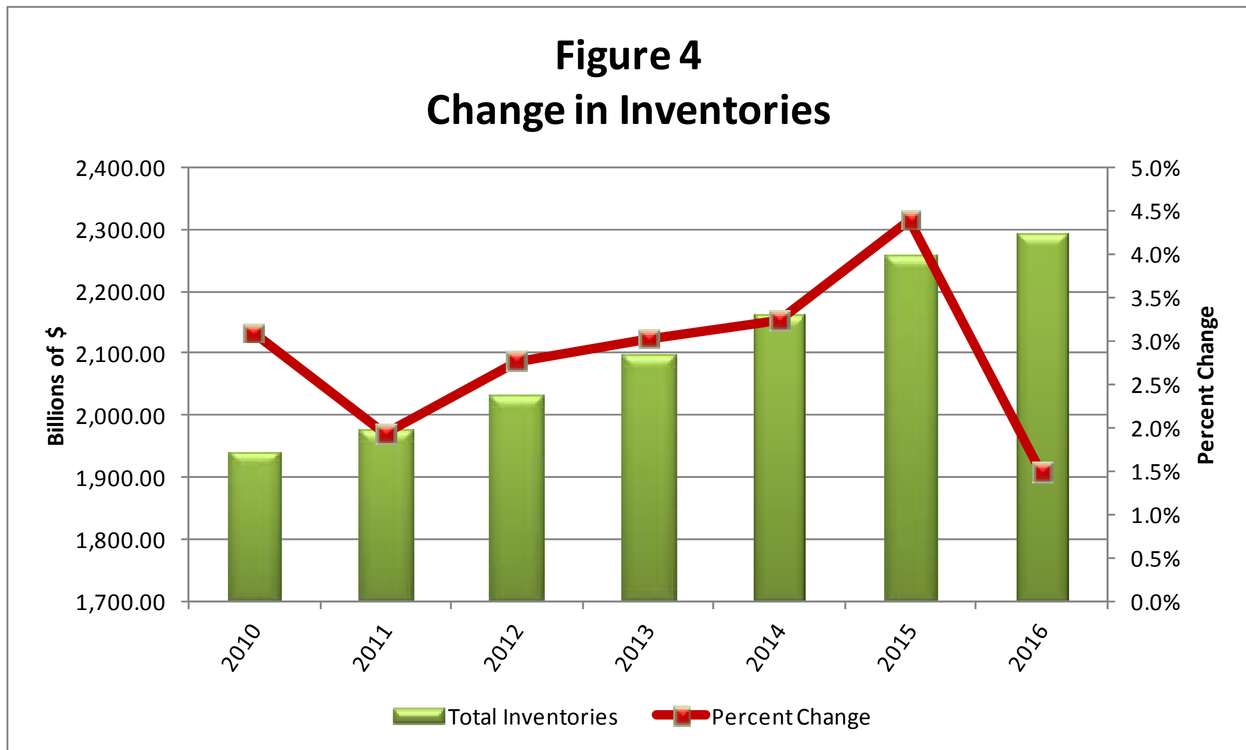
As the dollar continued to appreciate, partially due to weak global economic growth, non-residential fixed investments fell 2 percent the first quarter of 2015. The strong dollar caused exports to decrease as goods became more expensive compared to those produced in other countries. The weak global economic growth was also a contributing factor in the reduced demand for goods from the US. In addition, the strong dollar caused US producers to rely more heavily on imports, which decreased the demand from US manufacturers. This resulted in a drag on economic growth as manufacturers are particularly sensitive to global competition.

Non-residential fixed investments remained weak in the second half of 2015. The projections for continued strong employment should have been encouraging to firms leading them to ramp up investments, but forces that halted investments in the first half of the year continued. The year ended with an annual average estimated growth in non-residential fixed investments of 2.9 percent.

Non-residential fixed investments are projected to remain flat in 2016 due to continuing weak economic growth and discouraging corporate profits. By the second half of the year, the dollar is projected to begin appreciating; lessening the drag from foreign trade. This will shrink inventories and result in increased capital spending and investment.

Inventories

During the recession, businesses experienced a period of inventory decumulation since consumer demand for their goods and services declined dramatically. During the recovery, businesses were hesitant to make significant expenditures or to ramp up production even though their profits were growing. After several years of slow growth and the intermittent decumulation, 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 their production and their inventory growth. Inventory decumulation persisted through the third quarter of 2011. Realizing increased sales in the fourth quarter, businesses had no choice but to increase their inventories to meet the demand.

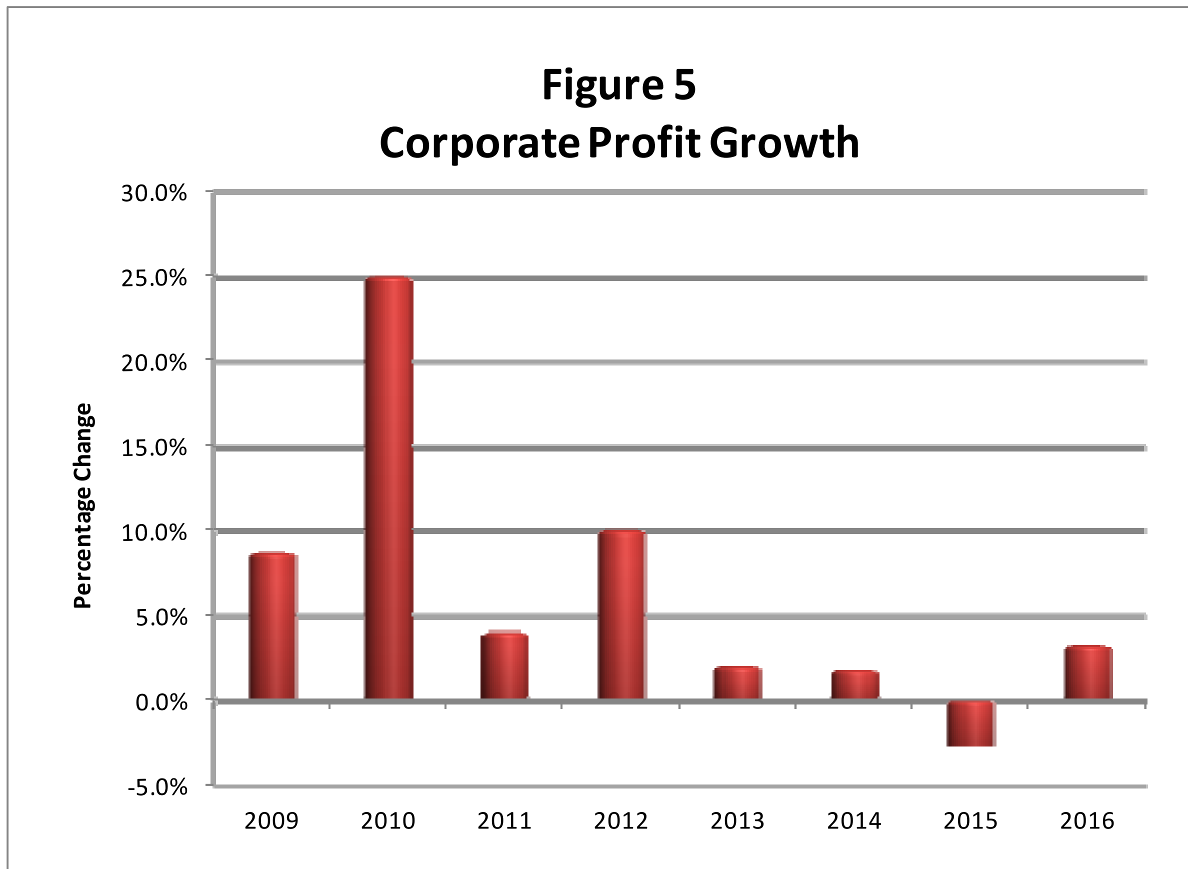
Inventories continued to increase through the third quarter of 2012, mainly from the automotive industry. Due to declining wage and income growth over the course of the recession, consumers delayed large purchases, such as new automobiles. As the economy recovered and income growth occurred, people began 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, after decumulations during the Midwestern drought. 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 was unclear.

The first half of 2015 began with large inventories, but was slowed in the second half of the year as sales growth did not keep up with the inventory and resulted in over supplies. Inventories are expected to return to normal levels in 2016 as foreign trade will be less of a drag on economic growth and consumers continue to spend.

Corporate Profits

Corporate profit growth, as shown in Figure 5, 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 the annual production of the business' goods. This adjustment has fluctuated in recent years due to bonus depreciation.



As machinery is used during the course of production, the value of that machinery diminishes. 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. This resulted in a reduction in corporate profits since businesses were no longer allowed to claim the full depreciation as an expense. Growth in corporate profits continued in 2012 at 10 percent despite larger capital consumption adjustment.

Although the stock market grew to record levels in 2013, volatility remained in the market due to the uncertainty coming from Washington. In addition, the slow economic growth served to dampen corporate profits as well. Corporate profits increased at a slower rate than in previous years, increasing by 2.0 percent.

The financial markets can have a large impact on overall corporate profits and if the markets struggle, overall corporate profits can decrease. The financial sector struggled in both 2014 and 2015, resulting in a corporate profit growth of 1.7 percent in 2014 and a decrease of 2.6 percent in 2015.

The outlook looks much better in 2016, with corporate profits projected to rebound to an annual average growth rate of 3.2 percent. After a slow start to the year, profits are expected to gain strength in the third quarter as the dollar's value stops appreciating and exports are able to increase once again. The year is projected to end with a fourth quarter growth in corporate profits of 12.9 percent.

GOVERNMENT

Government policies are employed in an attempt to influence the overall economy, whether it is 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

Fiscal policy entails directing the economy through tax policy or through government spending. When the Federal, state or local governments lower taxes, more money is left in the hands of consumers and businesses to spend as they wish.

In October of 2015, after years of uncertainty surrounding Federal fiscal policy that resulted in sequestrations and government shutdowns, the Federal government reached a two-year budget agreement that averted another government shutdown and will prevent a default until at least September 30, 2017. In December of 2014, the Consolidated Appropriations Act, Protecting Americans from Tax Hikes Act of 2015 and the Fixing America's Surface Transportation (FAST) Act were signed into law. These Acts authorized $1.1 trillion in government spending, providing $700 billion in tax cuts and delaying any new taxes on health care.

The Protecting Americans from Tax Hikes Act of 2015 will give taxpayers more certainty in the tax code, by eliminating the continued practice of extending tax credits, by making certain tax credits such as the child tax credit and earned income tax credit permanent. In addition, Congress also lifted the 40-year ban on US crude oil exports.

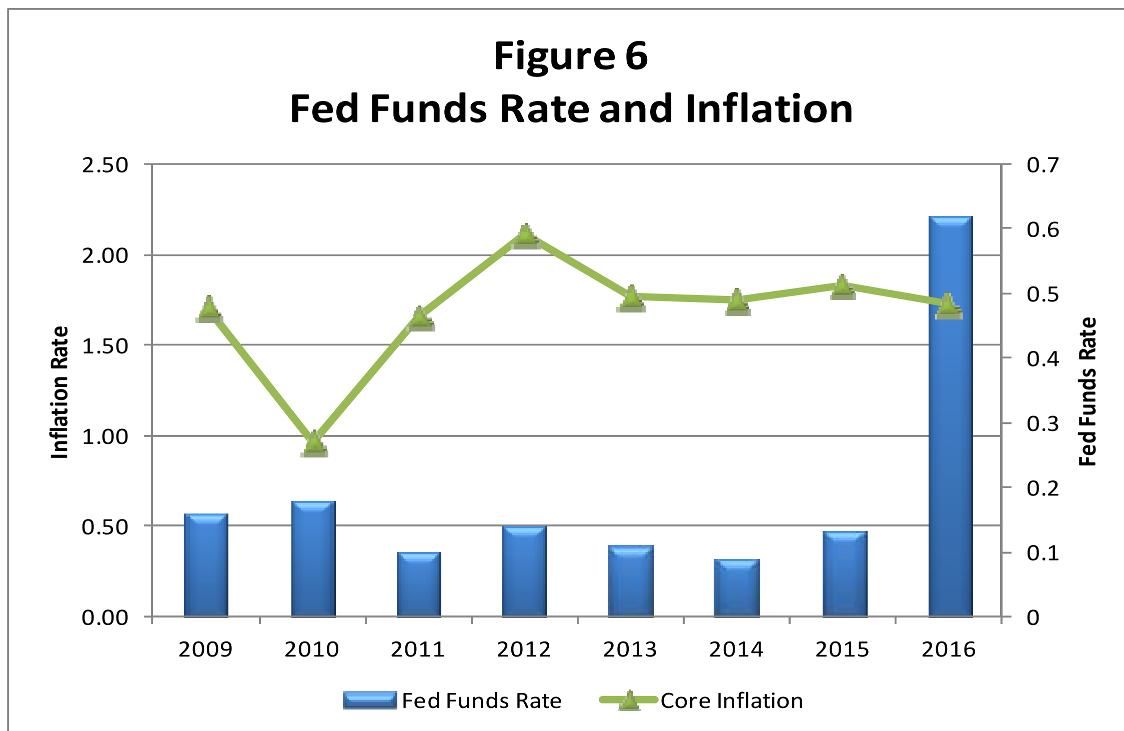
MONETARY POLICY

Under the control of the Federal Reserve Board (Fed), monetary policy involves the manipulation of interest rates and the money supply, in order to maximize employment and maintain stable prices. One of the ways 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 Federal 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 spending and encourage saving.

During the recession, in 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.

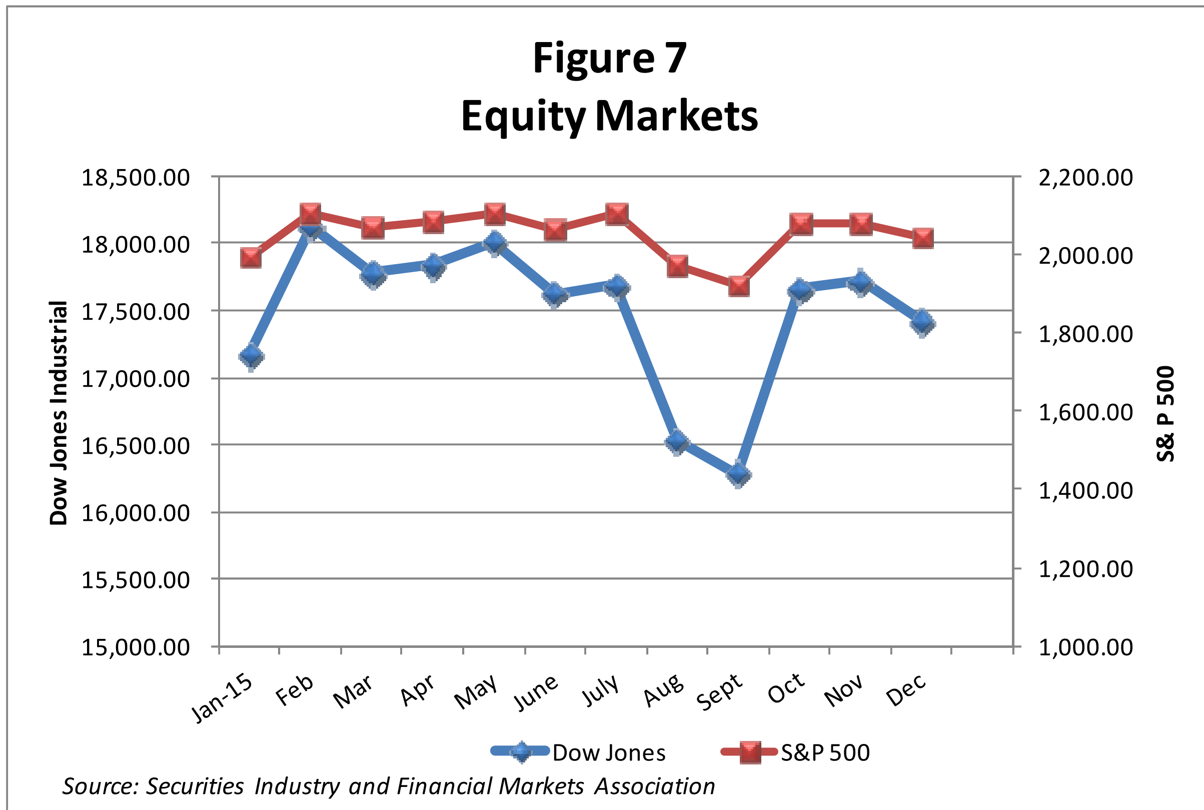
At the December 2015 meeting of the Federal Open Market Committee, it was announced that the Fed Funds rate will be increased to a target of 0.25-0.50 percent. This puts an end to seven years of near zero rates and is the first time the Fed has increased rates in nearly a decade. These rates were initially expected to be increased gradually, with four 25-basis point increases in 2016. But given the concerns surrounding continued low inflation and weak economic growth, rates are expected to be increased slower than originally anticipated, increasing only twice in 2016, with the first increase not until June. The rate is projected to increase to a median of 0.62% at the end of 2016, 1.4% at the end of 2017 and 2.41% at the end of 2018. While rates are projected to increase over the next few years, they are projected to be lower than the peak of 5.25% in 2006.



However, the Fed plans could be put on hold or even reversed if inflation continues to remain low or if there is any shock to the economy. The Fed's target inflation of 2% may be difficult to achieve if oil prices do not stabilize and the dollar continues to appreciate. The Feds have not ruled out the possibility of rate cuts and are currently evaluating what the impact of unprecedented negative interest rates would have on the economy.

Since the Fed Funds rate is the rate used when banks loan money to each other and is the basis upon which banks set their own loan rates such as mortgage rates and personal loan rates, the increase to the rate will translate to higher returns on savings products and a higher cost to borrow for consumers.

FINANCIAL MARKETS



Source: Securities Industry and Financial Markets Association

In 2014, even with the uncertainties from concerns with emerging markets, weak manufacturing results in China, and China's currency devaluation, the S&P ended at an all-time high for the month of December at 2,058 points. The average for the entire year of 2014 was 1,930 points, an increase of 288 points or 17.5 percent from 2013. This strong growth was short-lived, as 2015 did not fare as well. The year started off by dropping over 60 points. The decrease in January of last year was the result of a long list of factors affecting the market, from the drop in oil prices, resulting in decreased energy stock prices, the rising dollar, and weakness in the global economy.

The factors that caused the shaky start to 2015 continued to cause significant volatility through the entire year, which was compounded by uncertainty surrounding rumored increases to the Fed fund rates. The stock market experienced strong growth in the beginning of the year, with the S&P reaching an all-time high of 2,107 in May, only to have the market experience a correction of 12.4 percent in August; the first market correction in four years. After decades of strong growth in China, their manufacturing bubble is coming to an end, with any future growth likely to be limited. This in turn is causing fear in US markets. This fear is not likely to end anytime soon and is in fact expected to continue to cause significant uncertainty. Overall, the S&P index ended the year at 2,044, a decline of 2.0 percent year-over-year.

The stock market began 2016 with yet another correction, with the S&P declining 5.1% in January, and the outlook not looking much brighter. Stock prices are not expected to increase significantly in 2016 as growth will be hindered due to continued weakness in the global economy, the rising dollar, continued low oil prices, and continued uncertainty of increases to the Feds fund rates.

GLOBAL ECONOMY

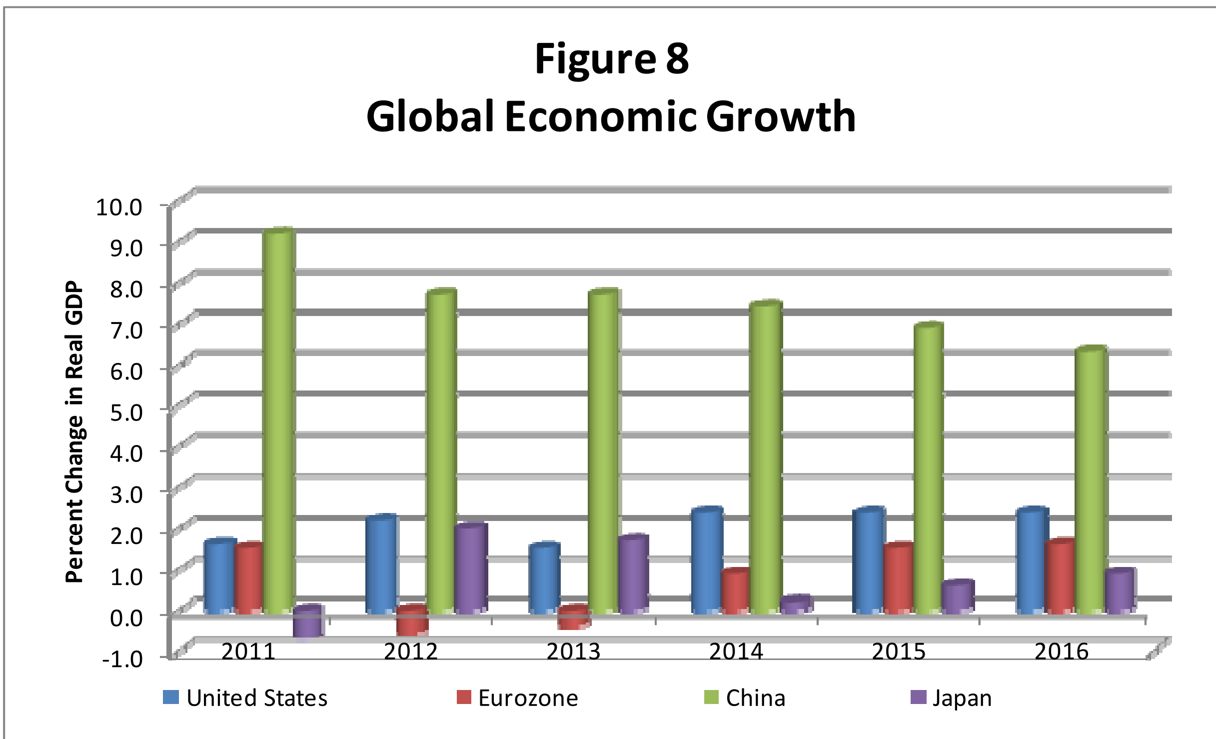
Any changes in the global economy can have a significant impact on the national economy even though trade is not a major contributor to overall national economic growth, as measured by GDP. This is due to increased participation of both businesses and investors in the economies of countries around the world. In the past couple of years,

various international events, such as the debt crisis in the Eurozone and the slowdown in China, 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.

As shown in Figure 8, the Eurozone finally saw economic growth in 2014 after two years of recession primarily due to the growth in the German economy. This growth continued into 2015 as the labor market continued to increase and low oil prices resulted in increased consumer spending making it possible for businesses to build up inventories while costs were low. Unlike the U.S., the value of the Euro is relatively low, which allowed European countries to increase their exports. Greece, while remaining in the Eurozone, is still struggling to regain economic growth. During the second quarter of 2015, Greece missed a payment to the International Monetary Fund, which continued their risk of default and the possibility of leaving the Eurozone. Since that time, Greece has reached an agreement with their creditors which should mitigate the risk of default in the short term.

With the end of an increased rebuilding effort resulting from natural disasters in March 2011, Japan's economy realized slightly weaker economic growth in both 2013 and 2014, but has rebounded slightly in 2015. This growth, albeit weak, is expected to continue into 2016.

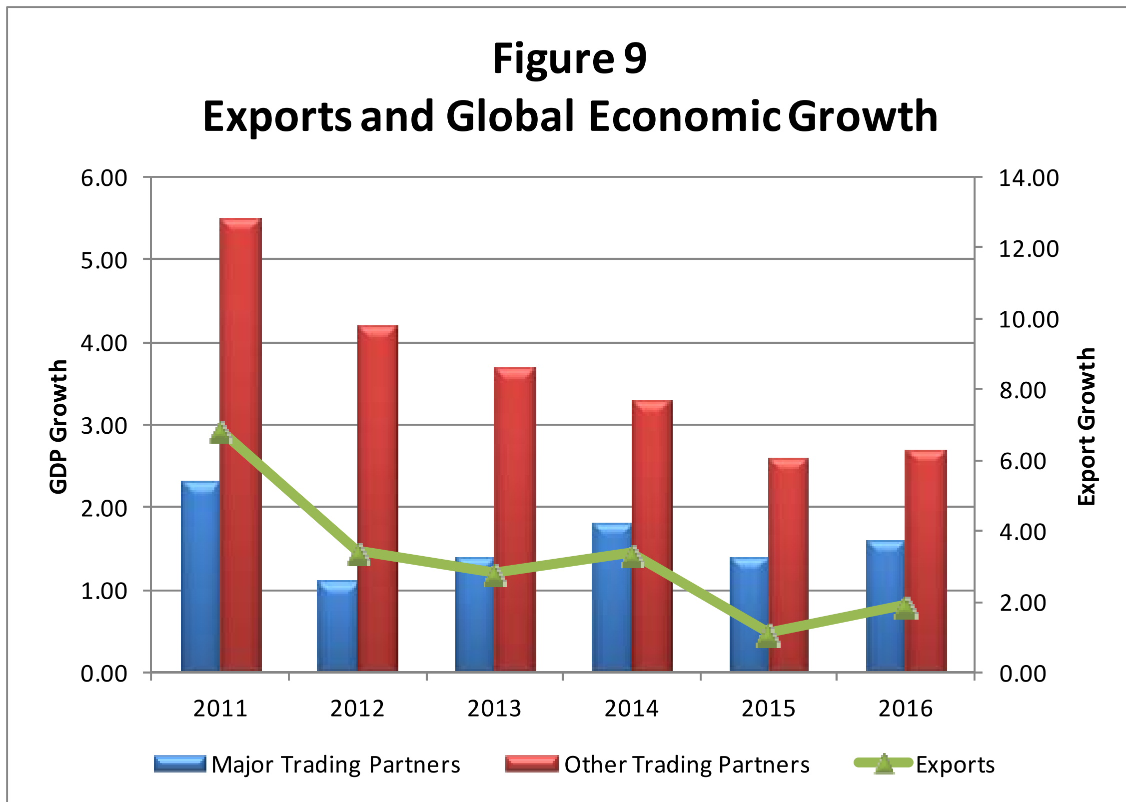
After years of strong economic growth in China, the sooner than expected slowdown has begun, predominantly in the manufacturing sector. However, growth in the service sector has helped China to avoid an even larger slowdown, with overall economic growth of 6.9 percent in 2015 and a projected growth of 6.3 percent in 2016. The slow global economic growth will make it difficult for China, which has benefitted from strong manufacturing exports in the past, to turn this deceleration around.



The strength of any nation's economy affects the demand for their domestic goods but also the demand for other countries' goods as well. 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.

In the first quarter of 2015 the labor dispute between the International Longshore and Warehouse Union and the Pacific Maritime Association affected ports in California, the second largest exporter in the country. This disruption may have been the cause of the largest trade deficit since October 2008, as exports failed to keep pace with imports, though it is unclear whether this was the case. Exports remained weak throughout 2015 due to the continued strong dollar, continued weak global economic growth, and the price of oil which was reducing US petroleum products exports.

This reduction in exports hurt businesses that had to drop the price of goods in order to remain globally competitive. The export of services however, had been largely unaffected by the strong dollar. In December of 2015, the US government lifted the 40-year ban on exporting crude oil, which should boost exports in 2016. The projected growth in the global economy is expected to provide modest export growth in 2016, increasing 1.9 percent, largely supported by the continued strength of the export of services which was largely unaffected by the appreciating dollar in 2015.

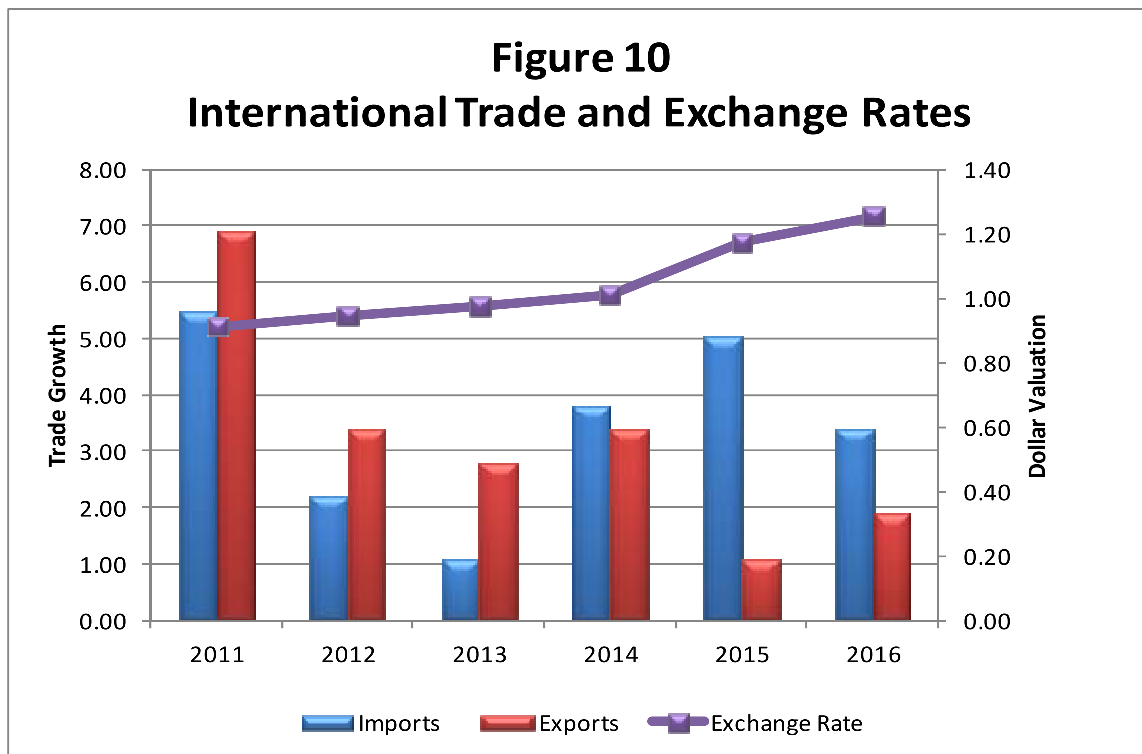


The value of a nation's currency also affects export and import growth. When the value of the currency increases, the price of domestic goods increases; making them more expensive compared to imported goods. Conversely, when the value of the currency declines, domestic goods become less expensive.

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

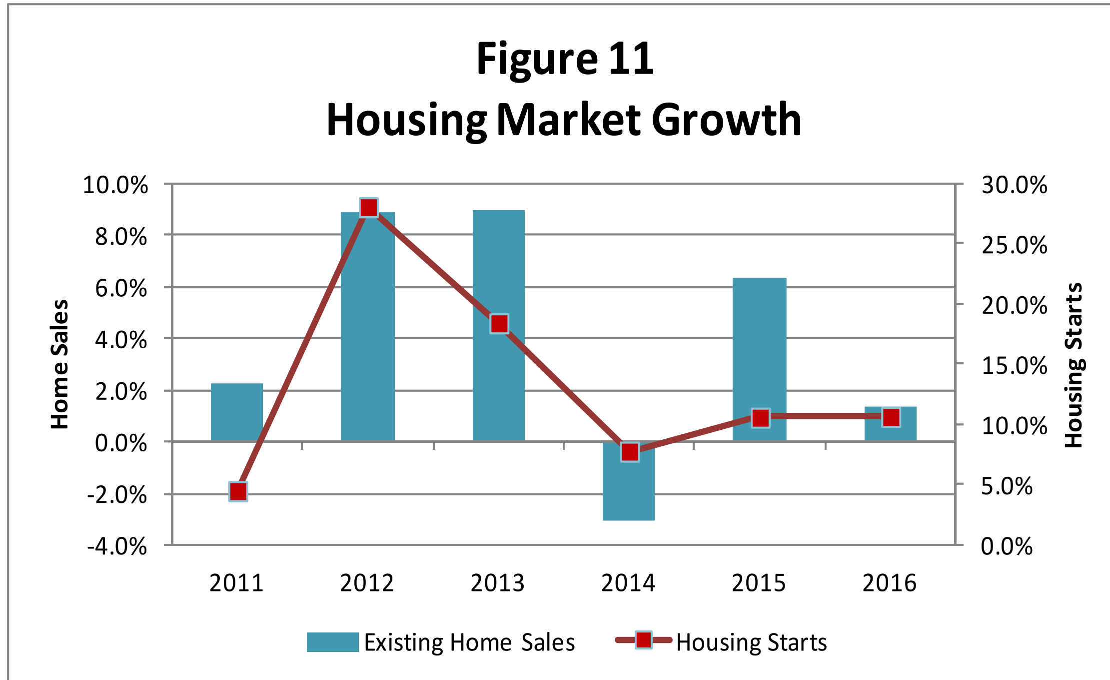
were once again in demand. As global weakness continued through 2015, the dollar continued to appreciate.

In December of 2015, the Federal Reserve increased interest rates, while major trading partners' rates were decreasing or remaining flat, leading investors choosing to continue to hold US assets. This investor behavior is expected to be one of the factors that will lead to the continued appreciation of the dollar through the first half of 2016. By mid-year the dollar is projected to increase in value by 7.4 percent against major trading partners' currencies, before starting its steady depreciation, as the global economy starts to improve. The appreciating dollar is expected to continue to affect the economy over the next year including; lowering of the core CPI, significant import gains, lower exports, and restrained consumer price 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. 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 spurred growth in home sales; however, that growth was short lived. Once the tax credit expired, home sales declined in 2010. In 2011, mortgage rates remained at historical lows and sales of existing homes grew, but only by two percent. Since then, the housing market has been experiencing strong growth. New homes sales, single-family housing and multi-family housing starts has made the housing market a bright spot for the economy and a critical component in the continued economic recovery. New homes sales in 2015 were the best year since 2007, averaging over 500,000 in new home sales. Single-family housing starts are back to 2007 levels and multi-family housing starts are even stronger.



The FHA, Fannie Mae and Freddie Mac implemented programs targeting mostly first-time homeowners with good credit but small down payments, to increase their access to credit to make it more affordable to purchase a home. This relaxing of lending standards, in addition to the FHA cutting the annual mortgage insurance premium at the beginning of 2015, has contributed to the growth in sales of both new and existing homes. In addition, the standards for construction loans eased, making it easier for consumers to construct new homes.

The number of mortgage applications surged prior to new disclosure rules that took effect in the beginning of October 2015. These rules were expected to increase the length of time it took to close on homes, a burden for some homebuyers. However, this surge only caused a temporary boost in home sales, with growth beginning to slide at the end of the

year. This may have been partially due to uncertainty with the timing of the Feds first rate hike.

As a result of the Feds first rate increase in nearly a decade, mortgage rates are expected to increase by less than a one percentage point by the end of 2016, increasing from 4 percent to 4.6 percent.

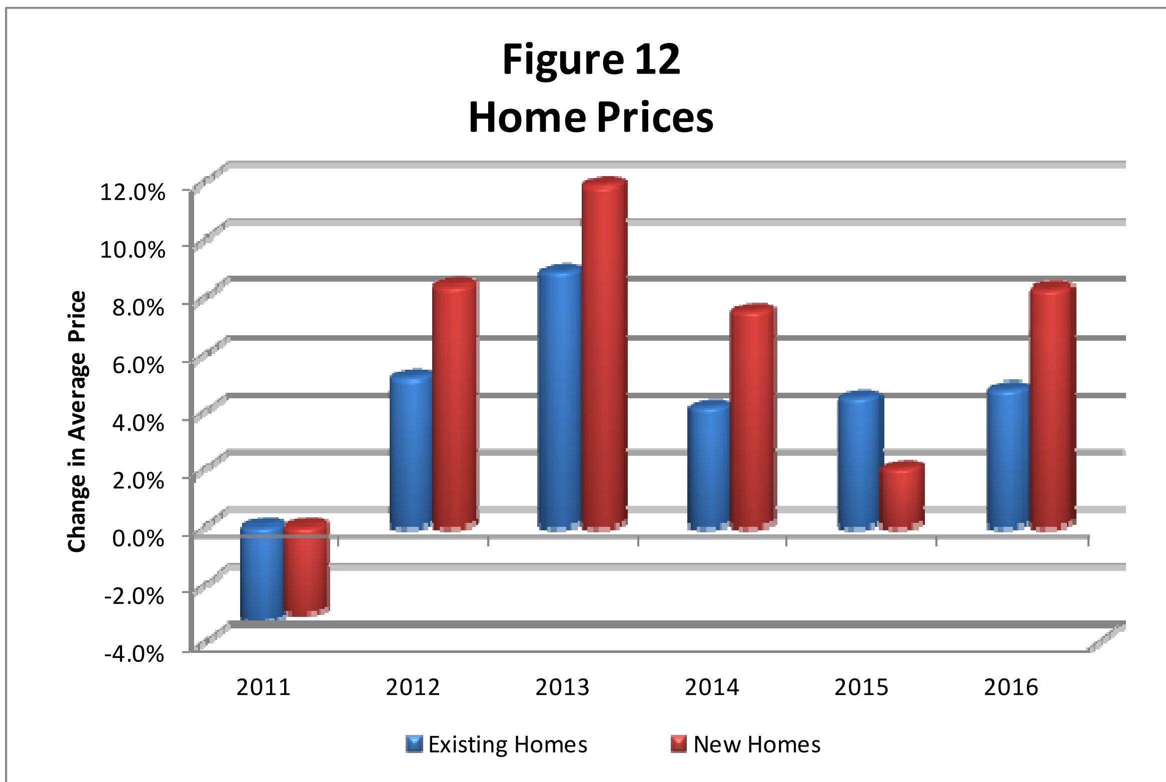
With steady job growth predicted and continued strengthening of consumer confidence, strong growth in housing starts and new homes sales are projected to continue through 2016. Housing starts are projected to increase to 1.26 million units in 2016, up from 1.11 million units in 2015. New homes sales are projected to increase to 600,000 units in 2016, up from 500,000 units in 2015. Existing homes sales are projected to increase to 5.3 million units in 2016, up from 5.23 million units in 2015.

Trends in home prices are a better indicator of the health of the housing market than homes sales because they can indicate what is in store for home sales. Robust home prices encourage homeowners to list their homes for sale, leading to a larger inventory and more sales.

Even as mortgage rates began to increase over the course of 2013, the demand for housing remained strong. This increased demand together with tight inventories pushed

home prices higher, increasing by 8.8 percent and 11.9 percent for existing homes and new homes, respectively.

After a few years of large fluctuations in homes prices, they have finally stabilized, which is expected to encourage homeowners to list their homes for sale, as the risk is minimized. Existing home prices are estimated to have increased by 4.5 percent in 2015, surpassing the peak in 2007, before the housing bubble. This growth in home prices is exceeding core inflation, which means consumers are creating equity. Estimated growth of 4.8 percent is expected to continue into 2016 which should encourage more people to list their homes.

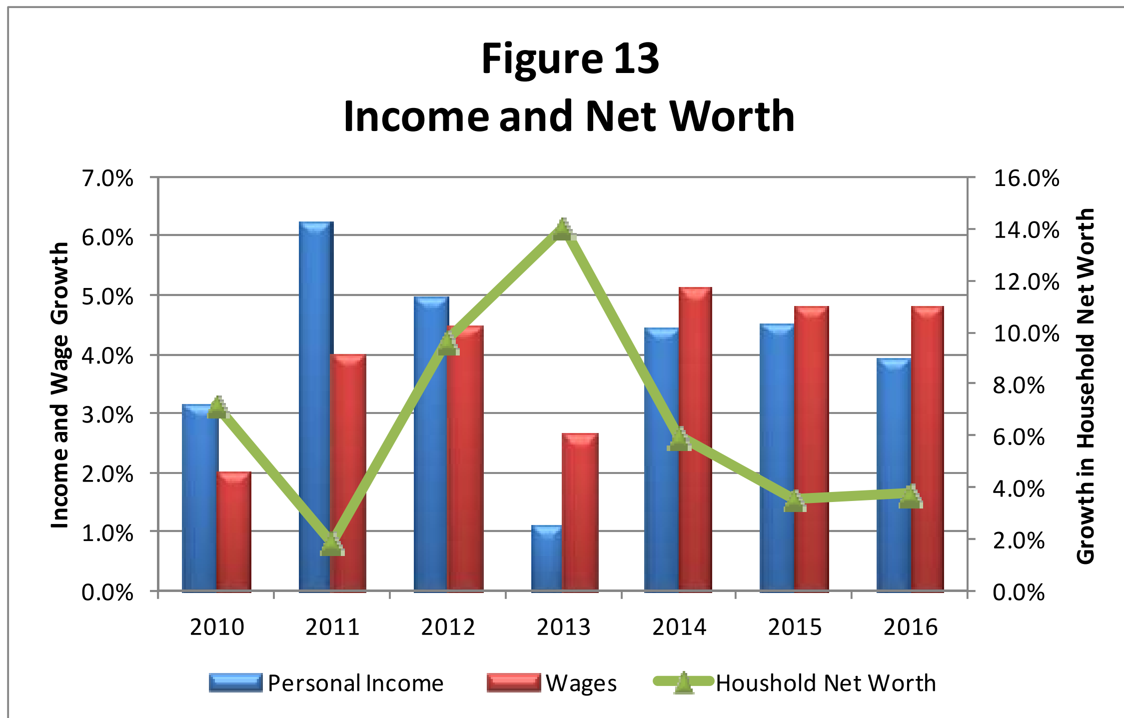


CONSUMER SPENDING

The beginning of the report stated that in order for an economy to expand, consistent growth in the labor market and the capital market is required. 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, 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.

After large job losses in 2009 and into 2010, the labor market strengthened in 2012, increasing wages 4.5 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 of 2.7 percent. Personal income growth slowed as well, increasing by 1.1 percent. Along with the slower wage growth, personal income growth was impacted by the "spin up" of dividends and capital gains into 2012.

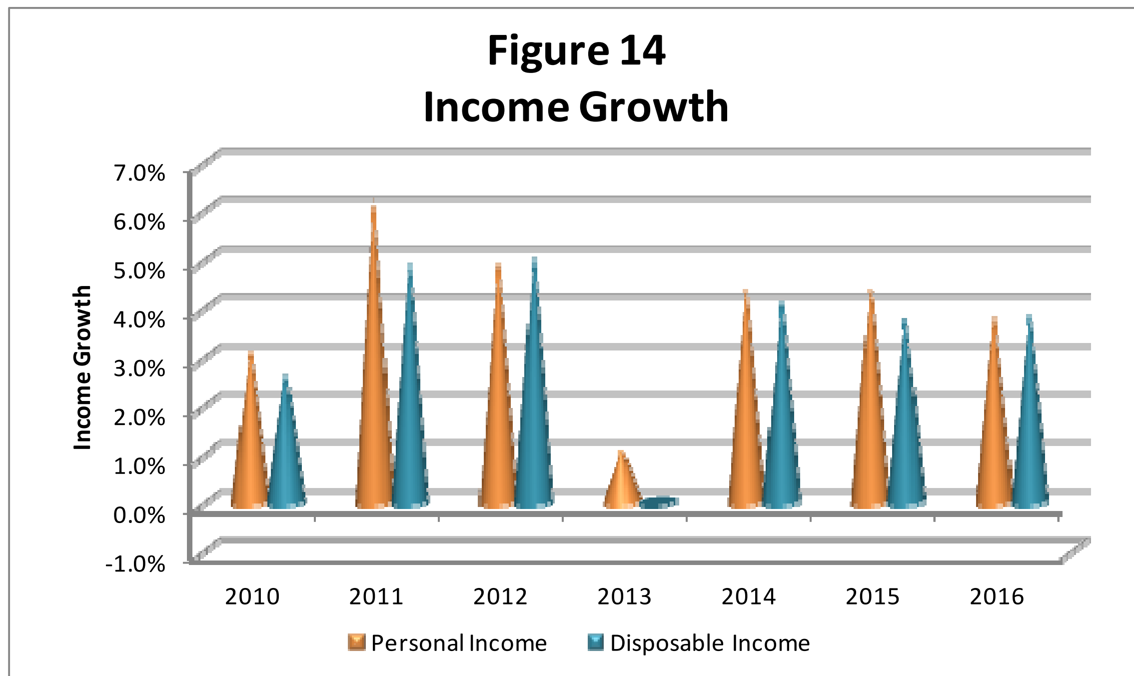


With the strengthening of the economy, the labor market continued to expand in 2014, increasing by an estimated 1.9 percent. With this increase in employment, wage growth accelerated by 5.1 percent, while personal income grew at a rate of 4.4 percent.

The economy continued to strengthen in 2015, as the labor market continued to expand. The number of jobs created was slightly less than in 2014 with wages and personal income growing at a rate of 4.8 percent and 4.5 percent, respectively.

The economy is expected to continue to strengthen into 2016, as the labor market continues to expand. While the total number of new jobs in 2016 is projected to be less

than in 2015, productivity is increasing, leading to continued wage growth of 4.8 percent. Along with this wage growth is personal income growth of 3.9 percent.



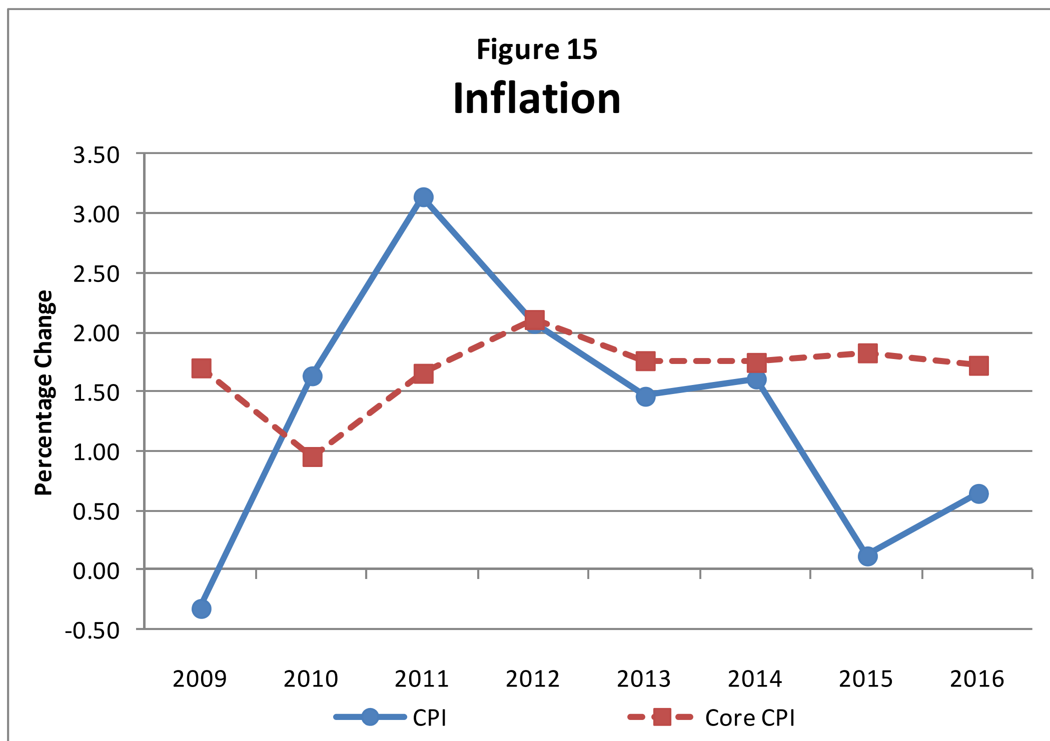
Personal income, also known as a person's gross income, is the total amount of wages and property income received by the consumer. However, the actual amount the consumer has available to spend in the economy is his disposable income – his personal income less tax payments. Due to the temporary nature of tax benefits since 2010, the amount of the consumer's disposable income has fluctuated. As shown in Figure 14, the growth in disposable income closely mirrored personal income growth in 2010 and 2012. In 2011 and 2013, disposable income growth lagged personal income growth primarily as a result of the expiration of tax credits in 2011, the expiration of emergency unemployment benefits and the expiration of payroll tax cuts in 2013.

The emergency unemployment benefits and the payroll tax cuts expired at the end of 2013, but the offsetting positive effect of the huge drop in oil prices lead to disposable income growth in 2014. As a result, disposable income is estimated to have grown by 4.2 percent as compared to personal income growth of 4.4 percent.

Personal income and disposable income are projected to continue in 2016, both growing at a projected 3.9 percent, due to continued wage growth. While growth in personal income is projected to be hampered by a projected weakness in the stock market, it will be offset by increases in home equity as the housing market is projected to remain strong.

INFLATION

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 these 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 energy costs in the production process into account when pricing their goods. Core inflation, which excludes food and energy prices and tends to be very volatile, is generally a better indicator of long-term price changes.

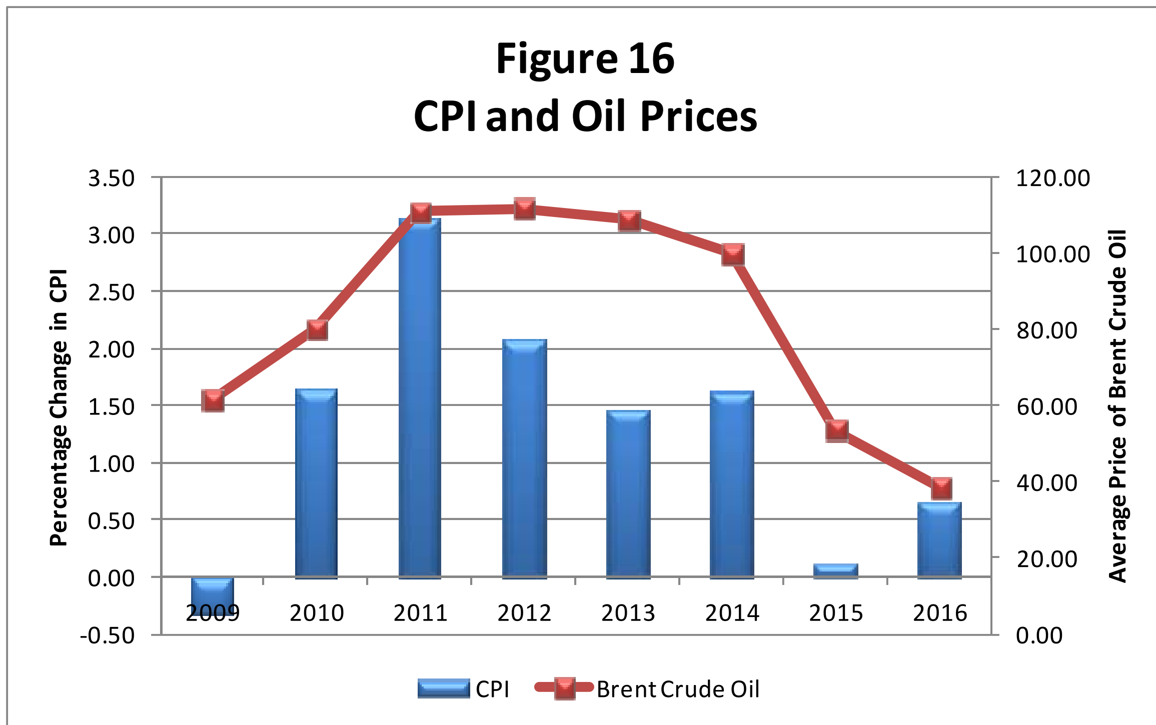


During the global recession in 2009, there was a period of deflation, as shown in Figure 15. However, core inflation decreased but remained positive during the same time period. This difference between the two indices was due to a large decrease in oil prices. While oil prices are expected to remain low through 2016, we are not predicting another period of deflation. Though inflation is projected to remain low, at 0.65 percent in 2016, this is higher than the estimated inflation of 0.1 percent in 2015. As mentioned above, income and wages are a major factor influencing consumption, the low inflation in 2016 is driving the increase in consumption as well.

Figure 16 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 also rose. Oil prices have been steadily decreasing since the mid-2014 and are expected to continue to decrease through 2016. This is a primary factor in the slow growth of the Consumer Price Index, though this drop in oil prices is not expected to be permanent.

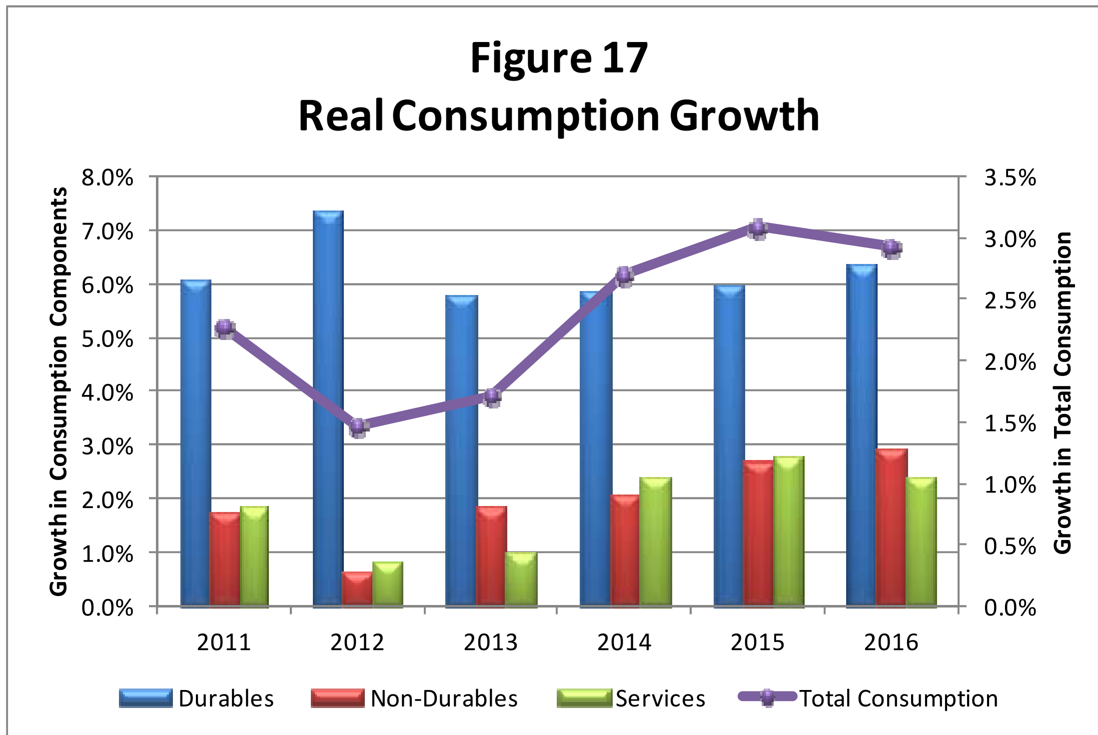
Oil prices fell from an average of $99.8/barrel in 2014, to $53.5/barrel in 2015 and are projected to continue to decrease to an average of $38.5/barrel in 2016. Low oil prices mean low gas prices at the pump for consumers and lower transportation costs for businesses, leading to lower prices of goods for consumers. The average price of a gallon of gas was $3.44 in 2014 and $2.52 in 2015; 2016 began with gas prices of $2.14 a gallon, with the annual average projected to be $1.95. The low gas prices have resulted in consumers spending on average $750 less on gas in 2015 as compared to 2014 and $380 less in 2016 as compared to 2015.



Oil prices are not the only factor that causes significant, and sometimes, erratic, inflation growth. Food prices, especially farm products, fluctuate year to year, especially due to weather's impact on crops.

In addition to the expectation of continued low oil prices, the projection of a strong dollar causing a decline in prices of non-energy imports and moderate wage growth will contribute to the low inflation and limit any expectations for a price acceleration this year.

CONSUMPTION



The consumption of services accounts for approximately two thirds of 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 employment growth and low inflation, consumption grew in 2015, increasing by 3.1 percent. With strong growth in light truck sales, the consumption of durables continued to grow at a rate of 6.4 percent. This growth was augmented by increased growth in the consumption of both non-durables and services as well.

Consumers are becoming accustomed to the low gas prices since mid-2014, which is expected to stabilize consumer spending in 2016, increasing by 2.9 percent, nearly the same rate of growth as 2015. In addition, growth in wages, improvements in consumer confidence, the continued housing recovery, and continued strong growth in light vehicle sales are expected to be contributing factors in the growth in consumer spending, with a partial offset for continued consumer savings and debt repayment.

RISKS TO THE FORECAST

It is expected that the Feds will increase interest rates mid-year, but factors such as oil prices not stabilizing, the dollar continuing to appreciate, and the volatility in the financial markets increase the possibility that interest rates will not be increased until end of the year, if at all. While it is expected that interest rates will be increased this year, increases too soon could lead to reduced consumer spending.

While the price of crude oil is projected to continue to decrease through 2016, any actions on the part of OPEC to decrease production sooner would have a significant impact on consumers' discretionary income, but could also increase inflation sooner than expected. Although the economy of the Eurozone and our other trading partners is improving, if global economic growth improves at a faster rate, there is the potential that their currency appreciates as well. This would slow the rate at which the dollar is expected to appreciate, resulting in an increase in exports and help to bolster economic growth.

A more robust than expected stock market could strengthen consumer confidence and increase the growth of consumption, put upward pressure on the housing market and increase exports. An increase in consumer spending and exports would cause businesses to expand, positively affecting both wages and employment. While a weakening stock market could have the opposite effect.

New York State Economic Outlook

Calendar Year

(Dollar Figures in Billions of Dollars)

	2015	2016	2017	2018
Gross State Product	$1,448	$1,505	$1,570	$1,635
Percent Change	3.7%	4.0%	4.3%	4.2%
Real Gross State Product	$1,276	$1,307	$1,339	$1,369
Percent Change	1.5%	2.5%	2.5%	2.2%
Nonagricultural Employment, Thousands	9,240	9,368	9,419	9,455
Percent Change	1.6%	1.4%	0.5%	0.4%
Unemployment Rate	5.4%	4.8%	4.8%	4.8%
Personal Income	$1,145	$1,186	$1,233	$1,287
Percent Change	4.2%	3.7%	4.0%	4.4%
Wages and Salaries	$626	$655	$681	$710
Percent Change	4.3%	4.6%	3.9%	4.3%
Retail Sales	$216	$221	$228	$233
Percent Change	0.6%	2.5%	3.0%	2.3%
Housing Starts, Thousands	60.5	36.3	34.6	33.9

Source: IHS Global Insight US Macroeconomic Forecast: February 2016

New York State Economic Outlook

State Fiscal Year

(Dollar Figures in Billions of Dollars)

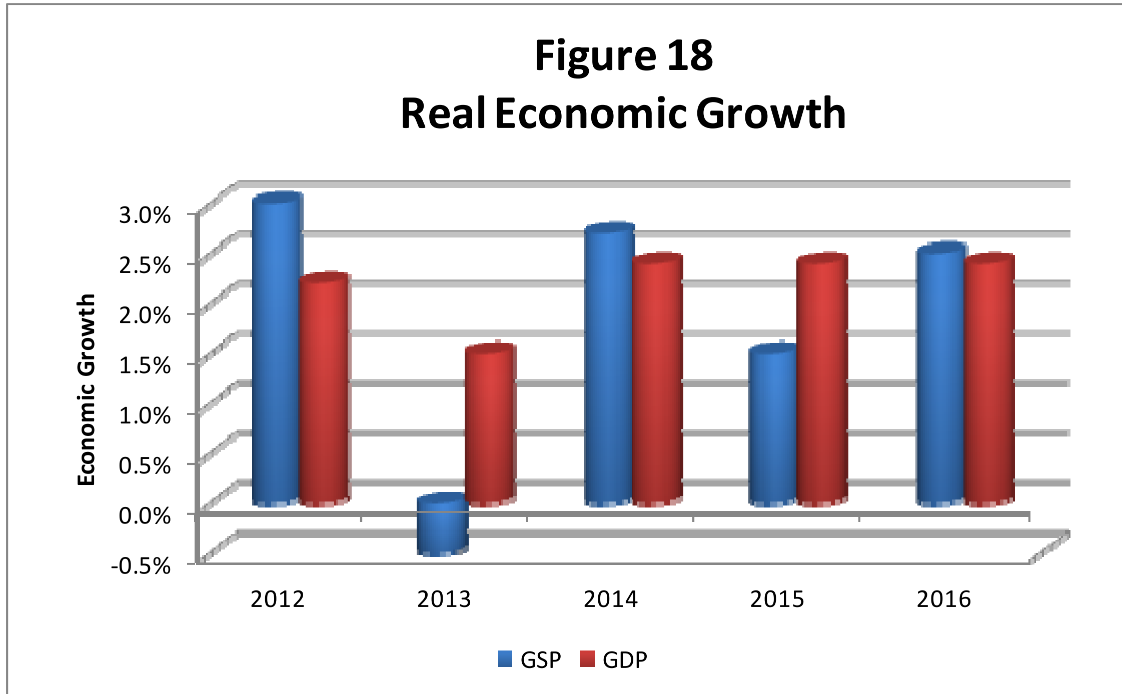
	2015	2016	2017	2018
Gross State Product	$1,409	$1,463	$1,521	$1,587
Percent Change	5.0%	3.8%	4.0%	4.3%
Real Gross State Product	$1,262	$1,284	$1,316	$1,348
Percent Change	2.5%	1.8%	2.5%	2.4%
Nonagricultural Employment, Thousands	9,130	9,278	9,388	9,426
Percent Change	1.7%	1.6%	1.2%	0.4%
Unemployment Rate	6.0%	5.1%	4.8%	4.8%
Personal Income	$1,107	$1,159	$1,197	$1,247
Percent Change	3.9%	4.6%	3.3%	4.2%
Wages and Salaries	$605	$636	$662	$688
Percent Change	5.2%	5.1%	4.0%	4.0%
Retail Sales	$215	$218	$223	$229
Percent Change	1.0%	1.3%	2.6%	2.8%
Housing Starts, Thousands	32.2	63.1	35.4	34.4

Source: IHS Global Insight US Macroeconomic Forecast: February 2016

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 in other states. The outputs of all these industries are then combined to determine the aggregate GSP.

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 domestic drilling, resulting in job and revenue growth in states such as Texas or Alaska. However, in New York 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.



A stark contrast between the effects on the State and the nation can be seen in 2013. When New York was still dealing with the negative effects of Super Storm Sandy damage. Despite the volatility from the debt ceiling impasse and emerging market concerns, the stock market still showed significant growth, however this growth was not enough to offset the negative effects of the storm damage and GSP decreased by 0.5 percent as compared to a 1.5 percent growth in GDP.

Economic growth improved in 2014, due in large part to strong growth in personal income, with economic growth in New York, increasing 2.7 percent in 2014. This growth was slightly faster than the 2.4 percent growth in Real GDP, even with slower growth in the financial markets and employment growing at less than the national rate.

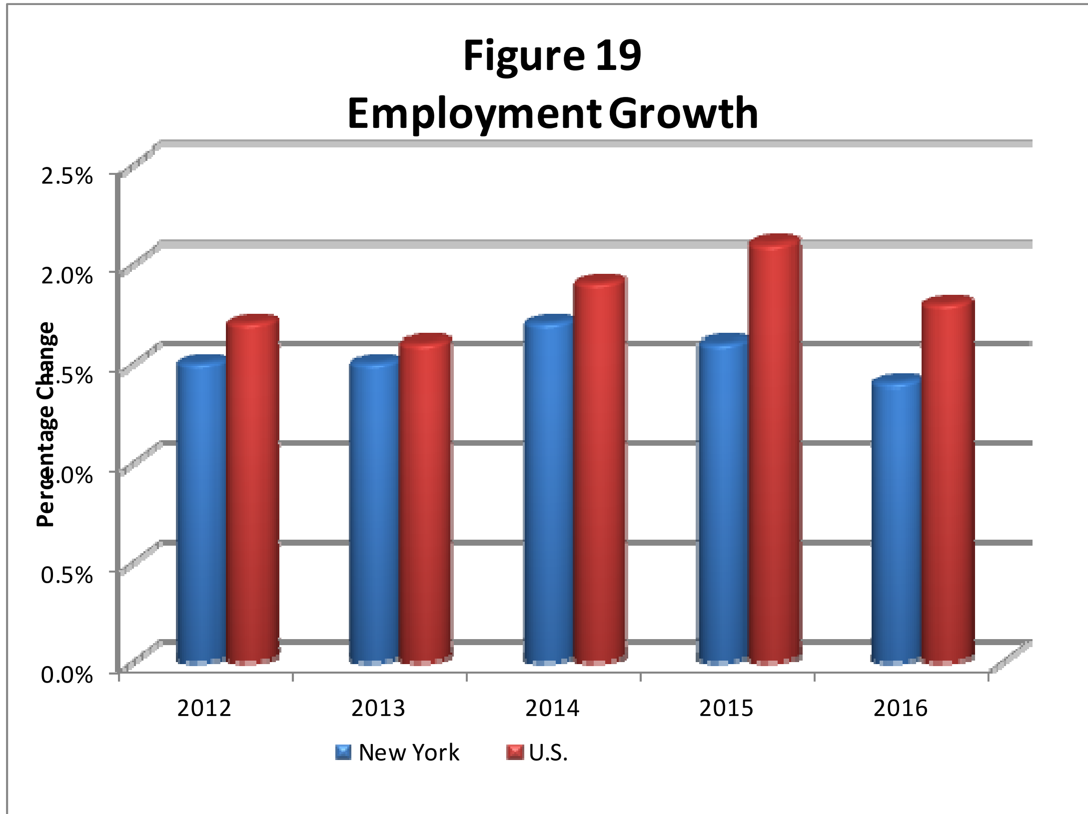
This growth is projected to continue into 2015, with real GSP projected to increase 1.5 percent. This growth is still slower than national economic growth, which is projected to increase by 2.4 percent. This can partially be explained by the weakness in the financial sector.

Growth is projected to pick up in 2016, increasing by 2.5 percent, due to strong wage growth, continued employment and housing growth.

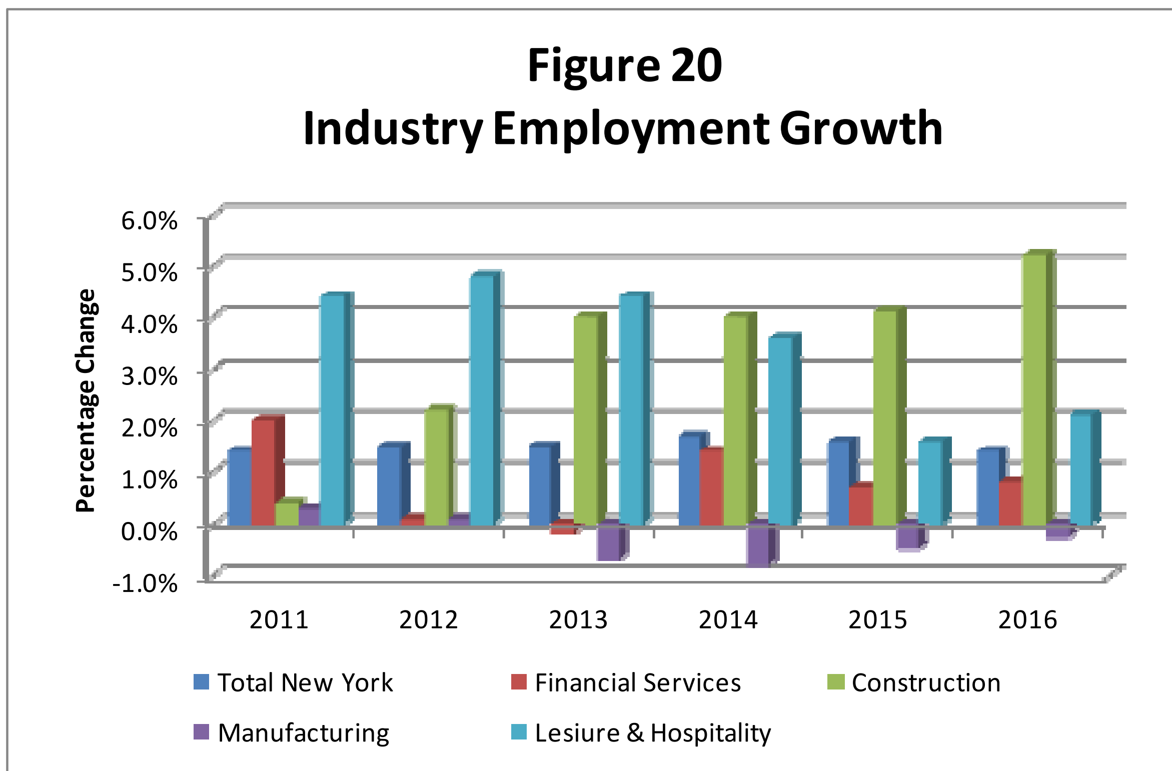
LABOR MARKET

Since 2012, 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 relatively flat at 1.5 percent. In 2013, national and New York's job growth continued at approximately the same pace. This trend is partially explained by the fact that during the last recession, New York experienced a shorter period of job loss as compared to the Nation and also regained jobs faster.

In 2014 and 2015, national job growth continued to outpace job growth in New York. National employment grew at a rate of 1.9 percent while New York employment increased by 1.7 percent in 2014. In 2015 national employment increased by 2.1 percent, while New York's employment increased by 1.6 percent, slightly weaker growth than in 2014.



This same trend is projected to continue in 2016, with national job growth outpacing New York job growth. National employment is projected to increase by 1.8 percent, while New York's employment is projected to increase by 1.4 percent. However, the size of the labor force increased at a faster rate nationally, which could mean workers are less discouraged at the national level and more willing to join the workforce than they are in New York or there is simply fewer workers in New York. New York's population has been relatively stagnant over the last few years which will make it very difficult for New York to keep pace with the nation.



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

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 lost jobs in 2013, decreasing employment by 0.2 percent. This was

reversed in 2014 when job growth increased by 1.4 percent and grew again in 2015 by 0.7 percent.

The financial services industry is continuing its slow employment gains since the financial crisis, with employment increasing by 0.8 percent in 2016. Employment in the financial firms may never return to the levels prior to the financial crisis as the industry has become more efficient.

The other industry that was significantly impacted by the economic downturn was the construction industry. Although the housing market did recover and in 2011, the robust growth in multi-family housing starts, resulted in annual gains in construction jobs through 2015. Growth in this industry is expected to continue into 2016, with an estimated growth of 5.2 percent, as workers are still needed to continue construction of the large number of multi-family housing starts from 2015.

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.

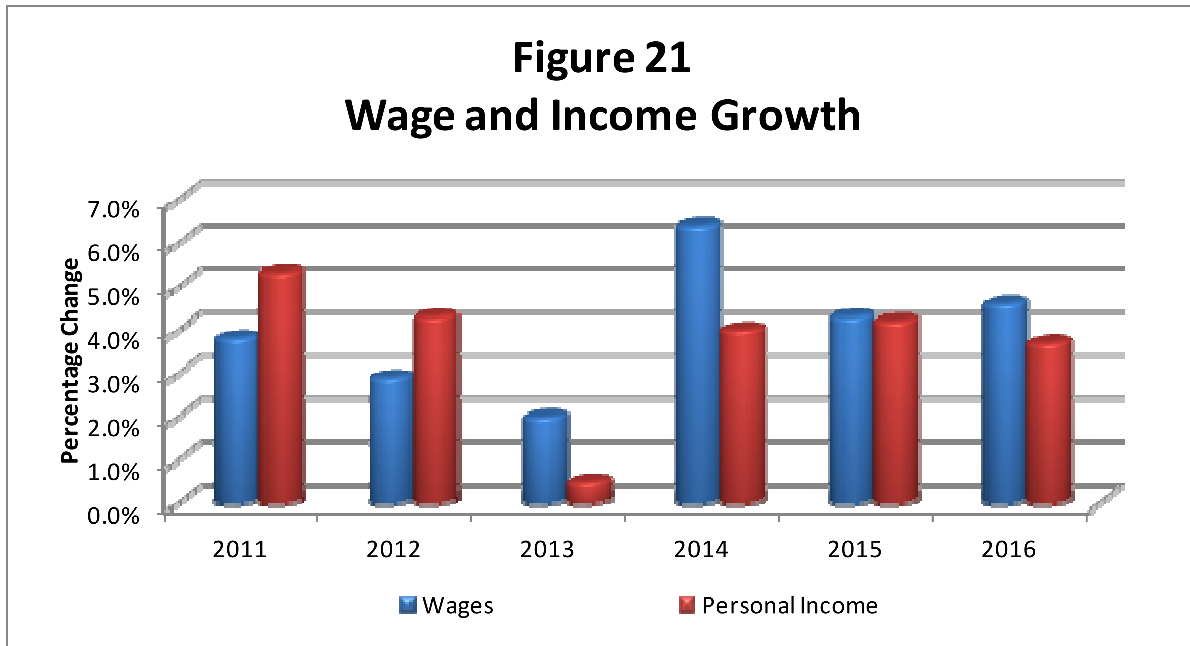
Similar to the construction industry, manufacturing employment suffered significant declines at the end of the recession. With the housing market still depressed and credit

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 0.4 percent over the two years. The manufacturing sector continued to struggle in 2013 with employment decreasing by 0.7 percent. Even with stronger economic growth, especially at the national level, manufacturing employment continued to decrease in 2014, by 0.8 percent and again in 2015 by 0.5 percent. The outlook is not much better for 2016 as employment is projected to decrease again by 0.3 percent. Nationwide, manufacturing decreased last year and is expected to continue this year due to the appreciating dollar which has been reducing the demand for US goods.

Leisure and hospitality has been experiencing solid and continuing growth over the last few years, increasing employment by 3.6 percent in 2014. Growth in this industry slowed in 2015, increasing 1.6 percent but is projected to increase the pace of growth to 2.1 percent in 2016.

WAGES AND INCOME



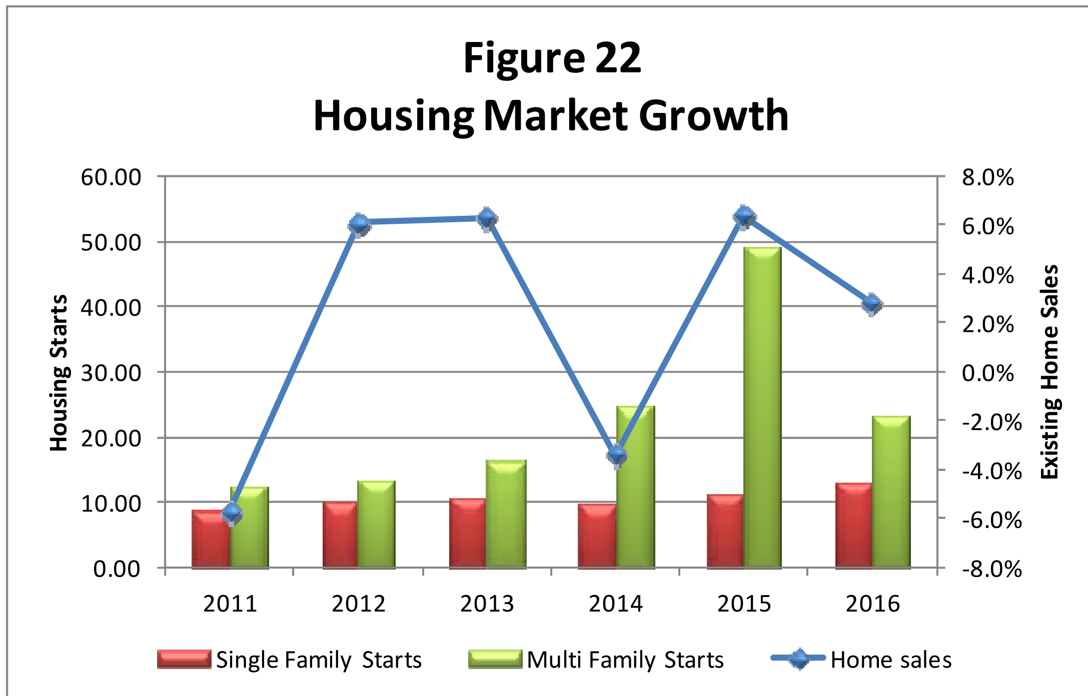
Prior to 2011, the payment of year-end bonuses by the financial services industry played an important role in New York's wage and income growth. Due to the timing of the payment of Wall Street bonuses, usually paid in the first quarter of the succeeding year, wage growth in New York was influenced by the performance of the industry in the previous year. 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 was negatively impacted by these changes in 2011, increasing by 3.8 percent, slower than the 4.3 percent growth in wages from the prior year.

Due to the spin-up of dividend income and capital gains realizations into 2012, wage and personal income growth slowed in 2013, increasing by 2.0 percent and 0.5 percent, respectively.

Although employment growth was only 1.7 percent, both wage growth and personal income growth increased at a faster rate in 2014 as compared to 2013. This was the result of the one year impact of the spin-up in bonus payments and capital gains realizations resulting from anticipated federal tax law changes as well as growth in proprietors' income.

While growth in personal income tends to closely coincide with wage growth, the estimated personal income growth of 3.7 percent in 2016 compared to the wage growth of 4.6 percent is due to the volatility in the stock market, which as measured by the S&P 500, is projected to decrease by 3.0 percent.

HOUSING MARKET



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, but 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 reduced the growth achieved in 2010.

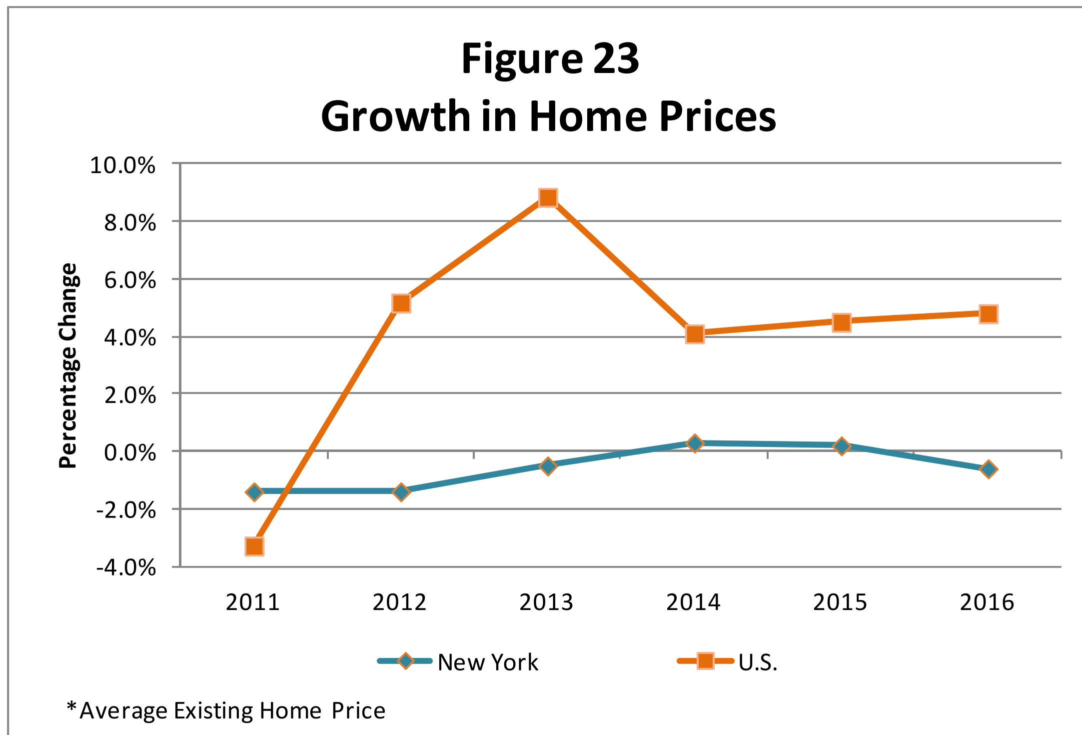
The improving economy in 2012 allowed growth in both existing home sales and single family housing starts in New York. After significant growth in multi-family housing starts in 2011, the large demand for more rental units was satisfied, resulting in lower

growth in 2012. Overall, the total number of housing starts increased by approximately 23,000.

The housing market continued to grow at a strong pace in 2013. In relation to housing starts, multi-family housing once again exhibited the most growth; over 16,000 starts occurring in 2013. However, single family housing starts surpassed the 2012 level with 10,600 starts, but growth increased at a slower pace.

After significant growth in 2012 and 2013, housing market growth declined statewide by 3.4 percent in 2014. In relation to housing starts, multi-family housing once again exhibited the most growth; nearly 25,000 starts occurred in 2014. However, single family housing starts declined from 2013 and remained at the 2012 level of 9,700. Growth in single family starts returned strong in 2015, increasing at a rate of 16.2 percent to over 11,000 starts. In 2015, multi-family starts continued the strong growth of previous years by nearly doubling, to over 49,000 starts, as a result of the looming June expiration of New York City's 421-a tax exemption program for multi-family homes.

As developers rushed to break ground in New York City in 2015 for multi-family starts in order to reap the benefits of the 421-a tax exemption program, growth in 2016 is expected to revert to 2014 levels, with 23,000 starts. Absent the expiration of the 421-a tax exemption, it is likely that both 2015 and 2016 would have seen moderately strong growth in multi-family starts.



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 housing market bubble burst, decreasing by 1.4 percent.

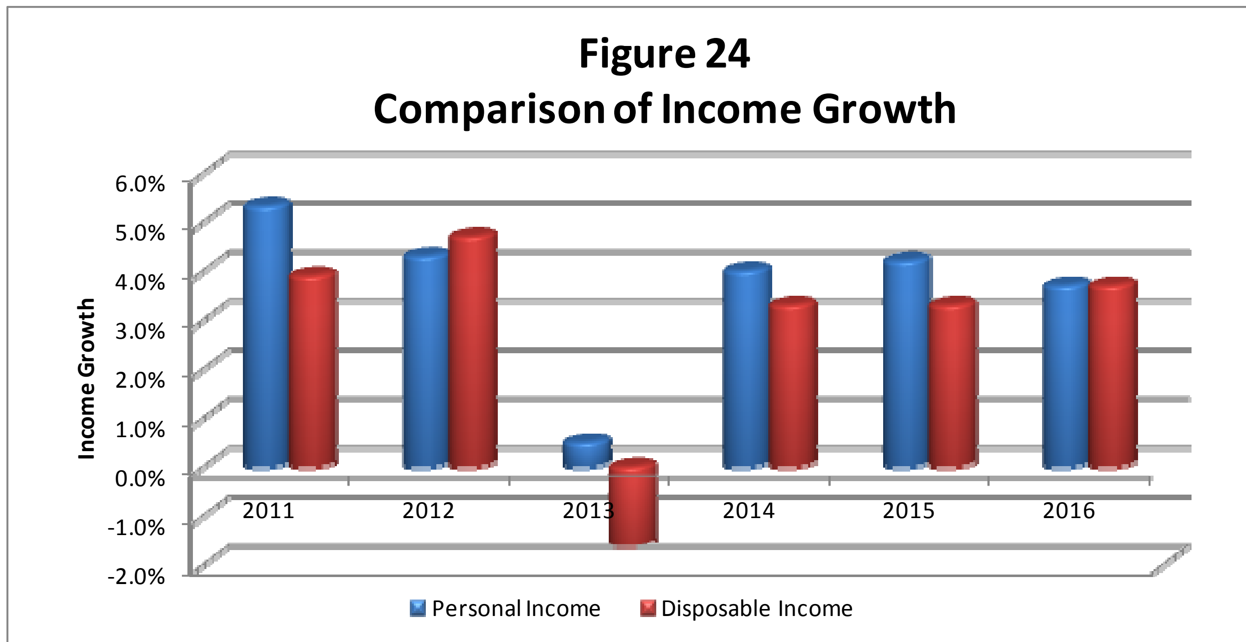
In 2012 and 2013, while national home prices were experiencing strong growth, homes prices in New York continued to decline, decreasing by 1.4 percent and 0.5 percent, respectively. This trend was reversed in 2014 as home prices were increased by a modest 0.3 percent. However, this trend still lagged behind the growth rate of 4.1 percent for the nation as a whole. During the housing bubble, New York homes prices did not over appreciate like in other parts of the nation. As a result, after the bubble burst, home prices in New York did not have as steep a decline as homes in other parts of the nation and have stayed relatively stable.

Growth in New York's home prices is projected to remain relatively flat in 2016, with a slight decrease of 0.6 percent, again lagging behind the projected national home price growth of 4.8 percent.

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 consumers at the national level, over the last few years 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.

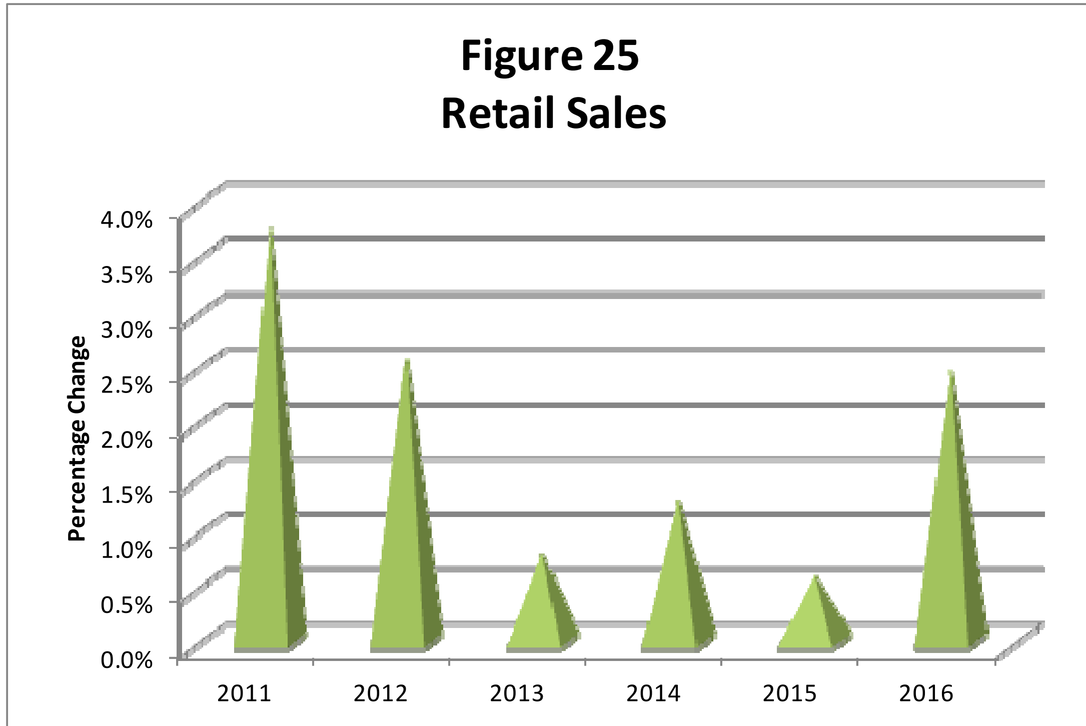


As shown in Figure 24, in 2011, disposable income growth lagged behind personal income growth due to the expiration of the Making Work Pay tax credit. The impact of the elimination of this tax credit narrowed the disparity between personal income and disposable income growth narrowed in 2012. Also mitigating this disparity was the reduction in New York middle income personal income tax rates enacted at the end of 2011, which took effect in 2012.

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 resulted from the population of taxpayers impacted by these new taxes New Yorkers.

While tax changes impact the level of disposable income going forward, their impact on growth is only realized in one year. In addition, as the price of oil has declined, consumers are spending less on gasoline resulting in bolstered disposable income growth in 2014.

Personal income growth continued in 2015 at an estimated 4.2 percent rate due to continued wage growth. This growth is projected to continue in 2016, albeit at a slower pace of 3.7 percent. While wages are projected to increase at 4.6 percent, personal income growth will be hampered by weakness in the stock market. However, the gap between personal income and disposable income will narrow in 2016 as continued low oil and gas prices will boost consumers' disposable incomes.



Even though the global economy was also showing signs of slowing in 2011, the dollar was still depreciating and tourism was growing, albeit at a slower pace than the prior year. As a result, the growth in retail sales slowed slightly but still increased by 3.8 percent.

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 2.6 percent

In 2013, with the impact of the expiration of the payroll tax reduction and the imposition of the new Medicare taxes, disposable income growth declined. Partially offsetting this

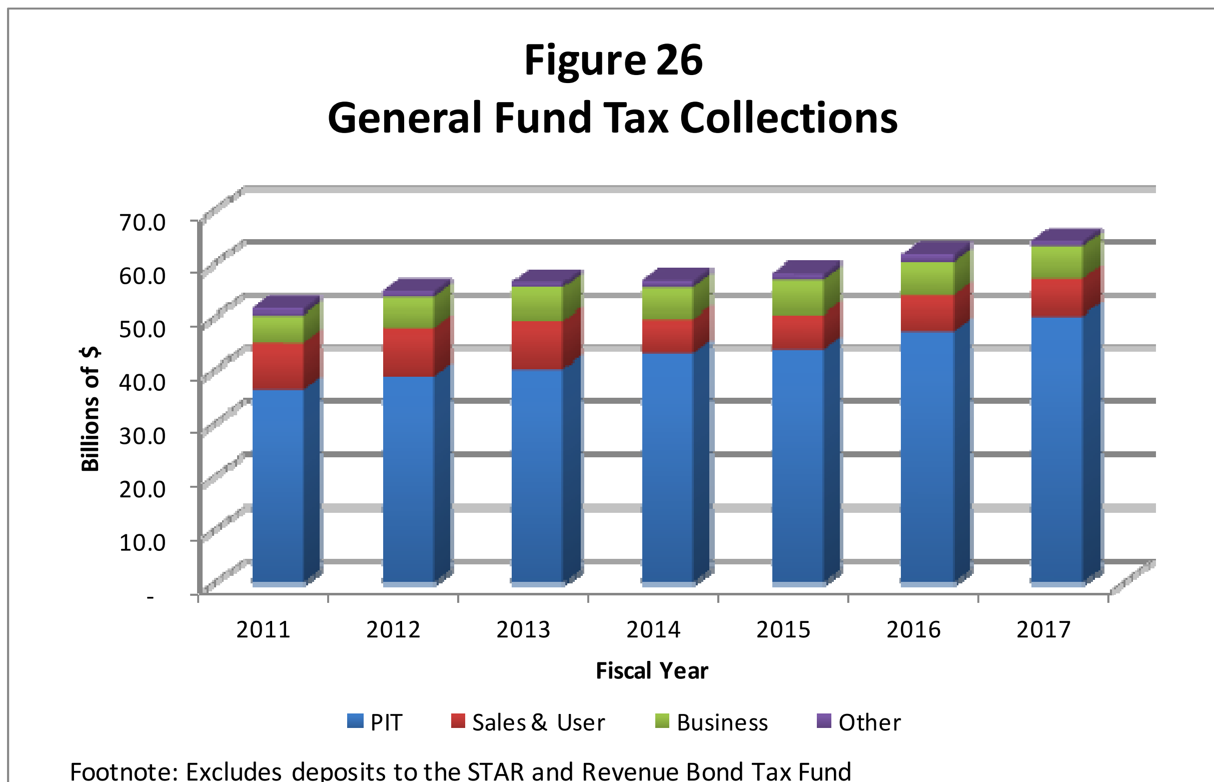
decline was the growth in 2012 bonus payments, however retail sales only grew by 0.8 percent.

With strong income in 2014 as well as stronger economic growth, retail sales grew by 1.3 percent, weaker than the 2.7 percent consumption growth at the national level. In 2015, retail sales are estimated to be weaker than consumption growth at the national level again, only increasing by 0.6 percent. While consumers are saving money from the low gasoline prices, it is not translating into increased retail sales.

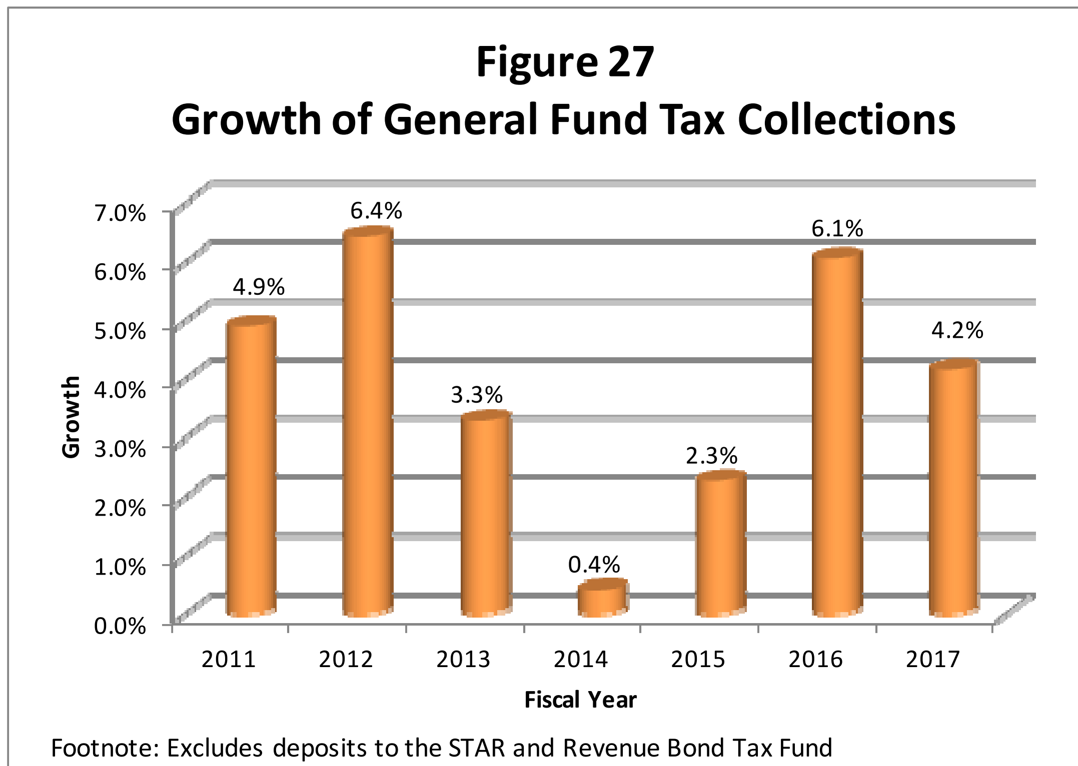
However, retail sales are projected to pick up in 2016, increasing 2.5 percent, almost at the same level as consumption growth at the national level. Consumers are getting used to the low oil and gas prices and are beginning to spend some of their savings.

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 most up to date 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.

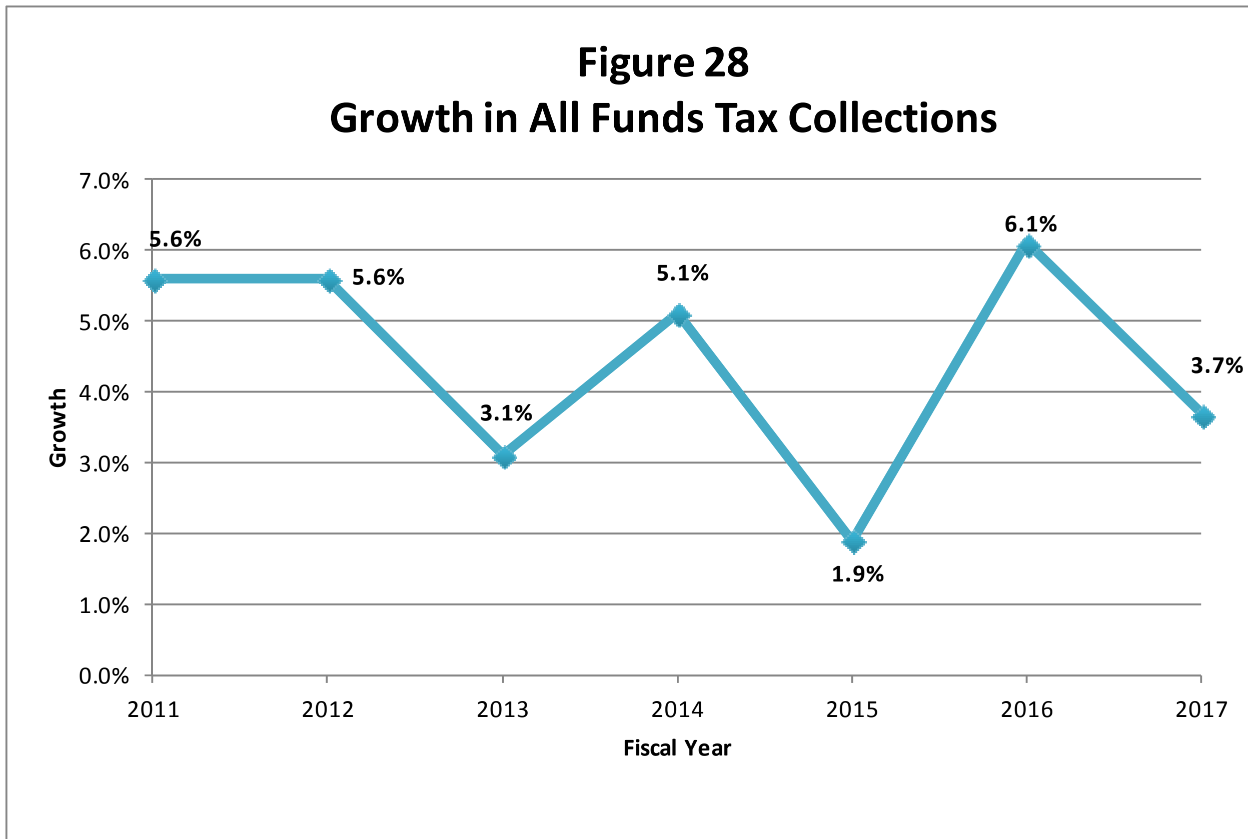


Using the NYSTREM model, the Senate Finance Committee estimates gross General Fund tax collections in FY 2016, excluding the deposits to the STAR and Revenue Bond Tax Fund will increase by 6.1 percent to $61.6 billion. All Funds collections are expected to increase by 6.1 percent to $75.3 billion in FY 2016. This increase is driven by personal income tax receipts which saw strong growth in withholding, a result of increased wages, and strong growth in estimated payments due to increased personal income; growth in sales and use taxes due to increased consumer spending, and growth in estate tax receipts due to the timing of payments. This growth was partially offset by a continuing decline in cigarette and tobacco taxes and petroleum business taxes.



In FY 2017, the Senate Finance Committee projects that General Fund tax collections, excluding deposits to the STAR and Revenue Bond Tax Fund, will increase by 4.2

percent to $62.4 billion. All Funds collections will increase by 3.7 percent to $78.1 billion. This increase reflects continued projected growth in the economy, offset by a reduction in corporate franchise tax receipts as a result of the business income tax rate reduction effective for the 2016 tax year.

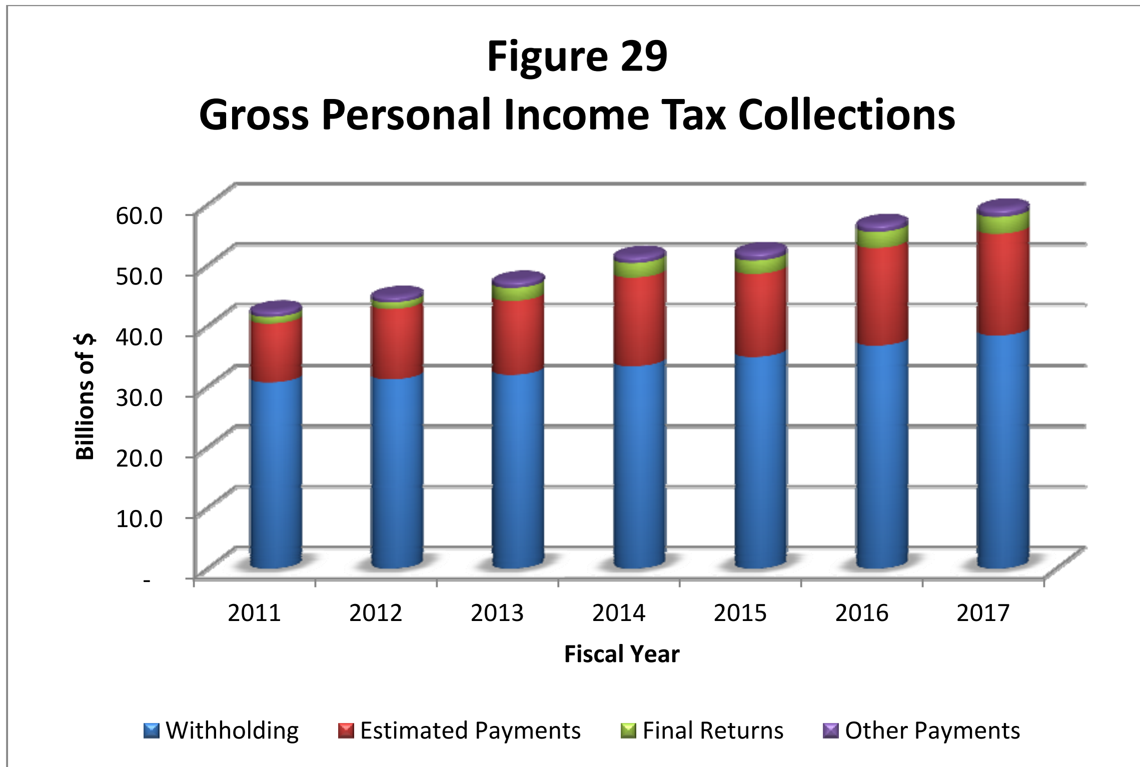


Personal Income Tax

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 2016, total General Fund personal income tax collections, net of $15.1 billion in reserve transactions, are estimated to increase by 8.1 percent to $47.2 billion. This increase reflects strong growth in withholding, a result of wage and employment growth, and strong growth in estimated payments due to increased non-wage personal income. This increase in withholding and estimated payments was partially offset by a decline in other payments and an increase in refunds due to an increase in the administrative cap and the changes to the family tax relief credit. For the 2015 tax year the family tax relief credit will not be pre-paid as it was in the previous two tax years, but will be paid when tax returns are filed. This change will push over $400 million in refunds into the next fiscal year.

In FY 2017, total personal income tax collections, net of $15.7 billion in deposits to the reserve funds, are projected to increase by 6.1 percent to $50.1 billion. This increase is a result of continued wage and personal income growth, projected in 2016 and a reduction in refunds. Refunds are decreasing due to the reduction in the administrative cap which is partially offset by the family tax relief credit refunds.



PIT Components

Withholding and estimated payments are methods by which the taxpayer can equalize 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 collections in the current fiscal year are estimated to increase by 5.3 percent to $36.8 billion, resulting from the projected increase in employment and wage growth; and an additional payroll day due to the leap year.

Withholding collections in the fourth quarter of the fiscal year historically have accounted for over thirty percent of total withholding for the year, as a result of the payment of performance bonuses by the financial services industry in the previous calendar year. In addition, the compensation structure of financial services employees has changed since the public backlash over bonuses paid to financial companies that 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 where 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.

Bonus payments have remained relatively flat from FY 2015 to the current fiscal year. Even without growth in bonus payments, increased wages resulted in the continued growth in collections. Withholding collections in FY 2017 are projected to increase by 4.5 percent to $38.4 billion from the projected increase in employment and wage growth. This growth will be partially offset by the loss of a payroll day.

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 because 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 their annual return. Upon the request of the extension, the taxpayer estimates what their 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.

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 in the current fiscal year are estimated to increase by 5.3 percent to $16.1 billion. This reflects a sharp increase in the amount of estimated payments paid with taxpayers' requests for extensions to file their annual tax returns. The extensions in

FY 2015 for the 2013 tax year were particularly low as a result of the spin-up of capital gains realizations on personal income tax returns into the previous tax year, which is causing the sharp increase in FY 2016 for 2014 extension payments.

In FY 2017, estimated payments are projected to increase by 4.0 percent, to $16.8 billion. This increase primarily reflects strong continued growth in proprietors' and non-wage income in 2016.

The personal income tax is also collected through 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 20.5 percent in FY 2016. Since final return payments are based on a taxpayer's income for the previous calendar year, this year-to-year increase is primarily due to the settlements from 2014 returns. In FY 2017, collections from final returns are projected to increase by 4.8 percent, to $2.8 billion. This is a result of the increased personal income growth in 2016.

The amount of refunds to be paid to taxpayers is estimated to be 12.1 percent higher in FY 2016. The increase in refunds is primarily due to the higher 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 through 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 $2.25 billion in FY 2016. In the current fiscal year, the amount of refunds increased by $1.1 billion, to $9.6 billion. This increase is partially attributed to the increase in the current year refund cap from $1.95 billion in FY 2015 to $2.25 billion and an increase in prior-year refunds. These increases to refunds are partially offset by a decrease in refunds resulting from not pre-paying the tax year 2015 Family Relief Tax Credit.

For FY 2017, refunds are projected to decrease by $392 million, to $9.2 billion. The decrease in refunds is due to the decrease in the cap on current year refunds to $1.75 billion, partially offset by the refunds due to the tax year 2015 Family Relief Tax Credit.

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 consist of any overdue taxes and the interest and penalties imposed upon such liability. Other collections are estimated to decrease by 8.0 percent to $1.28 billion in FY 2016. In FY 2017, other payments are projected to increase by 8.8 percent, to $1.39 billion.

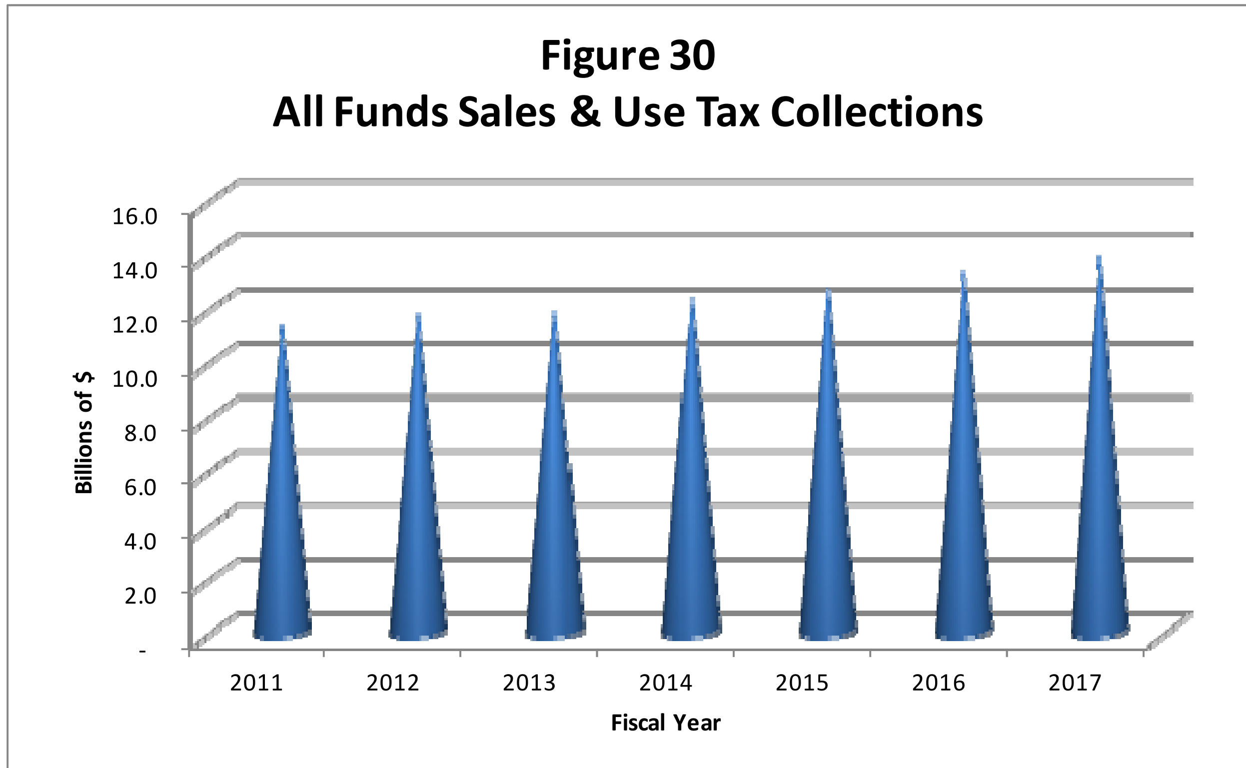
A portion of income tax collections are deposited to a special revenue fund and a debt service fund. The STAR reserve is a special revenue fund that receives a portion of personal income tax collections to reimburse school districts for the reduction in their property tax collections as a result of the 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 8.0 percent in FY 2016, reflecting the projected growth in personal income tax collections during the year. Deposits into the RBTF are projected to be 6.2 percent higher in FY 2017. This increase is due to higher projected personal income tax receipts as a result of personal income and wage growth.

User Taxes and Fees

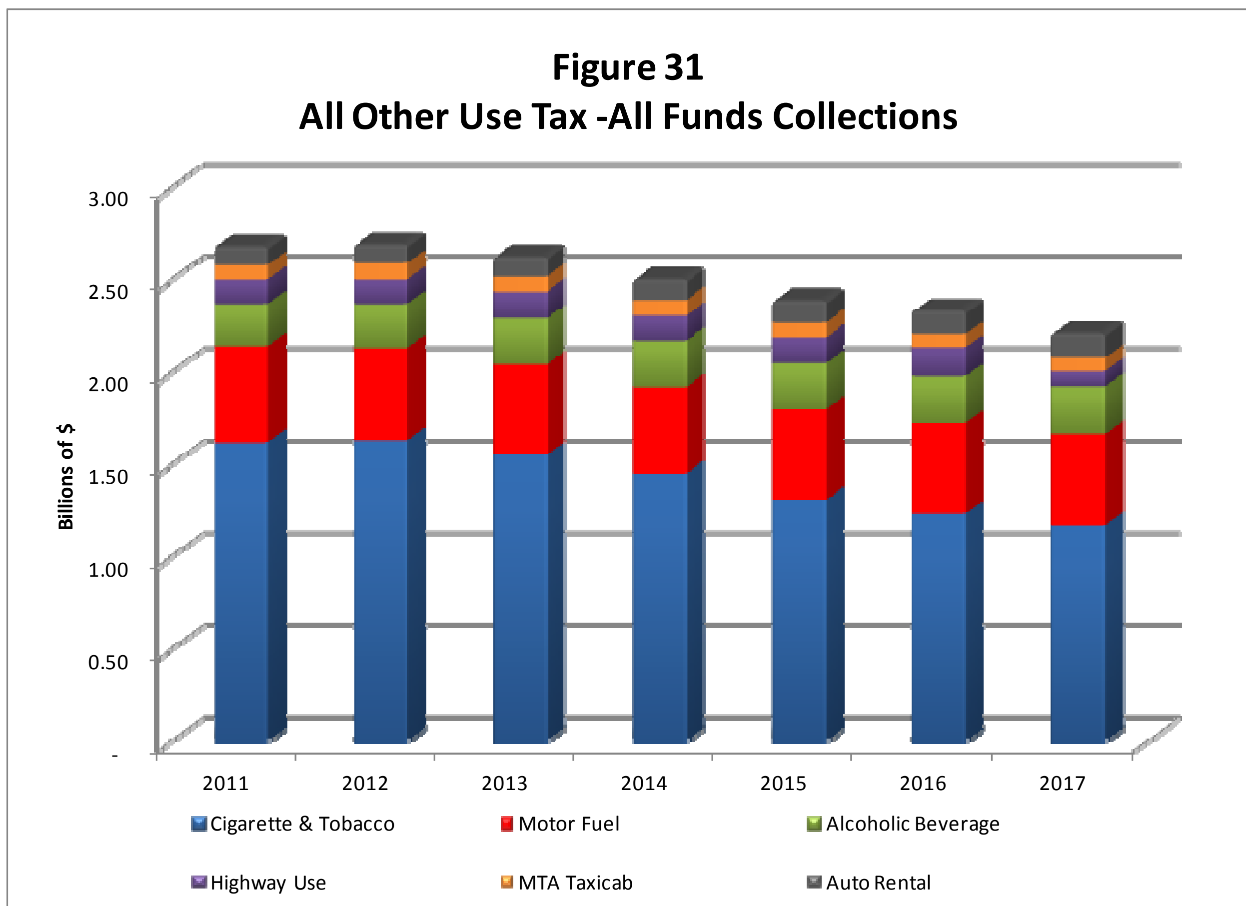
User taxes, also known as consumption taxes, are what their name implies - taxes on the use or consumption of different items in the State. These taxes consist of the sales and use tax, the auto rental tax, the cigarette tax, the motor fuel tax, alcoholic beverage taxes, the highway use tax, the MTA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

Special Revenue Funds; some are partially deposited into Debt Service Funds; while others are deposited to a combination of funds.



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 two Debt Service Funds (the Local Government Assistance Tax Fund and Sales Tax Revenue Bond Tax Fund). In FY 2016, General Fund receipts are estimated to increase by 3.6 percent, to $6.3 billion. On an All Funds basis, sales and use tax collections are estimated to increase by 3.8 percent to $13.5 billion in FY 2016. The increase in collections reflects growth in consumption as well as income growth.

In FY 2017, General Fund receipts are projected to increase by 4.1 percent to $6.6 billion. All Funds sales and use tax receipts are projected to increase by 4.1 percent to $14.0 billion. This increase in collections reflects the continued consumption and income growth projected for 2016.



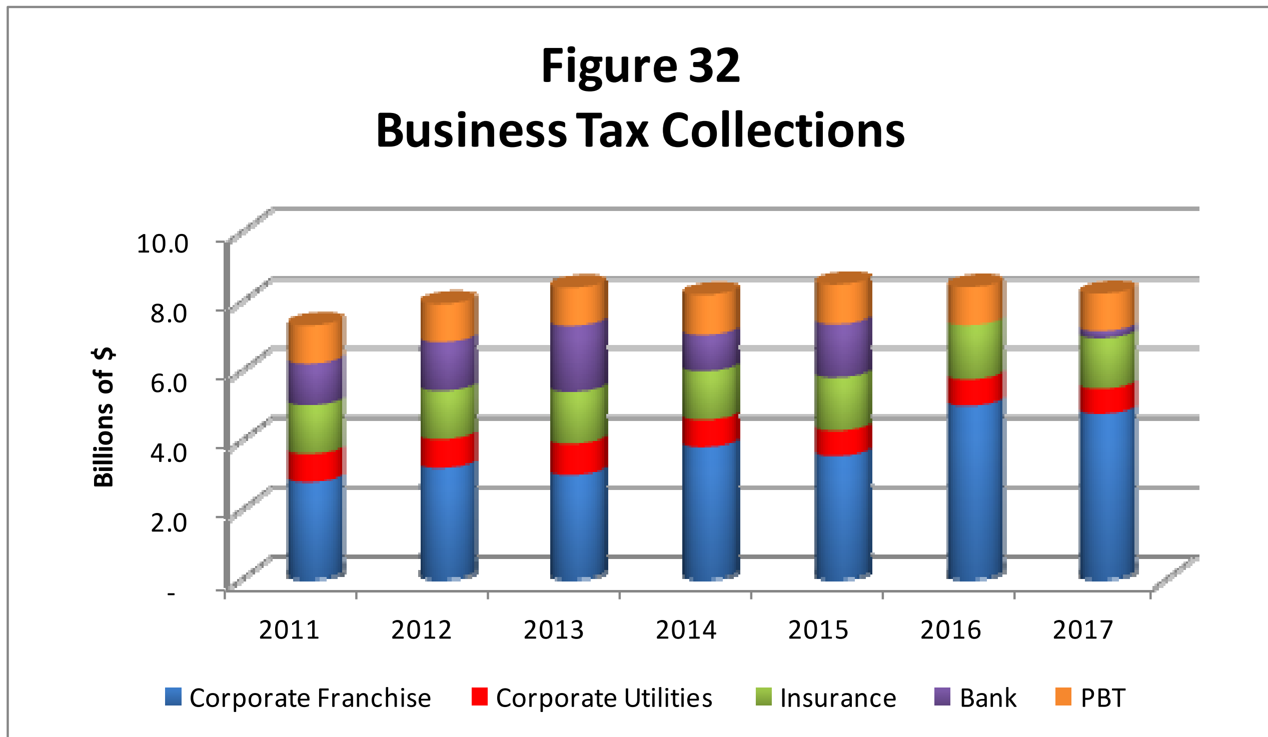
Receipts from the cigarette tax are deposited to the General Fund and the HCRA funds while receipts from the tobacco tax are deposited solely to the General Fund. General Fund collections for cigarette and tobacco taxes in FY 2016 are estimated to decrease by 13.1 percent primarily due to a change in the administration of the tobacco tax. All Funds collections for FY 2016 are estimated to decrease by 6.2 percent.

In FY 2017, General Fund cigarette and tobacco tax collections are projected to increase by 7.5 percent due to a decline in refunds paid resulting from the change in the tobacco tax administration. All Funds cigarette and tobacco tax collections are projected to decrease by 5.0 percent in FY 2016, 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 3.9 percent to $254.9 million in FY 2016. In FY 2017, these tax collections are projected to increase by 1.7 percent to $259.3 million.

All Funds collections of the remaining user taxes are estimated to increase by 2.3 percent to $847 million in FY 2016. For FY 2017, collections from these other taxes are projected to increase by 7.3 percent, to $909 million.

Business Taxes



Business taxes in New York are imposed on various aspects of a business' income. The corporate franchise tax is imposed on a business' 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.

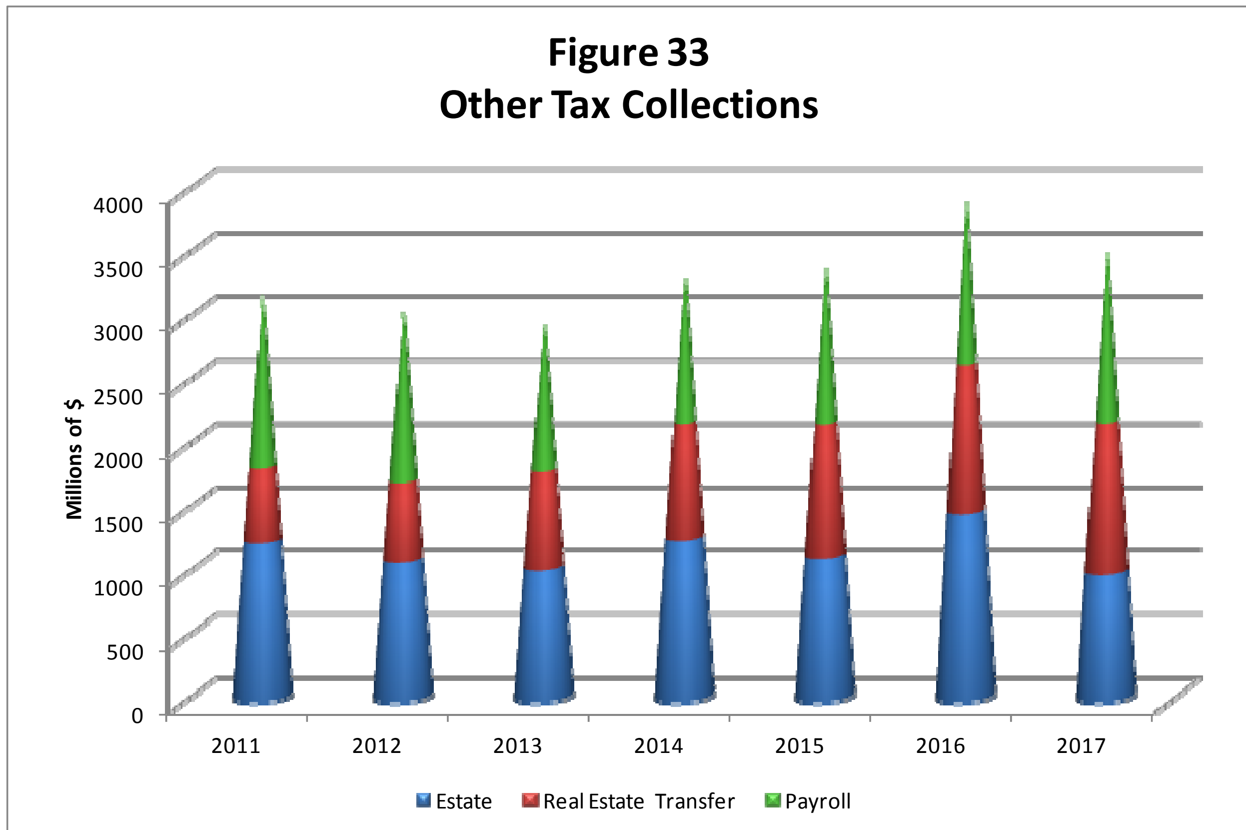
General Fund business tax collections are estimated to decline by 2.0 percent to $6.1 billion in FY 2016. This decline is due to the decrease in audit collections under the bank tax. Effective January 1, 2015, the bank tax was merged with the corporate

franchise tax. All banks are now taxed under the corporate franchise tax. In addition this decline is partially due to an increase in insurance refunds due to assessments paid to the Life Insurance Guaranty Corporation. On an All Funds basis, business taxes are estimated to decrease by 1.2 percent to $8.3 billion. This decrease is due to the factors stated above and a decrease in collections from the petroleum business tax as a result of the 3.2 percent indexing decrease in the tax rate which occurred in January 2015 and the 5.0 percent indexing decrease in the tax rate which occurred in January 2016 .

General Fund business tax collections are estimated to decrease by 3.0 percent to $6.0 billion in FY 2017. This decrease is attributable to the reduction in corporate franchise tax receipts resulting from the reduction to the business income tax rate effective for the 2016 tax year, a reduction in corporation and utilities receipts due to decreased energy consumption, and an increase in insurance refunds due to assessments paid to the Life Insurance Guaranty Corporation. On an All Funds basis, business taxes are estimated to decrease by 1.2 percent to $8.2 billion. This decrease is due to factors stated above and a decrease in collections from the petroleum business tax as a result of the 5.0 percent indexing decrease in the tax rate which occurred in January 2016 and the estimated 5.0 percent indexing decrease in the tax rate that will take effect in January 2017.

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 remainders of the taxes are deposited solely to the General Fund.



General Fund receipts of these taxes are estimated to increase by 30.5 percent to $1.47 billion in FY 2016. This increase in receipts is partially due to an increase in the number of super large estates settled in the current fiscal-year and partially offset by the increase in the estate tax exclusion amount. The FY 2015 Enacted Budget reformed the Estate Tax by phasing in higher exclusion amounts so that by 2019 the State exclusion amount

will equal the Federal exclusion amount. In FY 2017, General Fund receipts are projected to decrease by 31.8 percent to $1.0 billion. This results from due the lack of super large estate tax payments and the continued increase to the estate tax exclusion.

All Funds collections of other taxes are estimated to increase by 14.9 percent to $3.95 billion in FY 2016 and are projected to decrease by 10.2 percent to $3.5 billion in FY 2017. The increase in the current fiscal year is attributable to strong real estate transfer tax due to the strong housing market, and MTA payroll tax collections. The decrease in other tax collections in FY 2017 is due to factors stated above and partially offset by increased collections from the MTA payroll tax as a result of projected wage growth and increased real estate transfer tax collections from 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 twenty-first 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 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 EVIEWS, IHS's, 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;
- 2 components of retail sales;
- housing starts, sales and prices;
- passenger motor vehicle registration; and
- total retail sales.

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