



Finance Committee

economic and revenue review

FY 2018



**GLOBAL
INSIGHT**

Senator John J. Flanagan

Temporary President of the Senate
Majority Coalition Leader

Senator Jeffrey D. Klein

Independent Democratic Conference Leader
Majority Coalition Leader

Senator Catharine M. Young

Chair of the Finance Committee

Senator Diane J. Savino

Vice-Chair of the Finance Committee

Shawn MacKinnon

Secretary to the Finance Committee

FEBRUARY 2017



NEW YORK STATE ECONOMIC AND REVENUE REVIEW

FISCAL YEAR 2018

Senator John J. Flanagan

*Temporary President of the Senate
Majority Coalition Leader*

Senator Jeffrey D. Klein

*Independent Democratic Conference Leader
Majority Coalition Leader*

Senator Catharine M. Young

Chair of the Finance Committee

Senator Diane J. Savino

Vice-Chair of the Finance Committee

Shawn MacKinnon

Secretary to the Finance Committee

Thomas Havel

Deputy Secretary to the Finance Committee

Prepared by Joanne Fogarty

In conjunction with:
IHS GLOBAL INSIGHT

FEBRUARY 2017

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
THE NATIONAL ECONOMY	9
THE NEW YORK STATE ECONOMY	49
REVENUE OUTLOOK	66
Personal Income Tax	68
User Taxes	76
Business Taxes	80
Other Taxes	81
APPENDIX Technical Characteristics.....	84

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 2018. Based upon IHS Global Insight's February economic forecast, the Senate Finance Committee projects All Funds tax revenues to be \$345 million above the Executive for FY 2018. This amount is enhanced by the estimate of tax revenues for the remainder of the FY 2017, which is \$158 million above the Executive estimate. This results in a two year All Funds tax revenue forecast that is \$503 million above the Executive projection.

The Senate Finance Committee projects \$462 million in General Fund revenues (inclusive of miscellaneous receipts and transfers) above the Executive Budget forecast for FY 2018. This amount is enhanced by the estimate for the remainder of FY 2017, which is \$104 million above the Executive estimate. Therefore, the two year General Fund receipts forecast is \$566 million above the Executive forecast.

All signs are pointing to strong economic growth in 2017 due to numerous factors including consumer spending and residential and non-residential investment. Consumer spending is growing at a good pace due to continued wage, disposable income, and employment growth; and the increased consumer confidence resulting from both the election of President Trump and the recent market performance.

Economic growth improved in 2016 due in large part to growth in consumer spending, wage growth, and the rebounding housing market. This was the first time since 2012, that economic growth in New York outpaced national economic growth. Growth at the national level has been hindered by declining inventories and weak exports. While growth is projected to continue to accelerate, growing by a rate of 1.8 percent, national economic growth is once again projected to outpace New York, growing by a rate of 2.3 percent. This is partially due to the widening gap between the size of the labor force in New York and the nation.

As outlined in the following tables, total All Funds tax collections are estimated at \$75.1 billion in FY 2017. This estimate is \$158 million above the Executive Budget forecast. For FY 2018, All Funds tax revenues are expected to increase by \$4.7 billion to \$79.9 billion or \$345 million above the Executive's projections.

Estimates for the remainder of the current fiscal year reflect increased personal income tax collections due to wage and salary growth in 2016. These estimates also reflect strong sales tax resulting from increases in disposable income and consumer confidence. IHS Global Insight's forecast of the overall national economy in 2017 is similar to the economic forecast presented by the Executive, with stronger wage, employment, corporate profit, consumption, and overall economic growth.

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. President Trump has created much uncertainty in the economy; however, it is currently affecting economic growth positively due to strong consumer and business confidence in anticipation of tax cuts, fiscal stimulus, and regulatory reform. Yet there is uncertainty regarding the timing and scope of President Trump's proposed tax cuts which will effect when taxpayers realize capital gains and thus effects when the resulting tax liability will occur.

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 2017 General Fund Tax Collections (Millions of Dollars)

	Senate Finance	Executive Budget	Variance
Personal Income Tax	32,275	32,274	0
Withholding	37,517	37,575	(58)
Estimated Payments	14,973	14,976	(3)
Final Returns	2,632	2,615	17
Other Payments	1,417	1,358	59
Gross Collections	56,539	56,524	15
Refunds	(9,226)	(9,215)	(11)
STAR	(3,208)	(3,208)	0
RBTF	(11,830)	(11,827)	(3)
User Taxes and Fees	7,104	7,082	22
Sales and Use	6,500	6,479	21
Cigarette / Tobacco	346	345	1
Alcoholic Beverage	259	258	1
Business Taxes	5,630	5,571	59
Corporate Franchise	3,372	3,334	38
Corporate Utilities	585	568	17
Insurance	1,350	1,346	4
Bank Tax	323	323	0
Other Taxes	1,128	1,134	(6)
Estate and Gift	1,109	1,114	(5)
Pari-mutuel Taxes	16	17	(1)
Other	3	3	0
Total General Fund Taxes	46,137	46,061	76
Miscellaneous Receipts	3,799	3,799	0
Transfers	18,158	18,130	28
Total General Fund Receipts	68,094	67,990	104

Note: totals may not add due to rounding

FY 2018 General Fund Tax Collections (Millions of Dollars)

	Senate Finance	Executive Budget	Variance
Personal Income Tax	35,585	35,406	179
Withholding	39,474	39,359	115
Estimated Payments	17,119	17,025	94
Final Returns	2,862	2,836	26
Other Payments	1,421	1,418	3
Gross Collections	60,875	60,638	237
Refunds	(9,963)	(9,955)	(8)
STAR	(2,606)	(2,606)	0
RBTF	(12,721)	(12,671)	(50)
User Taxes and Fees	7,510	7,502	8
Sales and Use	6,903	6,891	12
Cigarette / Tobacco	347	348	(1)
Alcoholic Beverage	260	263	(3)
Business Taxes	5,980	5,955	25
Corporate Franchise	3,832	3,827	5
Corporate Utilities	564	559	5
Insurance	1,422	1,407	15
Bank Tax	162	162	0
Other Taxes	990	969	21
Estate and Gift	974	949	25
Pari-mutuel Taxes	14	17	(3)
Other	3	3	(1)
Total General Fund Taxes	50,066	49,832	234
Miscellaneous Receipts	2,298	2,298	0
Transfers	18,275	18,047	228
Total General Fund Receipts	70,639	70,177	462

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	47,313	47,309	4
Withholding	37,517	37,575	(58)
Estimated Payments	14,973	14,976	(3)
Final Returns	2,632	2,615	17
Other Payments	1,417	1,358	59
Gross Collections	56,539	56,524	15
Refunds	(9,226)	(9,215)	(11)
User Taxes and Fees	16,235	16,184	51
Sales and Use	13,903	13,861	42
Cigarette / Tobacco	1,229	1,227	2
Alcoholic Beverage	259	258	1
Motor Fuel Tax	514	506	8
Highway Use Tax	138	140	(2)
Auto Rental	127	127	(0)
MTA Taxicab	65	64	1
Medical Marihuana	1	1	0
Business Taxes	7,950	7,847	103
Corporate Franchise	4,176	4,129	47
Corporate Utilities	761	738	23
Insurance	1,506	1,502	4
Bank Tax	383	383	0
Petroleum Business	1,125	1,095	30
Other Taxes	2,271	2,272	(1)
Real Estate Transfer	1,143	1,138	5
Estate and Gift	1,109	1,114	(5)
Pari-mutuel Taxes	16	17	(1)
Other	3	3	0
Payroll Tax	1,362	1,361	1
Total All Funds Taxes	75,131	74,973	158

Note: totals may not add due to rounding

FY 2018 All Funds Tax Collections (Millions of Dollars)

	Senate Finance	Executive Budget	Variance
Personal Income Tax	50,912	50,683	229
Withholding	39,474	39,359	115
Estimated Payments	17,119	17,025	94
Final Returns	2,862	2,836	26
Other Payments	1,421	1,418	3
Gross Collections	60,875	60,638	237
Refunds	(9,963)	(9,955)	(8)
User Taxes and Fees	17,004	16,982	22
Sales and Use	14,750	14,726	24
Cigarette / Tobacco	1,198	1,202	(4)
Alcoholic Beverage	263	263	0
Motor Fuel Tax	505	505	(0)
Highway Use Tax	88	87	1
Auto Rental	135	134	1
MTA Taxicab	65	64	1
Medical Marihuana	1	1	0
Business Taxes	8,310	8,253	57
Corporate Franchise	4,694	4,687	7
Corporate Utilities	739	732	7
Insurance	1,588	1,572	16
Bank Tax	190	190	0
Petroleum Business	1,099	1,072	27
Other Taxes	2,207	2,179	28
Real Estate Transfer	1,216	1,210	6
Estate and Gift	974	949	25
Pari-mutuel Taxes	14	17	(3)
Other	3	3	(1)
Payroll Tax	1,433	1,421	12
Total All Funds Taxes	79,863	79,518	345

Note: totals may not add due to rounding

United States Economic Outlook

(Dollar Figures in Billions of Dollars)

	2016	2017	2018	2019
GDP	\$18,567.0	\$19,397.1	\$20,322.8	\$21,221.7
Percent Change	2.9%	4.5%	4.8%	4.4%
Real GDP	\$16,660	\$17,044	\$17,496	\$17,906
Percent Change	1.6%	2.3%	2.7%	2.3%
Consumption Expenditures	\$11,515	\$11,838	\$12,221	\$12,576
2009 Dollars, Percent Change	2.7%	2.8%	3.2%	2.9%
Government Expenditures	\$2,909	\$2,924	\$2,943	\$2,961
2009 Dollars, Percent Change	0.9%	0.5%	0.6%	0.6%
Investment Expenditures	\$2,788	\$2,906	\$3,040	\$3,148
2009 Dollars, Percent Change	0.7%	4.2%	4.6%	3.6%
Change in Inventories	\$2,275	\$2,288	\$2,334	\$2,386
2009 Dollars, Percent Change	1.0%	0.6%	2.0%	2.3%
Exports	\$2,128	\$2,170	\$2,222	\$2,290
2009 Dollars, Percent Change	0.4%	1.9%	2.4%	3.0%
Imports	\$2,690	\$2,799	\$2,978	\$3,143
2009 Dollars, Percent Change	1.1%	4.1%	6.4%	5.5%
CPI - All Urban, Percent Change	1.3%	2.4%	1.9%	2.4%
CPI - Core, Percent Change	2.2%	2.1%	2.0%	2.1%
Pretax Corporate Profits	\$2,098	\$2,285	\$2,419	\$2,428
Percent Change	0.5%	8.9%	5.9%	0.4%
After-tax Corporate Profits	\$1,532	\$1,698	\$1,884	\$1,852
Percent Change	4.2%	10.8%	11.0%	-1.7%
Personal Income	\$16,006	\$16,707	\$17,559	\$18,478
Percent Change	3.5%	4.4%	5.1%	5.2%
Wages and Salaries	\$8,184	\$8,573	\$9,035	\$9,517
Percent Change	4.2%	4.8%	5.4%	5.3%
Nonagricultural Employment, Millions	144.3	146.5	148.5	150.2
Percent Change, Seasonally Adjusted	1.8%	1.5%	1.4%	1.1%
Unemployment Rate	4.9%	4.6%	4.3%	4.1%
Interest Rates				
T-Bill Rate, 3 Month	0.32%	0.9%	1.65%	2.51%
T-Note Rate, 10 Year	1.84%	2.7%	3.15%	3.84%
T-Bond Rate, 30 Year	2.60%	3.2%	3.78%	4.36%
Standard and Poor's 500 Stock Index				
Percent Change	1.5%	11.6%	4.2%	3.6%

Source: IHS Global Insight US Macroeconomic Forecast: February 2017

The National Economy

All signs are pointing to strong economic growth in 2017 due to numerous factors including consumer spending and residential and non-residential investment. Consumer spending is growing at a good pace due to continued wage, disposable income, and employment growth; and the increased consumer confidence resulting from both the election of President Trump and the recent market performance.

President Trump has created much uncertainty in the economy; however, right now it is affecting economic growth positively due to strong consumer and business confidence in anticipation of tax cuts, fiscal stimulus, and regulatory reform. Yet, the current dialogue surrounding trade, specifically with Mexico and China, could have a negative impact not only US economic growth, but as global economic conditions.

It is expected that the Feds will increase interest rates three times this year, but this could be put on hold or even reversed if inflation begins to slow, if growth in the labor market is reversed or if there is any shock to the economy. Increasing the interest rates too soon could lead to reduced consumer spending, which has been a driving force in economic growth.

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.

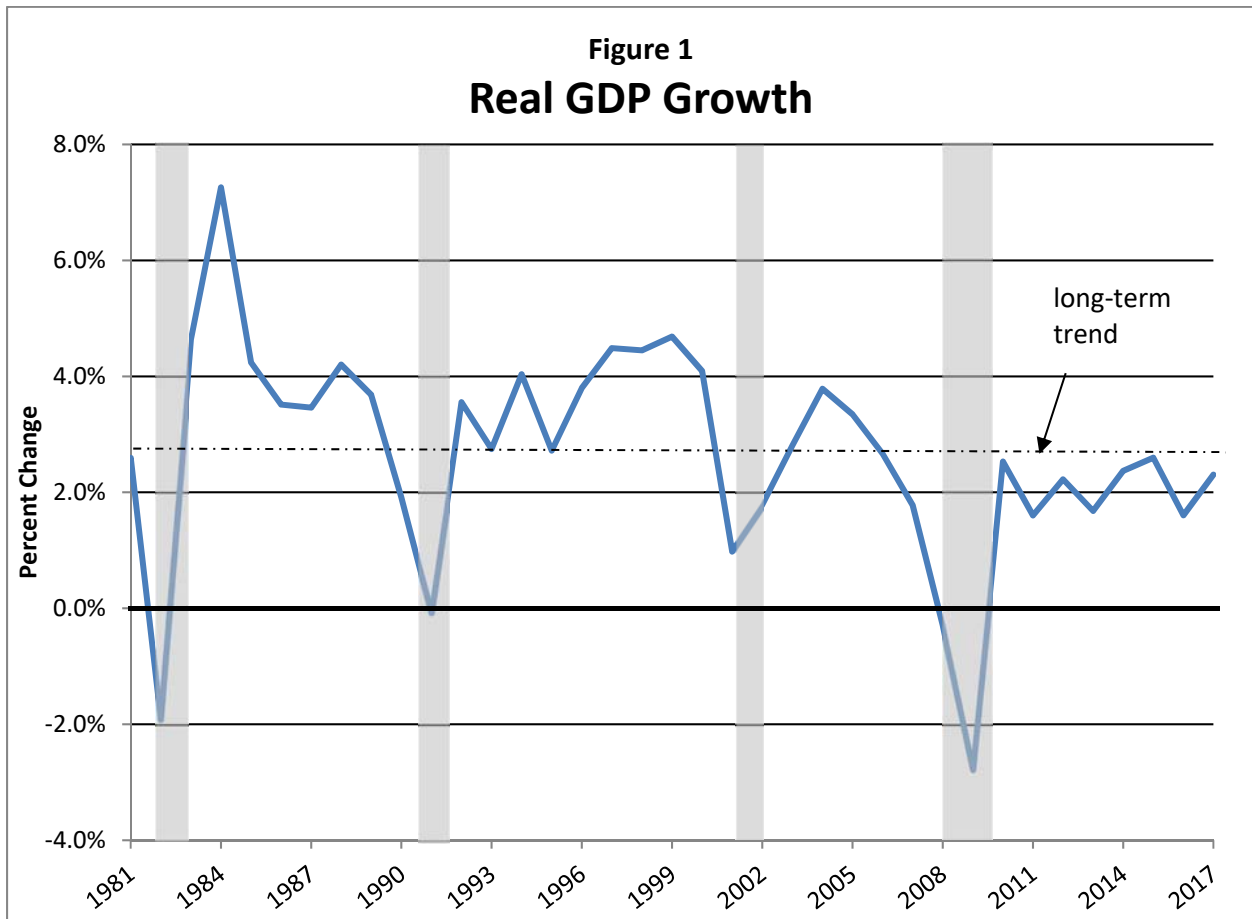
Although varieties of factors are used to determine when an economy goes into recession, the most simplistic explanation is a decline in GDP growth for at least two consecutive quarters. When GDP turns positive, the economy is considered to be in recovery. As the economy becomes stronger and grows at 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 the consumer is an individual or a business.

In order to effectively evaluate the economic output of goods and services produced in the country from year to year, the effects of price changes or inflation need to be removed.

This allows one to determine if fluctuations in the economy are caused by changes in prices or actual output.

The recovery and expansion phases from the last four 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 2016 marking the seventh year of economic recovery.



The first half of 2016 began with weak real GDP growth, despite the fact that there was strong employment gains, however real GDP growth did begin to strengthen in the second

half of the year. For the past five out of six years, the first quarter of the year has shown weak growth, however it always turned around. It may have more to do with seasonal adjustment process than actual economic factors. The second half of 2016 was positively impacted by strong consumer spending and the rebounding housing market. However, this growth continued 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.

While the first quarter of the year is generally weak compared to the rest of the year, 2017 is starting out on strong footing, due to numerous factors such as consumer spending and business investment. Consumer spending is growing at a good pace due to continued wage, disposable income, and employment growth; and the increased consumer confidence from both the election of President Trump and market performance. However, this growth is slightly hindered by the appreciating dollar and increasing interest rates.

LABOR MARKET

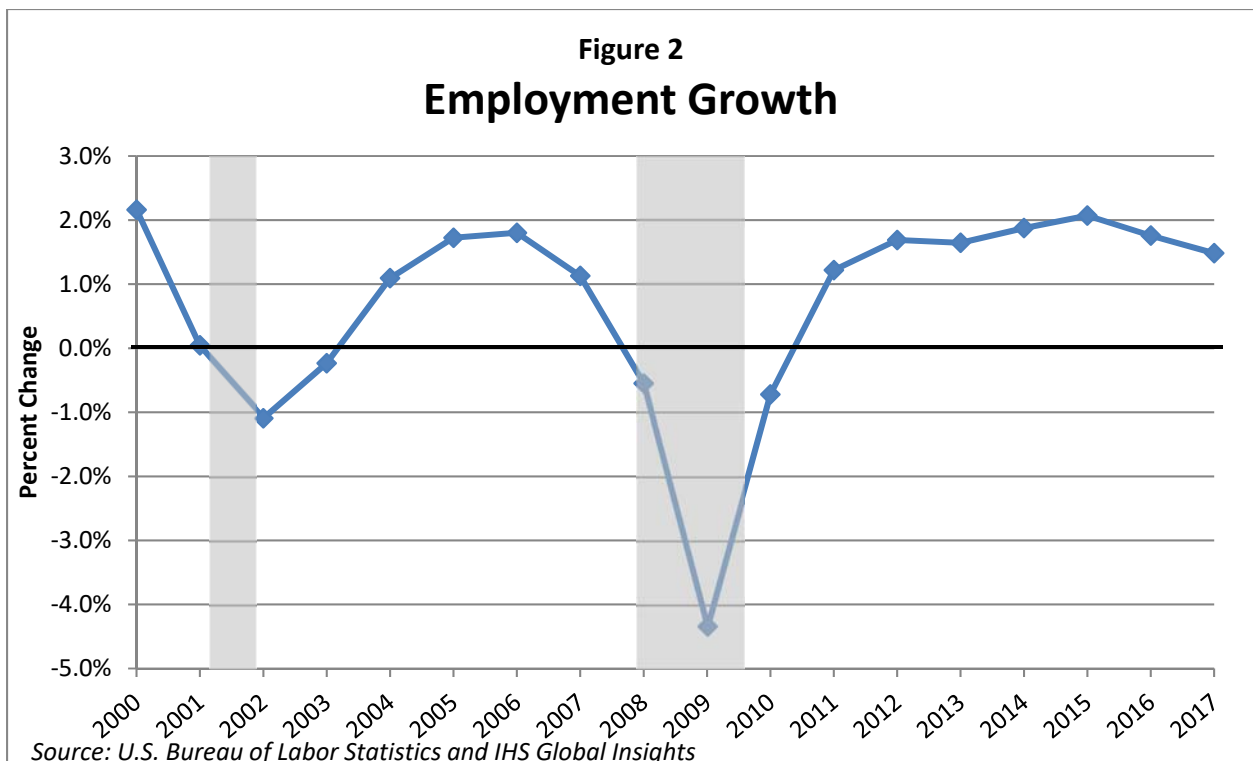
As stated above, one of the factors that contribute to an expanding economy is a strong labor market. While there is always some level of unemployment in any economy (the full employment unemployment rate varies between four and six percent), the economy needs a labor force that is able, available and 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, we have seen solid job growth, which is projected to continue.

The recovery and expansion phases from the last two recessions are shown in Figure 2 (the recessions are represented by the shaded areas). The recovery from the Great Recession was a jobless recovery, with employment growth not returning until 2011. Similar to the previous recovery, employment growth 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 2.93 million jobs with no change in productivity.



Employment growth continued in 2015, growing by 2.1 percent over the previous year, with a monthly average of 241,000 jobs created. In 2015, productivity increased by 0.7 percent, dampening what may have been much stronger 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. Employment growth continued in 2016, albeit slower, growing by 1.8 percent, with average monthly job gains of 207,000.

The growth in labor force participation surpassed that of population growth and increased productivity are essential to spurring healthy economic growth. Without both of these conditions, there is the potential for increased pressure on wages and therefore prices and

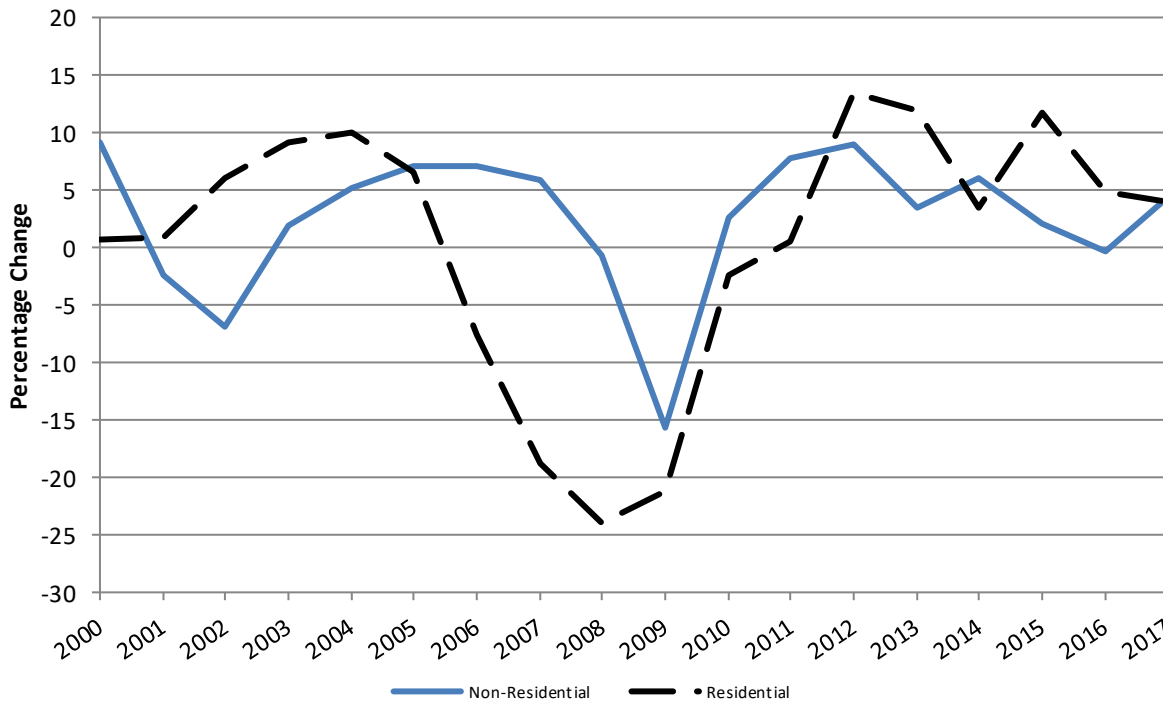
inflation. In 2017, increased productivity is expected to cause job growth to slow, increasing 1.5 percent, with average monthly job gains of 157,000.

While still uncertain, it is expected that the new presidential administration is going to invest in infrastructure spending; if this happens there will be a large boost in employment. The unemployment rate for 2018 is projected to be 4.3 percent, down from 4.9 percent in 2016 and a projected level of 4.6 percent in 2017.

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.

Figure 3
Fixed Investment



Source: U.S. Bureau of Economic Analysis, IHS Global Insight

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 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 U.S. 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 2.1 percent.

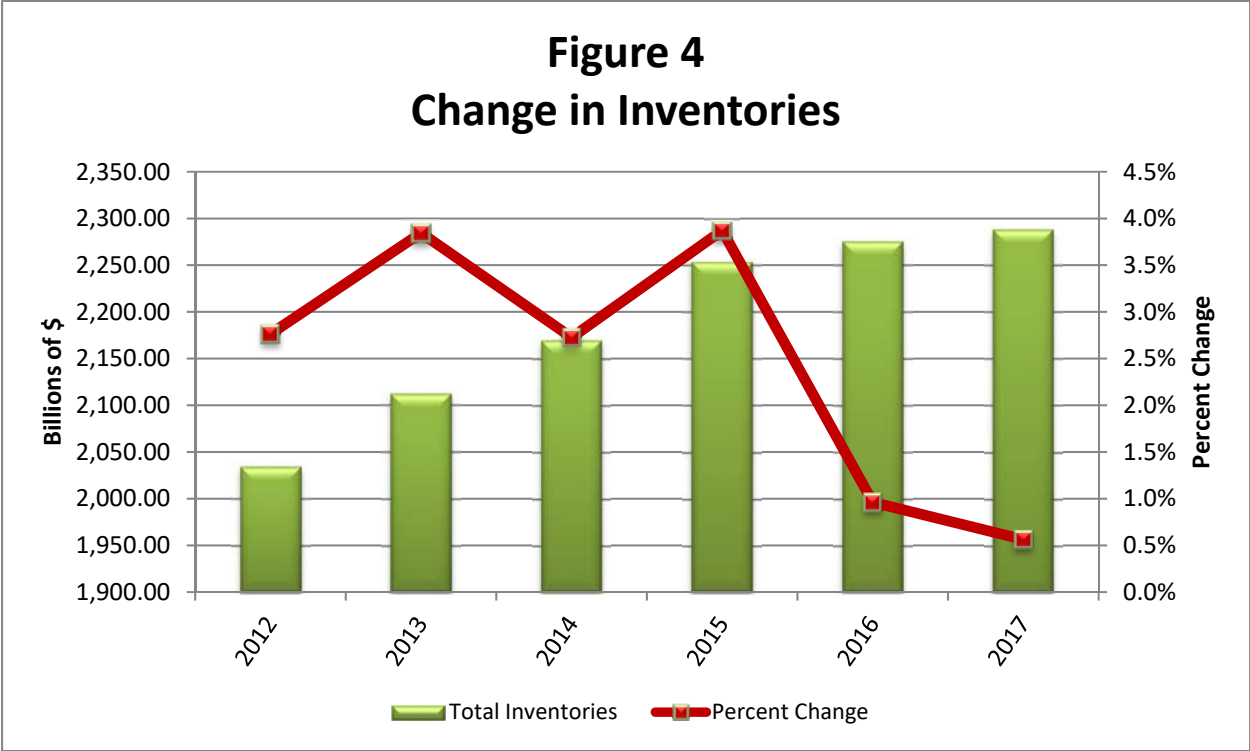
Non-residential fixed investments dropped slightly in 2016, by 0.4 percent, due to continuing weak economic growth and discouraging corporate profits in the first half of the year. By the second half of the year, due to growth in both aircraft and energy related investments, growth in non-residential fixed investments improved.

This growth is projected to continue into 2017, growing at 4.3 percent, due to strong business confidence that there will be tax cuts and regulatory reform. In addition, growth in corporate profits and rebounding energy prices are having a positive impact on investments.

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.

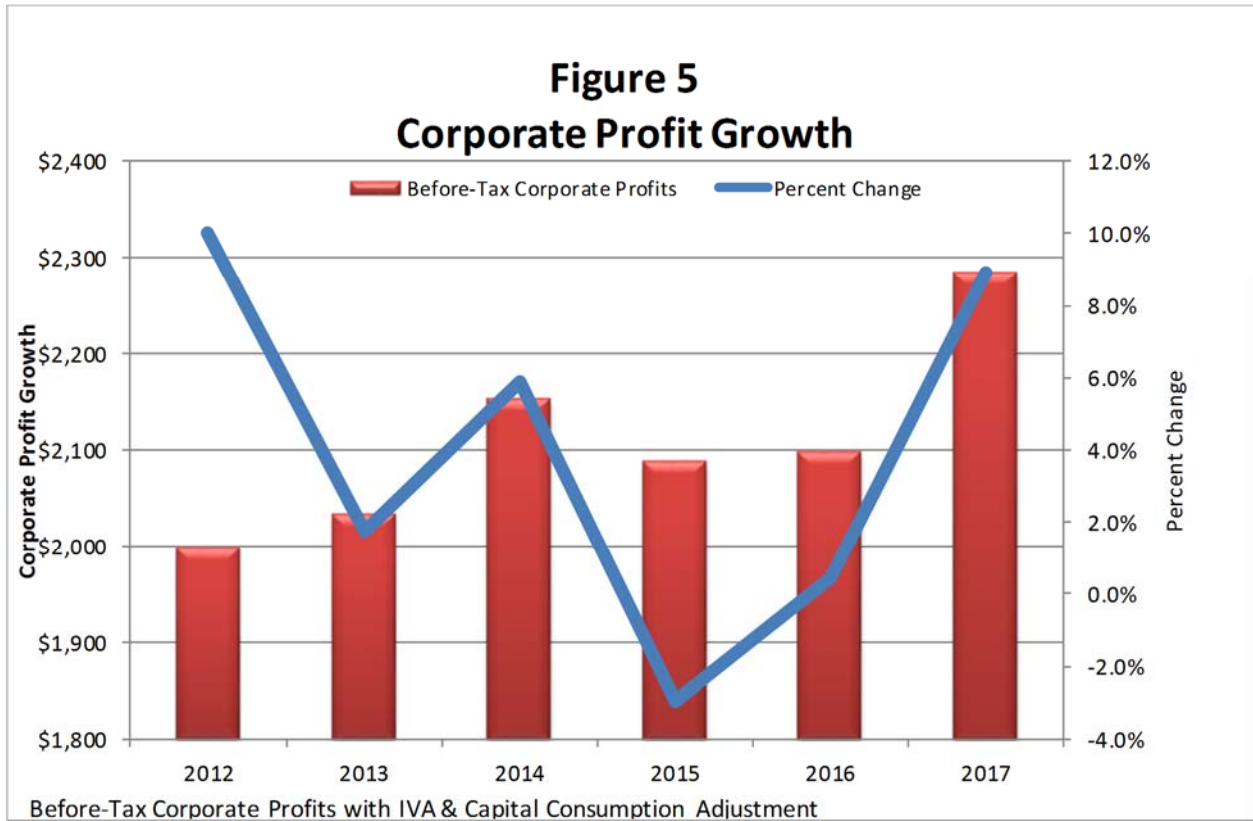
Inventory growth rebounded in 2013 as farmers replenished their stocks, after decumulations during the Midwestern drought. However, the largest inventory accumulation was realized in the non-farm sector, especially in wholesale trade. The reason for this large inventory accumulation in the latter part 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. The building of inventories slowed in 2016 as consumers continue to spend and should continue to slow in 2017, growing by only 0.6 percent. While the large inventories are putting pressure on the economy it is not significant enough to effect production, however, the import of goods may slow in order to let the inventories diminish.

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 adjustments.

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 2015, resulting in a corporate profit decrease of 3 percent. However, when the markets are doing well, corporate profits can increase, such as they did in the fourth quarter of 2016 when corporate profits increased by over 16 percent, year-over-year. This growth in corporate profits is projected to continue into 2017 at an average growth rate of 8.9 percent, with continued strong growth in the financial markets predicted.

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 gave 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.

While no formal tax plan has been released by President Trump, he has made it clear that tax reform will be a priority of his administration. He has stated that he intends to cut taxes for middle-class Americans through reducing the number of tax brackets, reducing tax rates, and increasing the standard deduction. However, he has also stated that he intends to place limits on the amount of itemized deductions that taxpayers may claim, which would limit deductions for state and local taxes (income, property, and sales). Speaker Ryan on the other hand is supportive of eliminating many itemized deductions, such as the state and local tax deduction.

In addition, during the presidential campaign, President Trump vowed to increase spending on the nation's bridges, roads, and airports. The size of investment is still unknown, but it has been speculated that it could range from \$250 billion to \$1 trillion.

MONETARY POLICY

Under the control of the Federal Reserve Board (Fed), monetary policy involves actions that are intended to adjust the supply of money that is available in the U.S. economy. The goal of the Fed in adjusting the money supply is to maximize employment, maintain stable

prices, and moderate long-term interest rates. The Feds have three main monetary policy tools, the discount rate, reserve requirements, and open market operations, which includes manipulating interest rates.

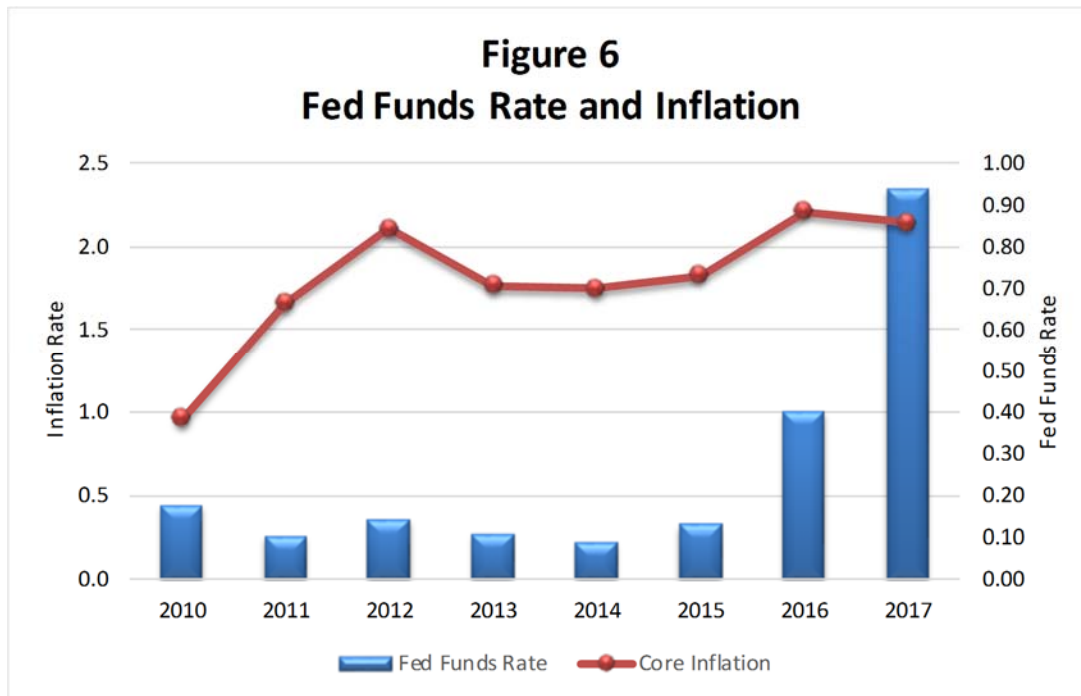
One of the ways the Fed manipulates rates is through the interest rate on Federal Funds which is the rate used when banks loan money to each other. The Federal Funds rate then becomes a basis upon which banks set their own loan rates such as mortgage rates and personal loan rates. When the economy is 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.

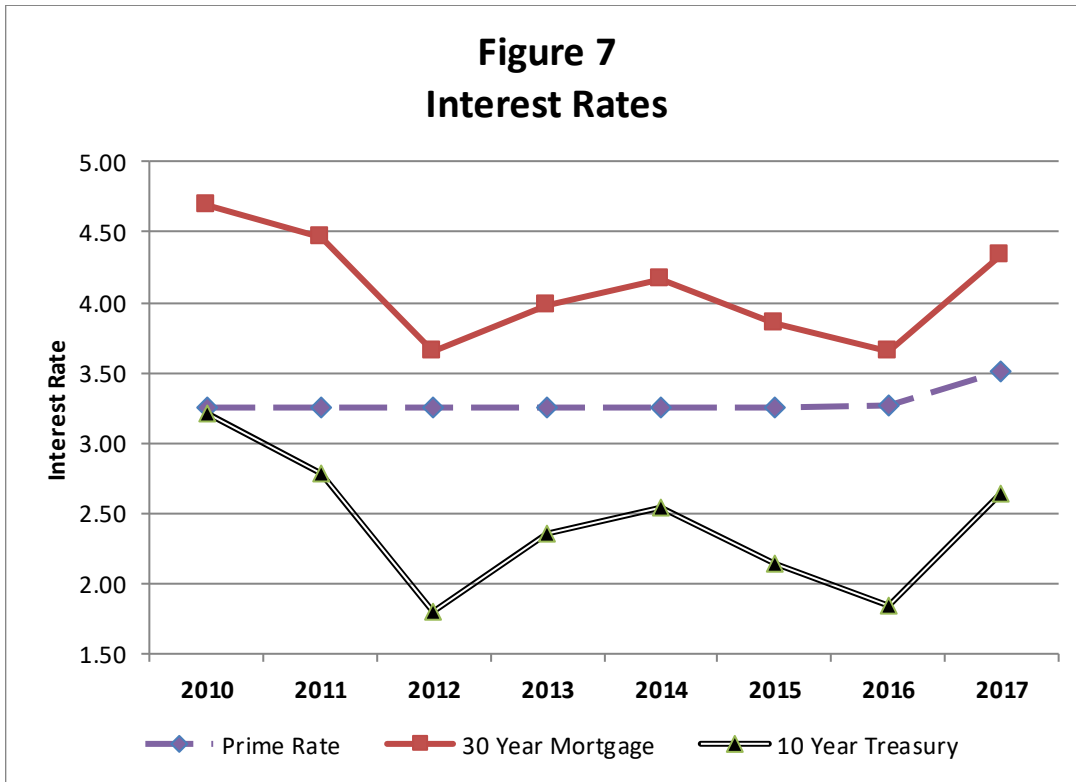
At the December 2015 meeting of the Federal Open Market Committee, it was announced that the Fed Funds rate will be increased to a target of 0.25-0.50 percent. This put an end to seven years of near zero rates and was the first time the Fed increased rates in nearly a

decade. These rates were initially expected to be increased gradually, with four 25-basis point increases in 2016. However, due to weak economic growth in beginning of the year, concerns surrounding the global economy and market volatility, rates were only increased once in 2016, in December by 0.25 percent to a target of 0.50-0.75 percent; this was the second increase in more than 10 years (June 2006).

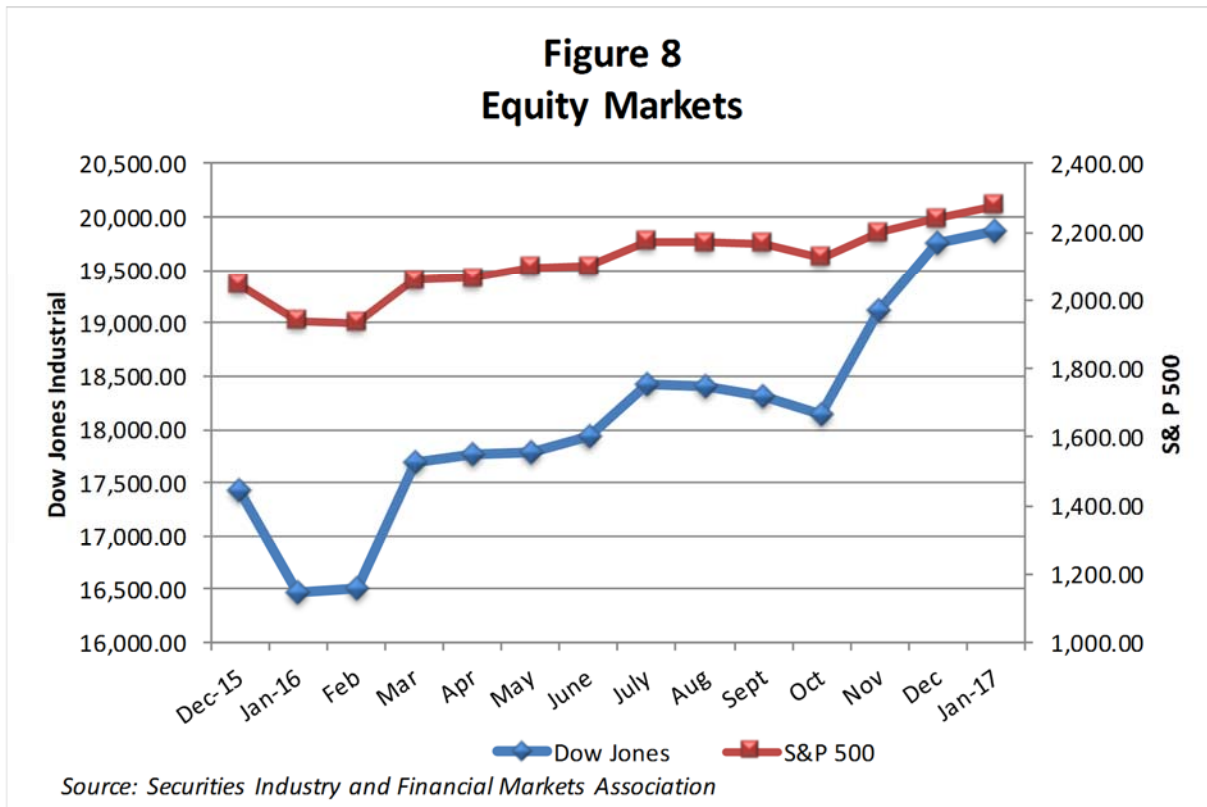
Due to increasingly positive economic activity, there is expected to be three rate increases in 2017 and in each of the two subsequent years, to a target of 3.0 percent by the end of 2019. Prior to the presidential election, it was expected that there would only be two rate increases in 2017. There is potential for larger or accelerated increases due to strong growth in the labor market, growth in inflation, and the potential for significant fiscal stimulus from the new presidential administration. While rates are projected to increase over the next few years, they are projected to be substantially lower than the recent high of 5.25% in 2006. However, the Fed plans could be put on hold or even reversed if inflation begins to slow, if growth in the labor market is reversed or if there is any shock to 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. After the rate increase in December, various US lenders announced that they were increasing their prime rate, which is a short-term benchmark used to set the rates for various products such as credit card rates, from 3.5 percent to 3.75 percent. In addition, 30-year mortgage rates, which averaged 3.62 percent in 2016, are expected to average 4.26 percent in 2017 and 5.05 percent in 2018.



FINANCIAL MARKETS



The stock market began 2016 with yet another correction, only the second in over four years, with the S&P declining 5.1 percent in January, causing concerns that another recession may be in the near future. The financial markets were extremely volatile at the beginning of 2016 due primarily to the strong dollar, continued global economic weakness, continued uncertainty of increases to the Fed's fund rates, and continued low oil prices, with prices hitting the lowest level in over a decade.

The second quarter of 2016 was effected by uncertainty created by the United Kingdom's referendum to leave the European Union, also known as Brexit, causing the S&P to drop 3.6 percent the day following the vote. However, Brexit did not cause any longer term drag on the markets and they recovered, though it is uncertain at this point, what effect this will have on US-United Kingdom trade and what, if any, impact there will be.

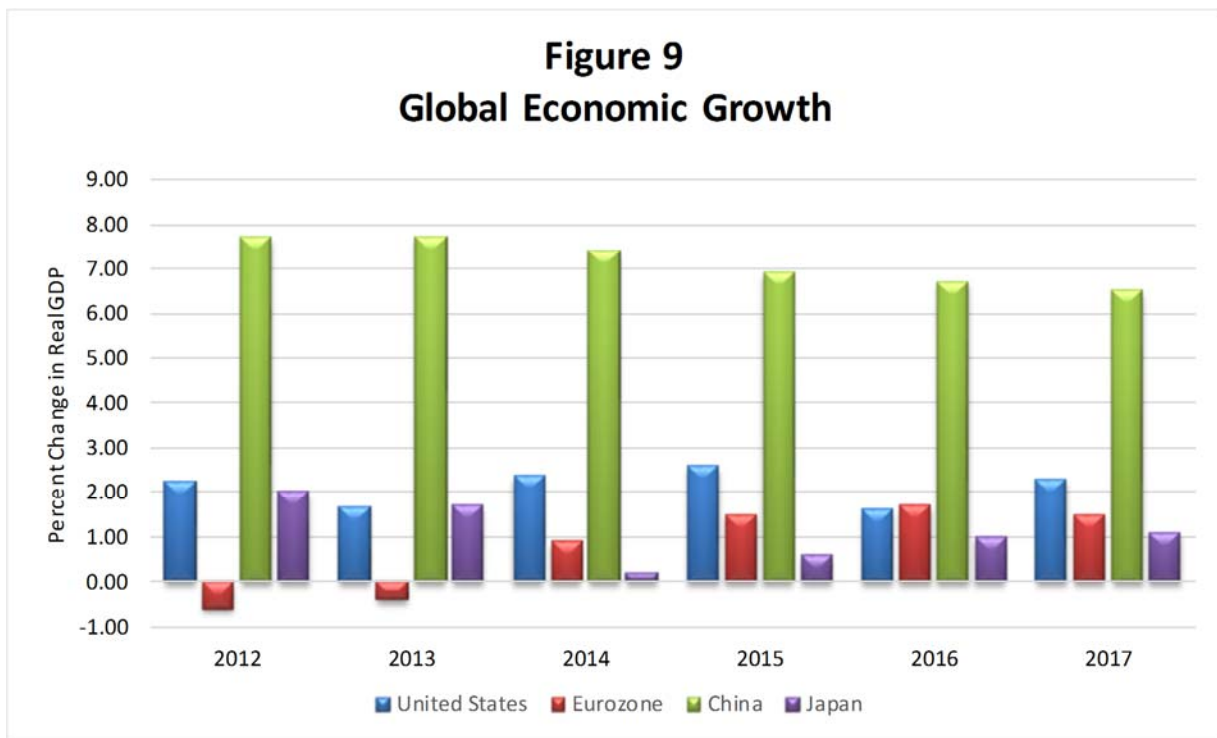
After a 4.2 percent gain in the S&P in the fourth quarter, the year ended with an overall year-over-year gain of 1.5 percent. While the election of Donald Trump was a boost to the stock market, it is uncertain how long the optimism surrounding his campaign promises to cut business regulations and taxes will last. Growth in the stock market is projected to continue into 2017, although not at the same level as the fourth quarter of 2016, the S&P is projected to increase by 8.1 percent year-over-year.

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 the value of the in dollar comparison to other currencies, but with the strengths or weaknesses of other national economies, which primarily affects the amount of imports and exports into and out of the United States.

As shown in Figure 9, 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 was relatively low, which allowed European countries to increase their exports. In 2016, in order to stimulate the economy, the European Central Bank cut interest rates and implemented quantitative easing. These policies encouraged growth and their economy grew by 1.7 percent in 2016, slightly faster than the 1.5 percent growth in 2015.

In mid-2016, the United Kingdom's referendum to leave the Eurozone unexpectedly was approved, causing stock markets to collapse globally, in this unprecedented move. While this move created significant uncertainty, the effects on the markets were short lived and the effects on the Eurozone's growth was nonexistent.



After many years of strong economic growth in China, as expected, this growth has been slowing over the last few years, predominantly in the manufacturing sector. There was a large decline in China's exports in the first quarter of 2016, amplifying the decline in industrial output. This decline in exports made it very difficult for China to boost its economy; however, this decline did eventually stabilize, though any growth is unlikely due to continued unstable global demand. 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. However, growth in the service sector has helped China avoid an even larger slowdown, with overall economic growth of 6.7 percent in 2016 and a projected growth of 6.5 percent in 2017.

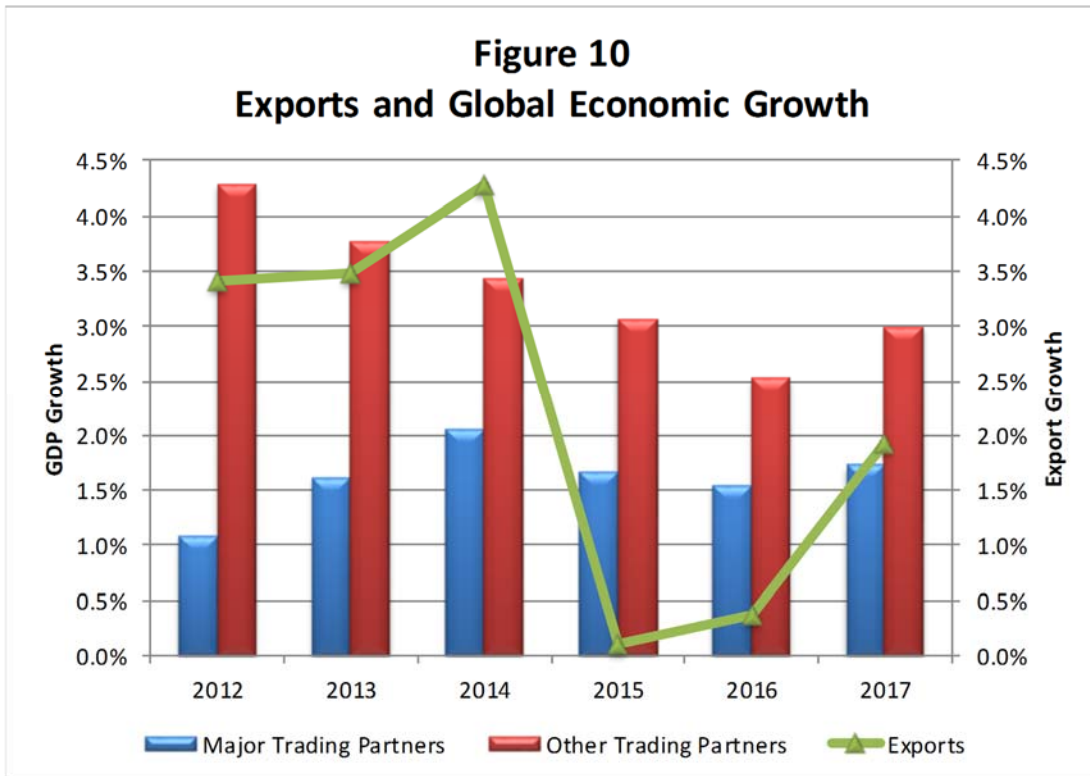
The strength of any nation's economy affects the demand for their domestic goods but also the demand for other countries' goods as well. As the supply of business inputs has become more globalized, a change in business spending and production in one country can impact business production in another.

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 and 2016 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, putting the petroleum deficit at an 18-year low in 2016. The projected growth in the global economy is expected to provide modest export growth in 2017,

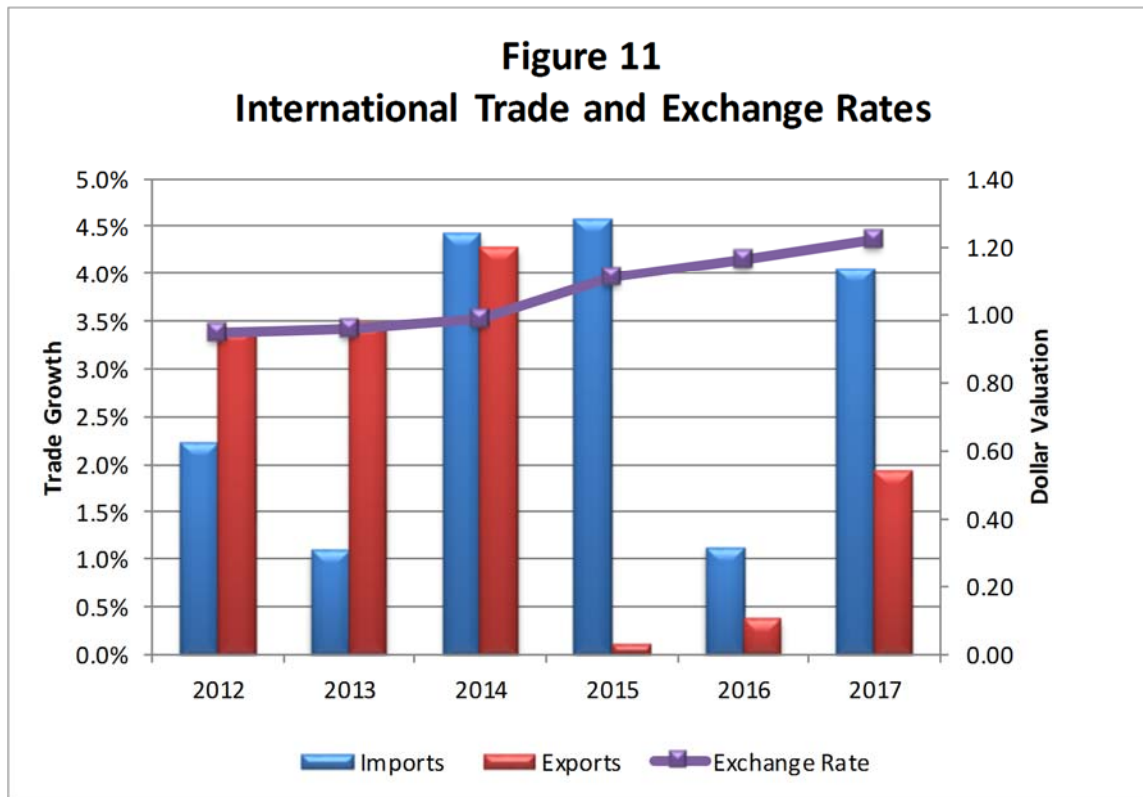
increasing 1.9 percent, largely supported by the continued strength of the export of services which was largely unaffected by the continuing appreciation of the dollar.

There is uncertainty surrounding President Trump’s rhetoric on trade policy, as he has threatened to leave the North American Free Trade Agreement (NAFTA), however this is unlikely as a trade war could have a significant negative impact on the United States’ economic growth over the next few years, as well as global economic conditions. If the United States does leave NAFTA, Mexico will likely go into a depression as the country relies heavily on trade with the United States, with over 80 percent of their exports coming to the United States.



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 2016, 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 2017 and will continue to increase as interest rates increase. The value of the dollar, as compared to major trading partners, will reach its peak in 2018, 5 percent above 2016, then begin to steadily decline as global growth increases. 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.

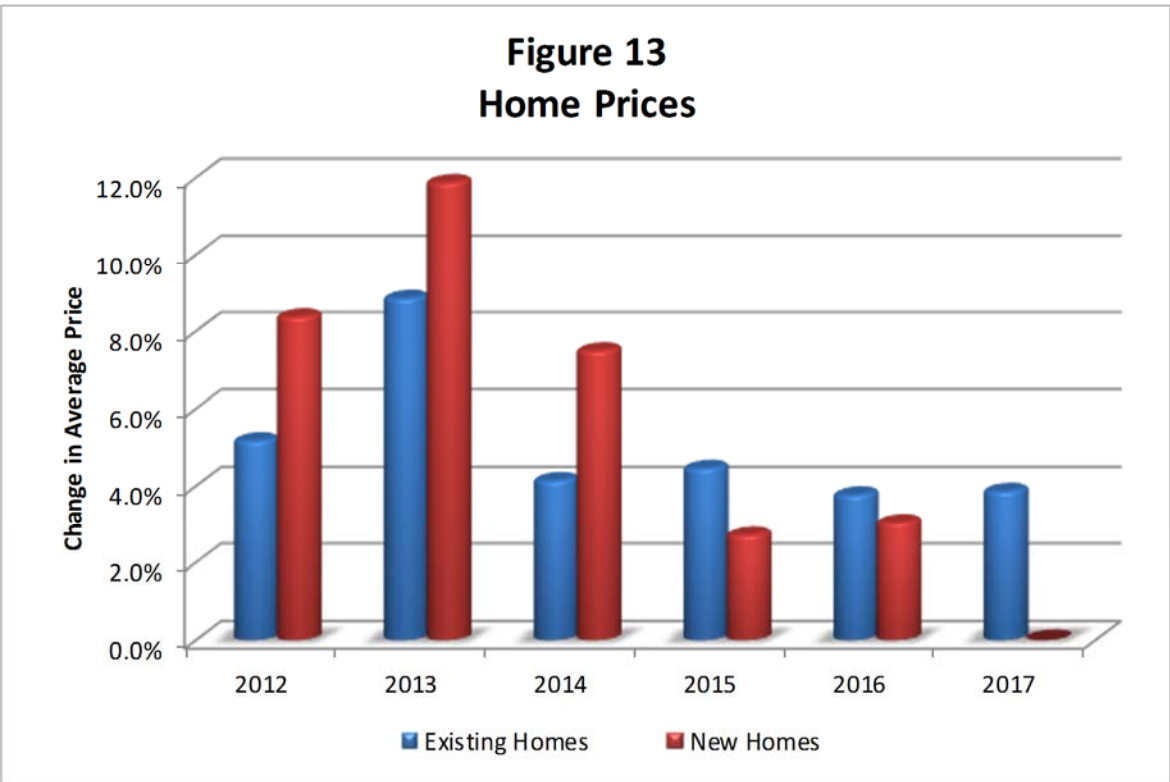


In the beginning of 2015, the FHA, Fannie Mae and Freddie Mac implemented programs targeting mostly first-time homeowners with good credit but small down payments, to increase their access to credit to make it more affordable to purchase a home. This relaxing of lending standards, in addition to the FHA cutting the annual mortgage insurance premium 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 year delivered the biggest gains in both housing starts and homes sales since 2007.

The number of mortgage applications surged, until new disclosure rules took effect in the beginning of October 2015. These rules increased 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.

In the beginning of 2016, the inventory of existing single-family homes was at the lowest level since 1995. However, real residential improvement spending increased by 11.5 percent over the last year, which will boost the price of these homes when they are sold. Even though the inventory for single-family homes has remained low throughout the year, the homes that are for sale are going quick and the prices are increasing fast due to the competition as the low inventory has not reduced demand. This low inventory of existing single-family homes on the other hand has caused the sale of new homes to flourish, with single-family housing starts at the highest level since 2007. Continued low interest rates has helped maintain affordability even as prices are rising.



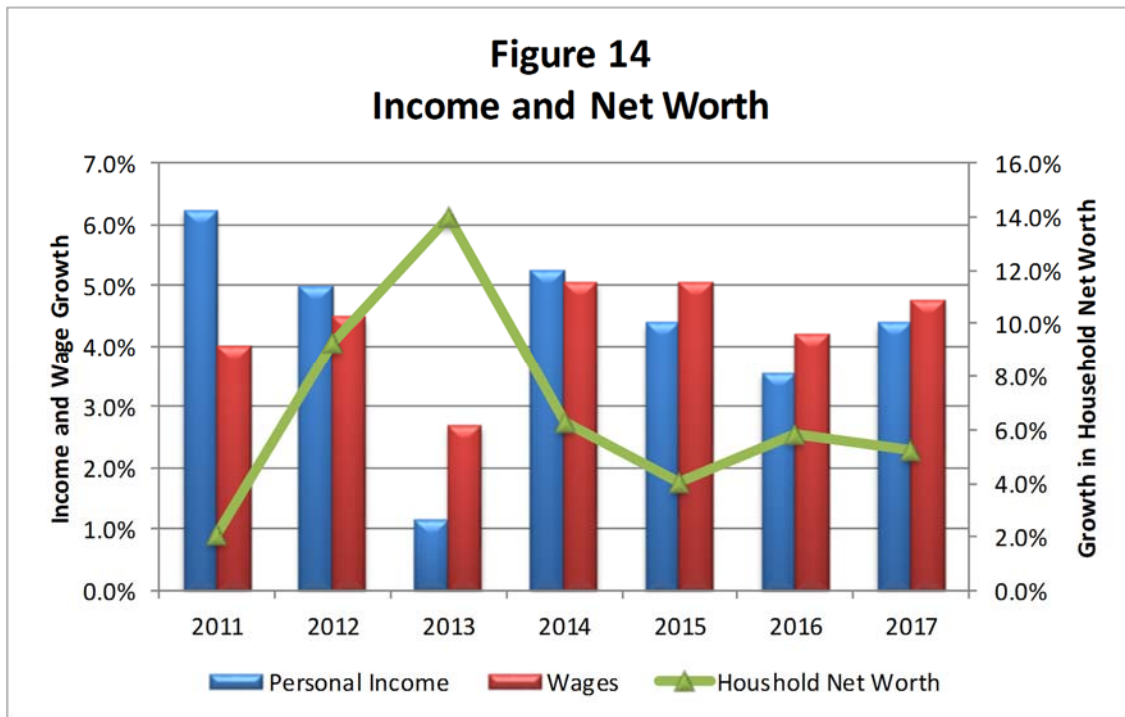
As a result of the Fed's rate hike in December, 30-year mortgage rates, which averaged 3.62 percent in 2016, are expected to average 4.26 percent in 2017 and 5.05 percent in 2018. However, with steady job growth predicted and continued strengthening of consumer confidence, strong growth in housing starts and new homes sales are projected to continue through 2017. Housing starts are projected to increase to 1.22 million units in 2017, up from 1.11 million units in 2016, growth of 5.2 percent. New homes sales are projected to increase to 650,000 units in 2017, up from 570,000 units in 2016, growth of 15.3 percent. Existing homes sales are projected to increase to 5.46 million units in 2017, up from 5.44 million units in 2016.

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.

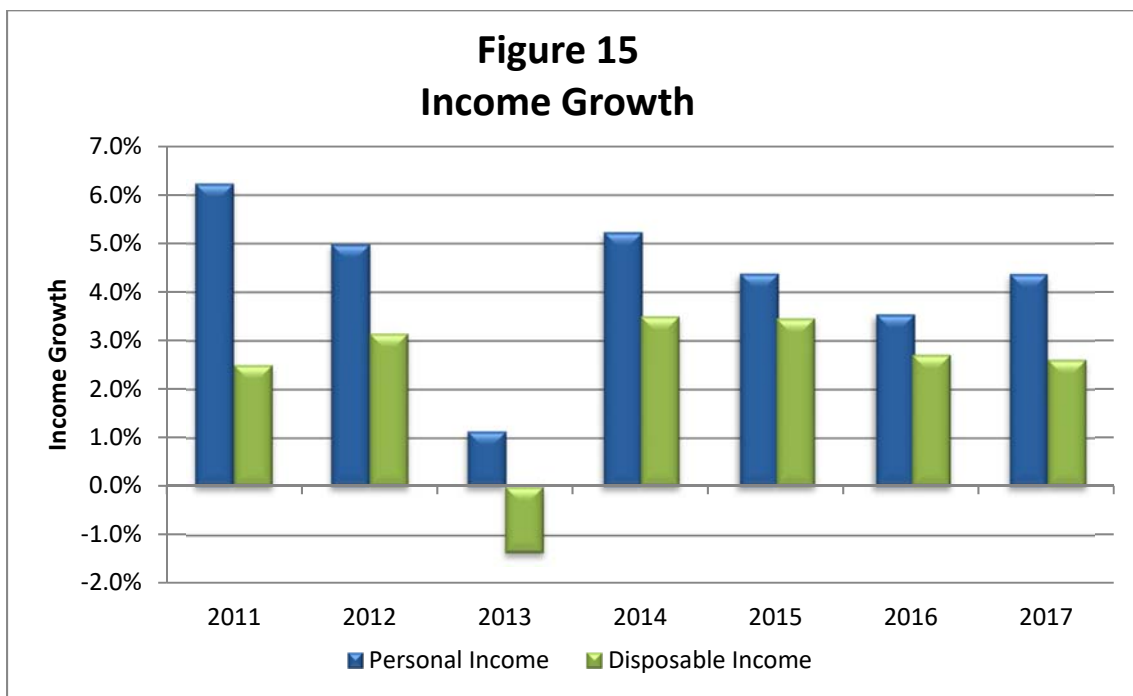


With the strengthening of the economy, the labor market continued to expand in 2014, increasing by an estimated 1.9 percent. With this increase in employment, wage growth accelerated by 5.1 percent, while personal income grew at a rate of 5.2 percent.

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 5.1 percent and 4.4 percent, respectively.

This growth continued into 2016, as the labor market continued to expand. The total number of new jobs created in 2016 was less than in 2015, leading to slower wage and personal income growth, growing at a rate of 4.2 percent and 3.5 percent, respectively.

The total number of jobs projected to be created in 2017 is slightly less than the number created in 2016, however, due to projections in increased productivity, wage and personal income are projected to accelerate, growing at a rate of 4.8 percent and 4.4 percent, respectively. In addition, the continued growth in the markets and the expected infrastructure spending are factors increasing personal income.



Personal income, also known as a person’s gross income, is the total amount of wages and property income received by the consumer. However, the actual amount the consumer has available to spend in the economy is his disposable income – his personal income less tax payments. Due to the temporary nature of tax benefits since 2010, the amount of the consumer’s disposable income has fluctuated. As shown in Figure 15, the growth in disposable income closely mirrored personal income growth in 2015 and 2016. 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.

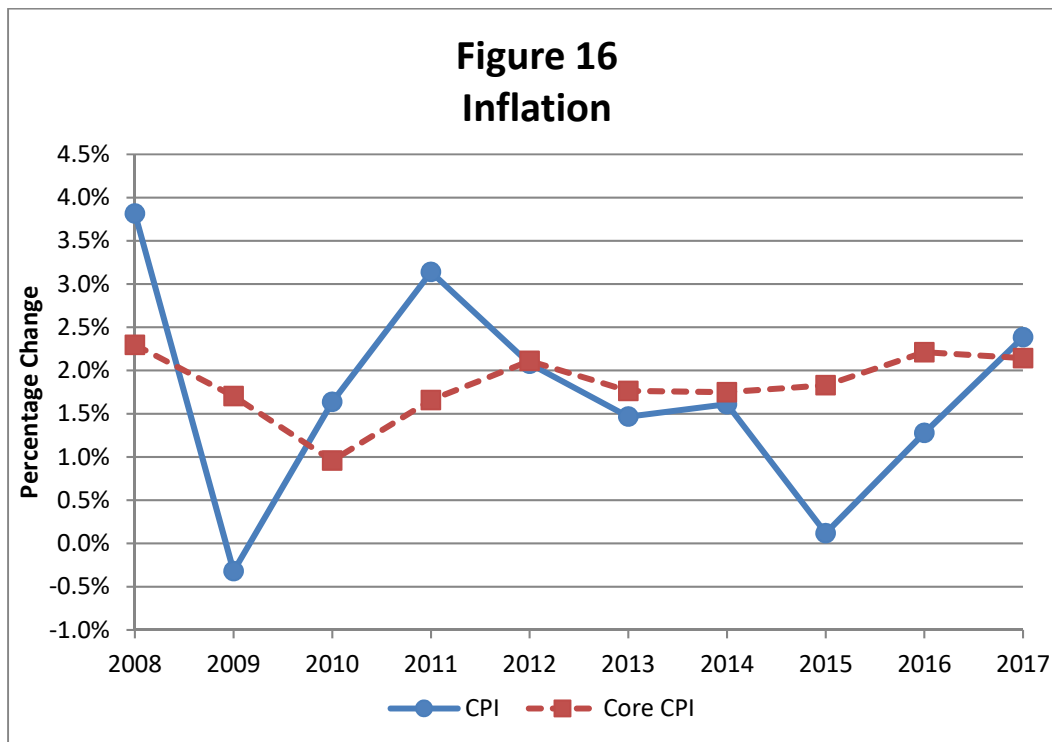
The emergency unemployment benefits and the payroll tax cuts expired at the end of 2013, but the offsetting positive effect of the huge drop in oil prices lead to disposable income growth in 2014. As a result, disposable income grew by 3.5 percent as compared to personal income growth of 5.2 percent.

Personal income and disposable income growth continued in 2016, growing at a rate of 3.5 percent and 2.7 percent, respectively, due to continued wage growth. Growth in personal income was hampered by weakness in the stock market, but was partially offset by increases in home equity, as the housing market remained strong.

This growth in personal income will continue into 2017 due to continued strong wage growth, growing at a projected rate of 4.4 percent. The strong growth in the market is helping to fuel this income growth, as is continued low oil prices and rising employment. While disposable income is projected to increase by a rate of 2.6 percent, there is a lot of uncertainty regarding the timing and scope of President Trumps proposed tax cuts, which could increase disposable income further.

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 which tends to be very volatile, is generally a better indicator of long-term price changes.



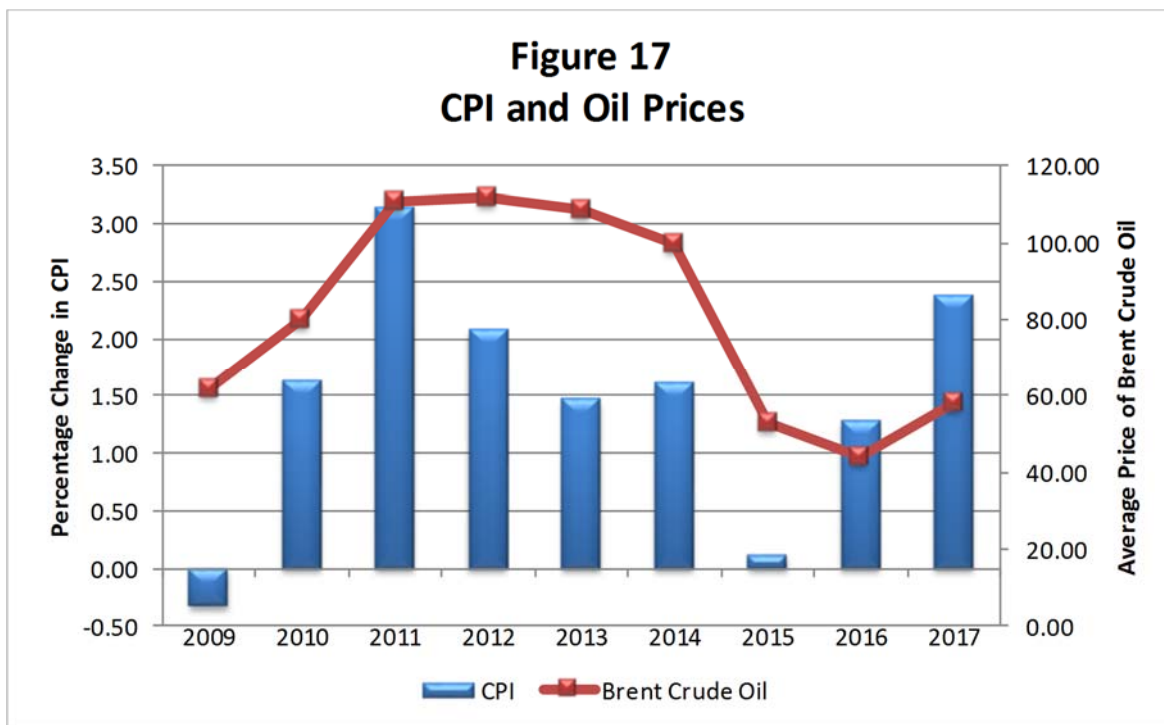
During the global recession in 2009, there was a period of deflation, as shown in Figure 16. However, core inflation decreased but remained positive during the same time period. This difference between the two indices was due to a large decrease in oil prices.

Inflation remained relatively low in 2016, increasing 1.3 percent from the prior year, in addition to the continued low price of oil; the strengthening dollar has restrained inflation by keeping the price of imported goods low. The dollar ended 2016 at the highest level, as compared to our major trading partners, since 2002 and is expected to increase another 2.5 percent in 2017. While the price of oil and the appreciating dollar have been drags on inflation, as stated above, wages is a major factor influencing consumption. In 2016 there was tremendous growth in average hourly earnings, growing 2.9 percent over last year, the largest growth in wages since 2009.

Figure 17 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 though are expected to begin to slightly increase in 2017. 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.

While oil prices are expected to remain relatively low through 2017, we are not predicting another period of deflation. In November of 2016, OPEC and other major exporters of oil reached an agreement to limit the supply of oil by 1.8 million barrels a day, which will increase the price of oil and inflation as a result.

Oil prices fell from an average of \$99.8/barrel in 2014, to \$53.5/barrel in 2015, to \$44/barrel in 2016, and are projected to rise slightly to an average of \$54/barrel in 2017. 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, \$2.52 in 2015, and \$2.20 2016. In 2017, the average price of a gallon of gas is projected to be \$2.49.

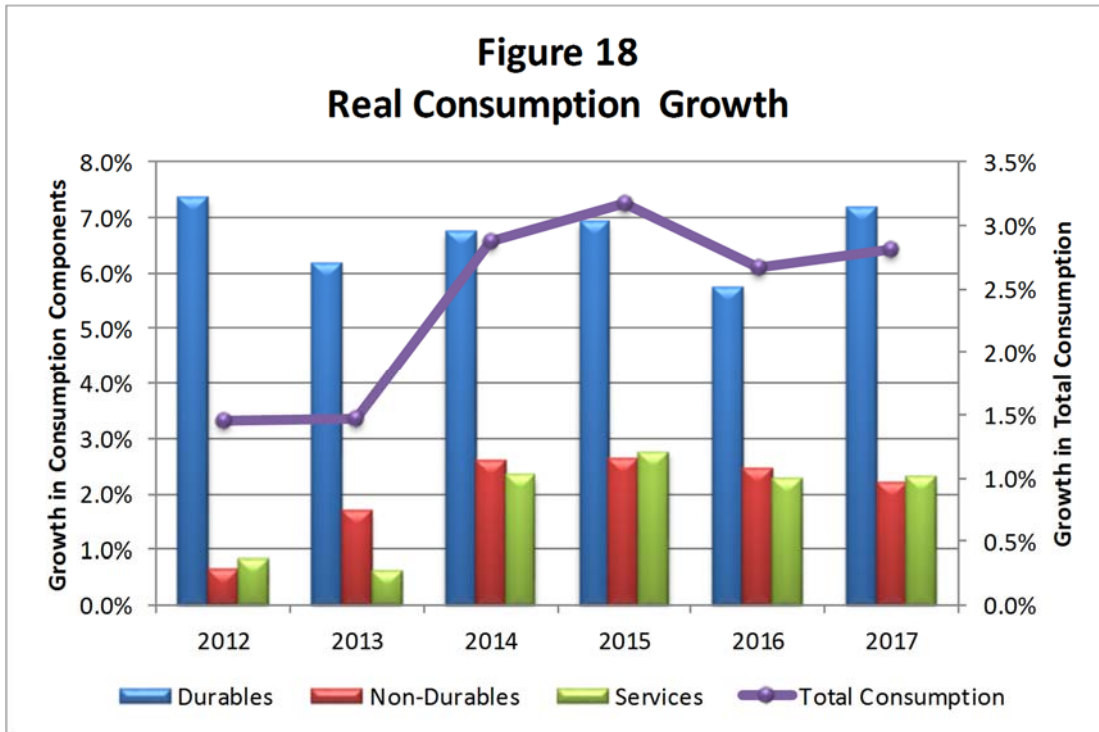


CONSUMPTION

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. Growth in these components as well as services drive consumption growth.

With strong employment growth, low oil prices, low interest rates, and rising disposable income, consumption grew in the first quarter of 2016 by a rate of 1.9 percent. However, this is slower than the average gain in 2015 of 3.1 percent. Weak stock market performance has caused many people to curtail spending, as spending did not keep pace with income growth, showing that the consumer's confidence has waned. This growth continued through the rest of the year, increasing 4.3 percent in the second quarter and 2.8 percent in the third quarter. This growth was partially bolstered by improvement in the stock market and by growth in back-to-school sales, which increased 3.9 percent, compared to last year's growth of 3.7 percent. The total growth for the year was 2.7 percent and is expected to uptick slightly in 2017, growing 2.8 percent.



Growth in the out-years is likely to be bolstered by increased consumer confidence due to tax cuts promised by the new presidential administration, assuming they are delivered. Consumer spending is projected to increase 2.8 percent in 2017 and 3.2 percent in 2018.

RISKS TO THE FORECAST

President Trump has created much uncertainty in the economy; however, right now it is affecting economic growth positively due to strong consumer and business confidence in anticipation of tax cuts, fiscal stimulus, and regulatory reform. Yet there is uncertainty regarding the timing and scope of President Trump’s proposed tax cuts which will effect when taxpayers realize capital gains and thus effects when the resulting tax liability will occur. Larger than anticipated tax cuts, fiscal stimulus, and regulatory reform could result in significantly higher consumer and business spending/investment.

If President Trump's rhetoric on trade policy is put into action and the United States leaves the North American Free Trade Agreement (NAFTA), a trade war could have a significant negative impact on the United States' economic growth over the next few years, as well as global economic conditions. In addition, the proposed tariffs on Chinese imports could cause a trade war with China significantly impact US exports.

A more bullish 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.

While the price of crude oil is projected to increase slightly during 2017, any actions on the part of OPEC to delay the production decrease, and therefore keep prices lower than anticipated would have a significant positive impact on consumers' discretionary income, keep inflation lower than anticipated, and continue to bolster economic growth.

New York State Economic Outlook

Calendar Year

(Dollar Figures in Billions of Dollars)

	2016	2017	2018	2019
Gross State Product	\$1,485	\$1,542	\$1,609	\$1,669
Percent Change	3.6%	3.9%	4.3%	3.7%
Real Gross State Product	\$1,275	\$1,295	\$1,323	\$1,346
Percent Change	1.6%	1.6%	2.2%	1.7%
Nonagricultural Employment, Thousands	9,365	9,447	9,520	9,567
Percent Change	1.2%	0.9%	0.8%	0.5%
Unemployment Rate	4.9%	4.8%	4.3%	4.1%
Personal Income	\$1,199	\$1,243	\$1,298	\$1,358
Percent Change	3.2%	3.7%	4.5%	4.6%
Wages and Salaries	\$651	\$676	\$708	\$741
Percent Change	3.8%	3.8%	4.8%	4.7%
Retail Sales	\$297	\$306	\$319	\$333
Percent Change	2.9%	2.9%	4.3%	4.4%
Housing Starts, Thousands	36.3	33.5	31.3	30.6

Source: IHS Global Insight US Macroeconomic Forecast: February 2017

New York State Economic Outlook

State Fiscal Year

(Dollar Figures in Billions of Dollars)

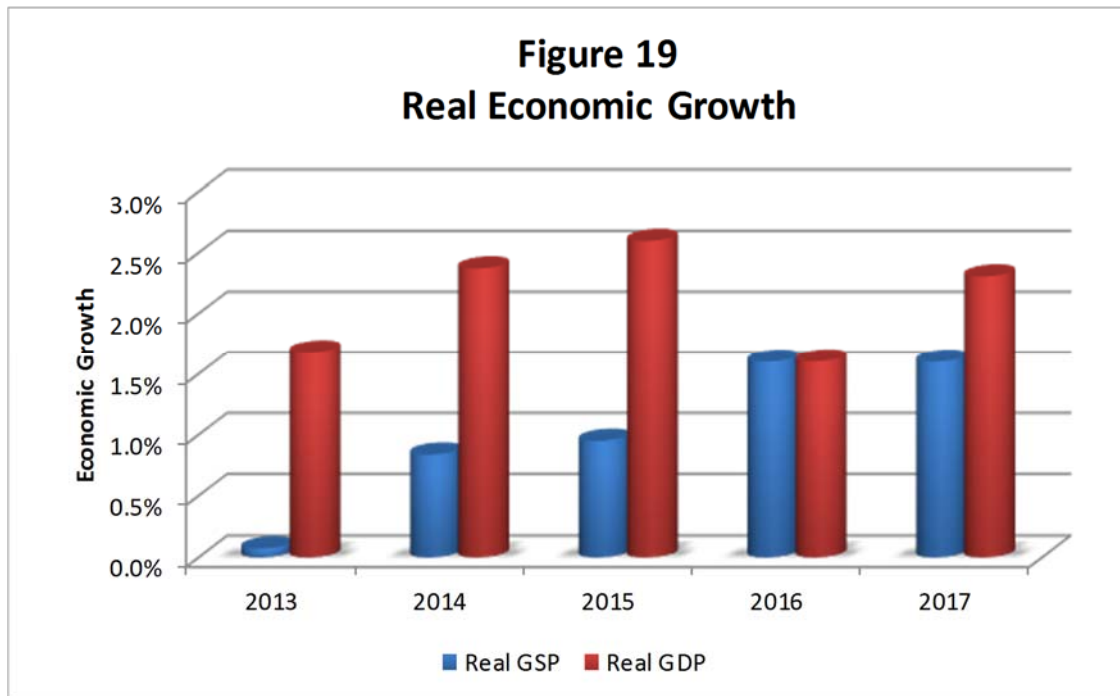
	2016	2017	2018	2019
Gross State Product	\$1,447	\$1,498	\$1,559	\$1,624
Percent Change	3.7%	3.5%	4.1%	4.2%
Real Gross State Product	\$1,260	\$1,279	\$1,302	\$1,330
Percent Change	1.1%	1.5%	1.8%	2.1%
Nonagricultural Employment, Thousands	9,282	9,391	9,466	9,535
Percent Change	1.6%	1.2%	0.8%	0.7%
Unemployment Rate	5.1%	4.9%	4.6%	4.2%
Personal Income	\$1,173	\$1,209	\$1,256	\$1,313
Percent Change	3.9%	3.1%	3.9%	4.6%
Wages and Salaries	\$634	\$657	\$683	\$717
Percent Change	4.6%	3.8%	3.9%	4.9%
Retail Sales	\$291	\$300	\$308	\$322
Percent Change	2.2%	3.2%	2.8%	4.6%
Housing Starts, Thousands	64.7	33.4	32.6	31.0

Source: IHS Global Insight US Macroeconomic Forecast: February 2017

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 real GSP increased by 0.1 percent as compared to a 1.7 percent growth in real GDP.

Economic growth improved in 2014, due in large part to strong growth in personal income, with economic growth in New York increasing by a rate of 0.8 percent in 2014. This growth was less than the 2.4 percent growth in real GDP, due to slower growth in the financial markets and employment growing at less than the national rate.

This growth continued into 2015, with real GSP increasing by a rate of 0.9 percent. This growth is still slower than national economic growth, which increased by a rate of 2.6 percent. This can partially be explained by the weakness in the financial sector.

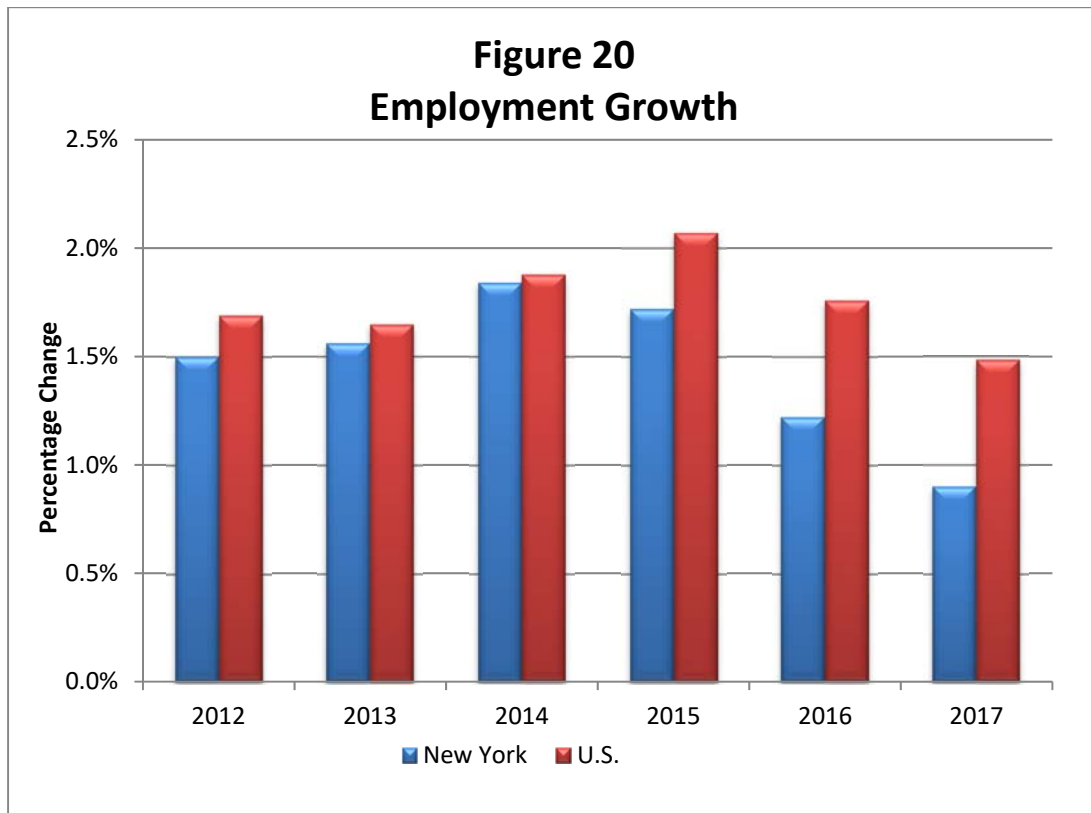
Growth continued in 2016, increasing by a rate of 1.6 percent, due to strong wage growth, continued employment and housing growth. This was the first time since 2012, that economic growth in New York outpaced national economic growth. Growth at the national level has been hindered by declining inventories and weak exports.

While growth is projected to continue at a rate of 1.6 percent, national economic growth is once again projected to outpace New York, growing by a rate of 2.3 percent. This is partially due to the widening gap between the size of the labor force in New York and the nation.

LABOR MARKET

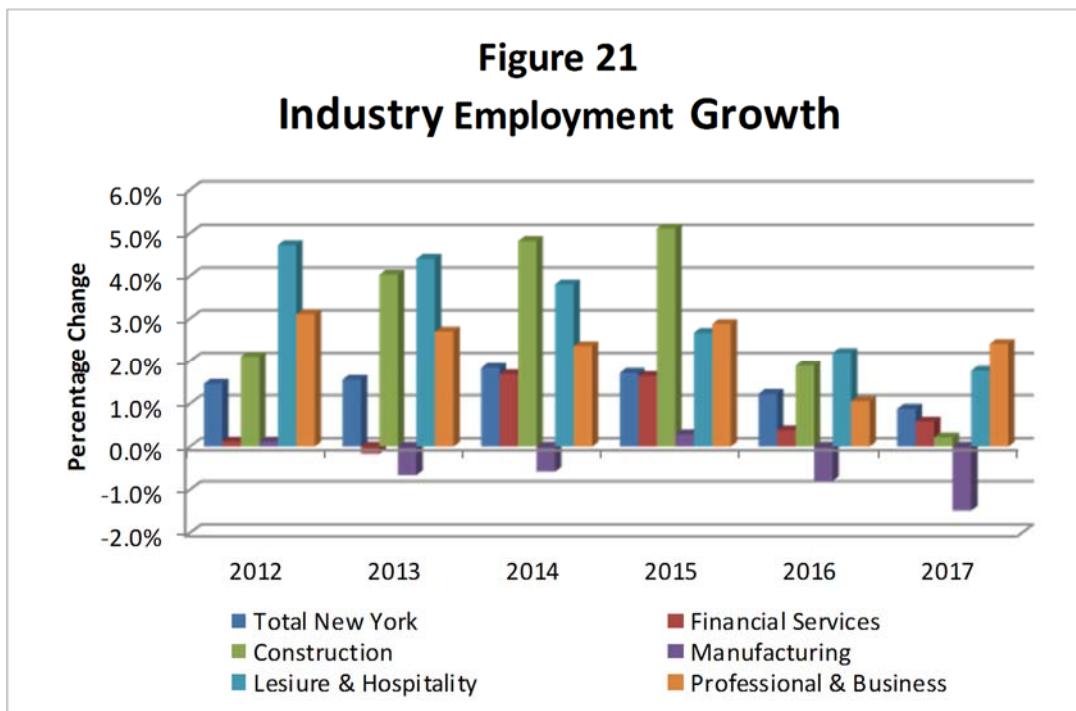
Since 2012, job growth in New York has been outpaced by national job growth. In 2012 national employment increased by 1.7 percent whereas job growth in New York remained relatively flat at 1.5 percent. In 2013, national and New York's job growth continued at approximately the same pace. This trend is 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 and while New York employment increased by a rate of 1.8 percent in 2014. In 2015 national employment increased by a rate of 2.1 percent, while New York's employment increased by a rate of 1.7 percent, slightly weaker growth than in 2014. This gap between national and New York job growth grew larger in 2016, with national employment growing by a rate of 1.8 percent and New York employment growing by a rate of 1.2 percent.



This same trend is projected to continue in 2017, with national job growth outpacing New York job growth. Yet job growth in both New York and at the national level are growing at slower rates than the last few years. National employment is projected to increase by 1.5 percent, while New York's employment is projected to decelerate, increasing by 0.9

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. Over the last year, New York's population grew by 0.2 percent compared the Nation's growth of 0.8 percent.



As a result of the economic downturn, many Wall Street jobs were lost and 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 1.7 percent and grew again in 2015 by 1.6 percent.

The financial services industry is continuing its slow employment gains since the financial crisis, with employment increasing by 0.4 percent in 2016 and a projected increase of 0.6 percent in 2017. Employment in financial firms may never return to the levels prior to the financial crisis as the industry has become more efficient and are relying more on the automation of services.

The other industry that was significantly impacted by the economic downturn was the construction industry. After the housing market recovered in 2011, the robust growth in multi-family housing starts resulted in annual gains in construction jobs through 2016. Growth in this industry is expected to continue into 2017, albeit at a muted growth rate, projected at 0.2 percent. This is the result of the fact that a large number of multi-family housing projects which began construction in 2015 are nearing completion.

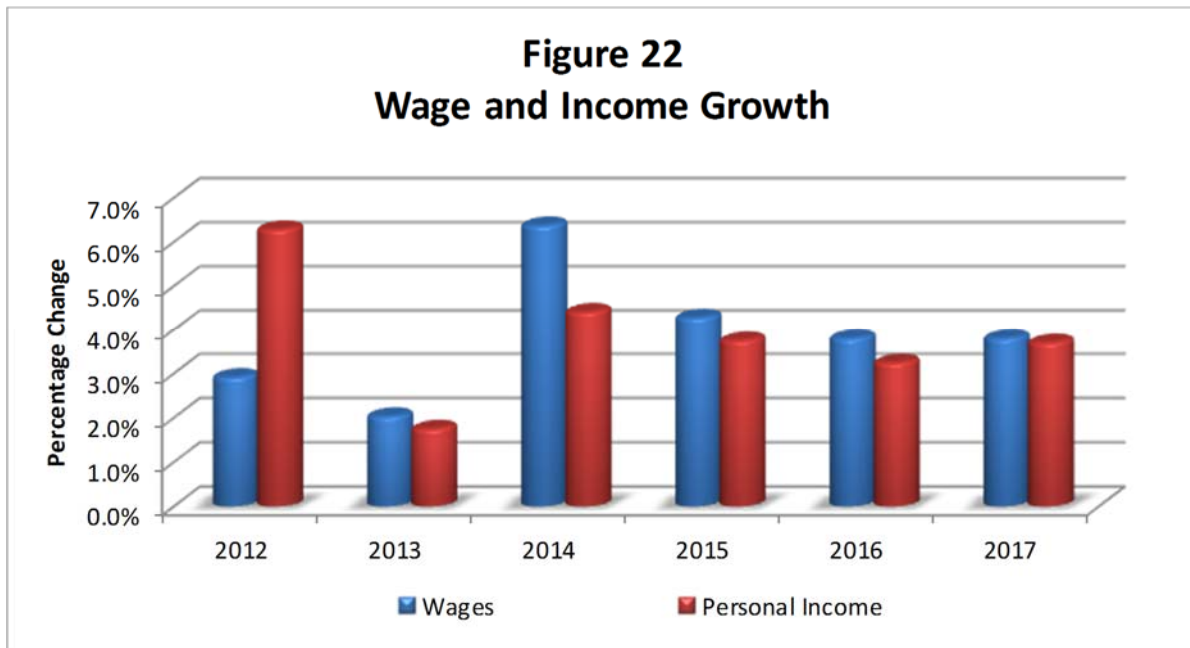
Employment in the manufacturing sector is not only influenced by the demand for goods domestically but, the demand for goods globally. The strength of the global economy as well as the value of the dollar as compared to other currencies impacts the manufacturing sector.

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 has strengthened, manufacturing employment in New York has not, declining for three out of the last five years, in 2012 and 2015, growing at a rate of 0.1 percent and 0.3 percent, respectively. Even with stronger economic growth, especially at the national level, manufacturing employment continued to decrease in 2016, by a rate of 0.8 percent. The outlook is not much better for 2017 as employment is projected to again decrease by 1.5 percent. Nationwide, manufacturing employment decreased last year due to the appreciating dollar which has been reducing the demand for US goods. However, manufacturing employment is projected to increase nationally next year, albeit slowly, partially due to the expected federal fiscal stimulus.

Leisure and hospitality has been experiencing solid and continuing growth over the last few years, increasing employment by 2.7 percent in 2015. Growth in this industry slowed in 2016, increasing 2.2 percent and is projected to increase at a rate of 1.8 percent in 2017.

WAGES AND INCOME



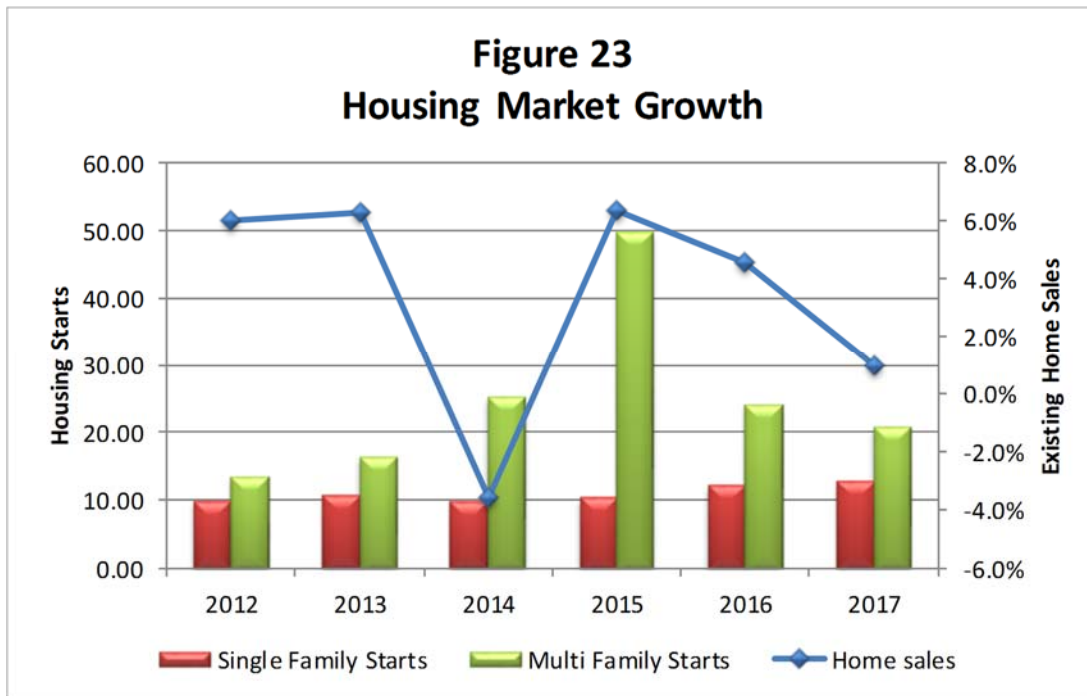
Prior to 2011, the payment of year-end bonuses by the financial services industry played an important role in New York's wage and income growth. Due to the timing of the payment of Wall Street bonuses, usually paid in the first quarter of the succeeding year, wage growth in New York was influenced by 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. However, this change in bonus payments also had the positive impact of reducing wage and income volatility.

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 1.8 percent, respectively, from a wage growth of 2.9 percent and a personal income growth of 6.3 percent in 2012.

Although employment growth was only 1.8 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. The growth rate of both wages, 4.3 percent, and personal income, 3.8 percent, returned to a more moderate rate in 2015.

Growth in personal income tends to coincide closely with wage growth unless there is a shock that influences non-wage income. Personal income growth is estimated at a rate of 3.2 percent in 2016 compared to the wage growth of 3.8 percent. Growth in personal income is projected to be 3.7 percent in 2017 and wages are projected to grow by 3.8 percent. The growth in wages for both 2016 and 2017 is slightly slower than the growth in wages for 2015 which is partially attributable to the continued decline in the year-end bonuses by the financial services industry.

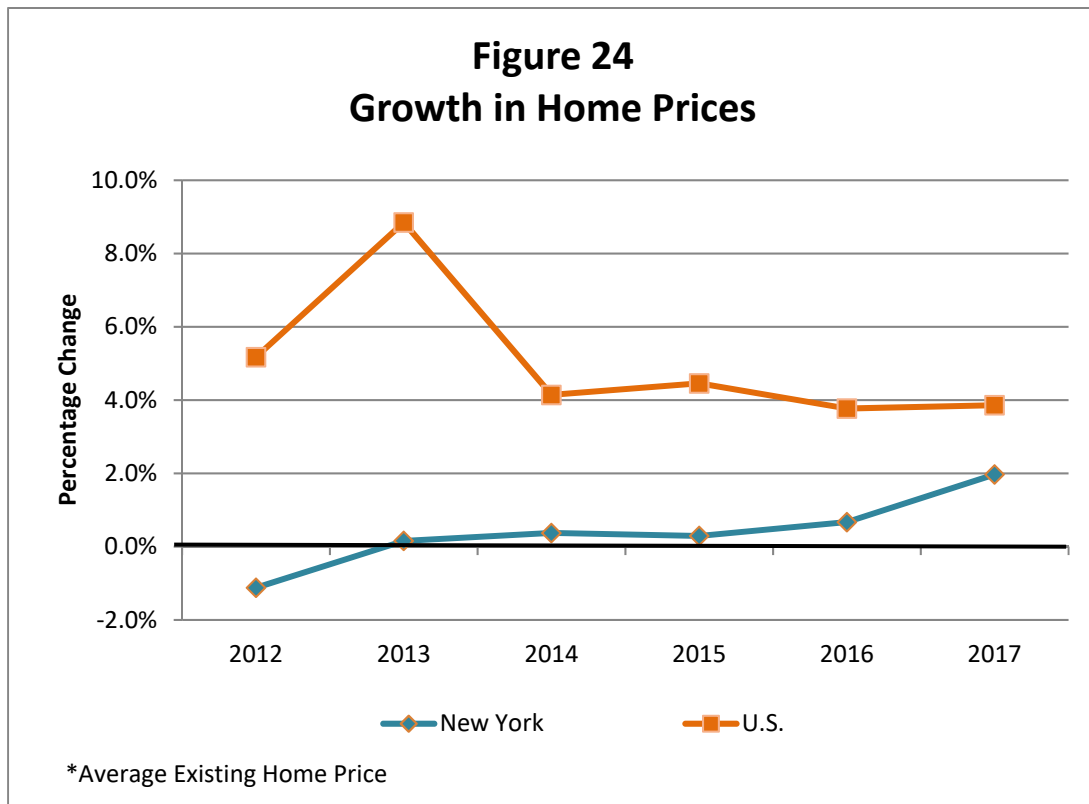
HOUSING MARKET



Since the economic downturn, demand for housing has increased, but that demand was focused primarily in the rental market. Despite low mortgage rates, New York residents have been opting to rent rather than buy. As a result, multi-family housing starts have increased by nearly 270 percent from 2012 to 2015, while single family housing by nearly 5 percent over the same time period.

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 reverted to 2014 levels, with 24,000 starts. Multi-family starts will continue to be at more historic growth of 21,000 starts in 2017.

The improving economy in 2012 allowed growth in both existing home sales and single family housing starts in New York. The overall growth in single family homes sales has increased steadily over the past few years and nearly 13,000 starts are projected for 2017.



In 2012 and 2013, while national home prices were experiencing strong growth, home prices in New York declined 1.1 percent in 2012 and were essentially flat in 2013, growing 0.2 percent. This trend has continued through 2016, with home prices increasing modestly each year, for a high of 0.7 percent in 2016. This trend lagged significantly behind the growth rates for the nation as a whole during these years, with a high of 4.5 percent in 2015. However, during the housing bubble, New York home prices did not over

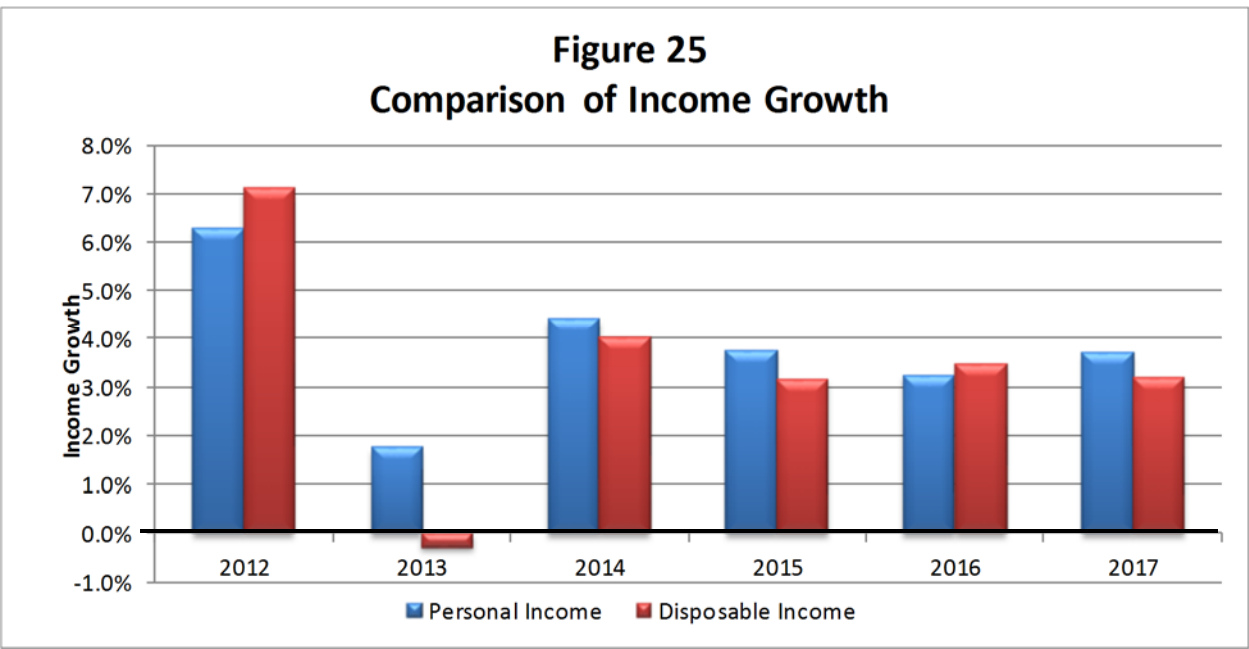
appreciate like in other parts of the nation. As a result, after the bubble burst, home prices in New York did not have as steep a decline as homes in other parts of the nation and have stayed relatively stable.

Growth in New York's home prices are projected to pick up in 2017, increasing by a rate of 2 percent, again lagging behind the projected national home price growth of 3.9 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 real 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.

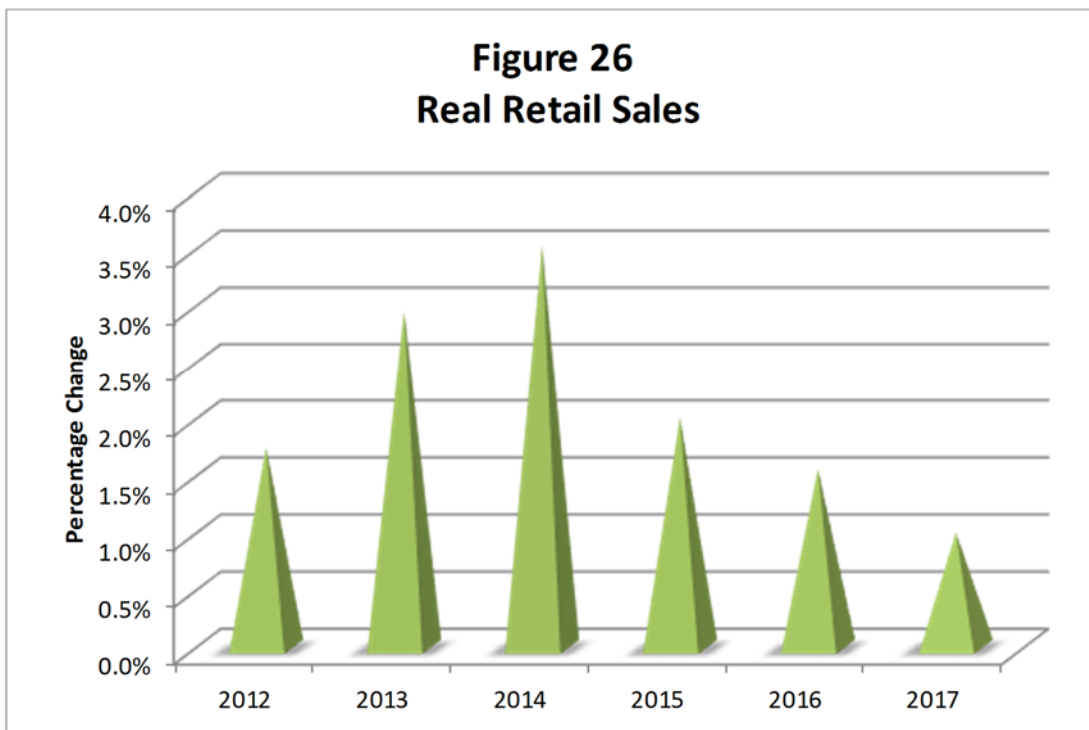


As shown in Figure 25, in 2013, disposable income growth lagged behind personal income growth due to the expiration of the temporary payroll tax reduction at the end of 2012. The expiration of this tax reduction not only impacted New York disposable income, but the entire nation. However, New York personal incomes were able to grow at a faster pace in both 2012 and 2013 compared to the nation due to the New York middle income personal income tax rates enacted at the end of 2011, which took effect in 2012.

As the price of oil has declined, consumers are spending less on gasoline resulting in bolstered disposable income growth in 2014, growing at a rate of 4 percent.

Personal income and disposable income growth continued in 2015 at a rate of 3.8 percent and 3.2 percent, respectively, due to continued wage growth. This growth has continued in 2016, albeit at a slower pace of 3.2 percent for personal income and slightly faster pace for

disposable income, growing at rate of 3.4 percent. This slowing of personal income growth is due to weakness in the stock market. However, personal income is projected to increase at a faster rate in 2017, growing by 3.7 percent, as the stock market rebounds. Disposable income will continue to grow at a rate of 3.4 percent as it is boosted by continued low oil and gas prices.



The changes in personal income and disposable income have an impact on consumer's spending behavior. While not a perfect proxy for consumption at the national level, the change in the amount of real retail sales in New York reflects consumer's spending behavior.

The significant slowdown in wages and personal income in 2012 contributed to slow growth in real retail sales. With the slowdown in the global economy and the appreciation

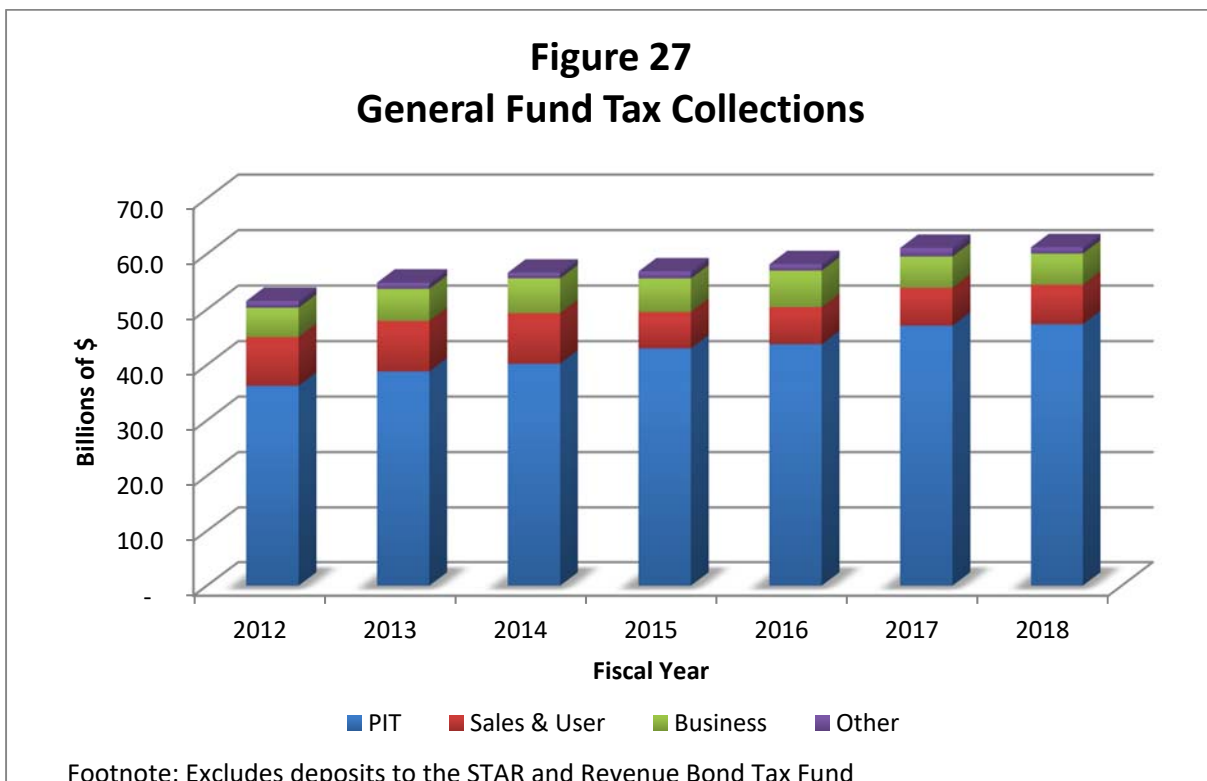
of the dollar, tourism also became a drag on real retail sales. As a result, the growth in real retail sales slowed to 1.7 percent. However, in 2013, even with the impact of the expiration of the payroll tax reduction and the imposition of the new Medicare taxes and disposable income growth declining, real retail sales grew by 2.9 percent.

With strong income in 2014 as well as stronger economic growth, real retail sales grew by 3.5 percent, stronger than the 2.9 percent consumption growth at the national level. In 2015, real retail sales were weaker than consumption growth at the national level increasing by 2 percent compared to growth at the national level of 3.2 percent. While consumers are saving money from the low gasoline prices, it was not translating into increased real retail sales.

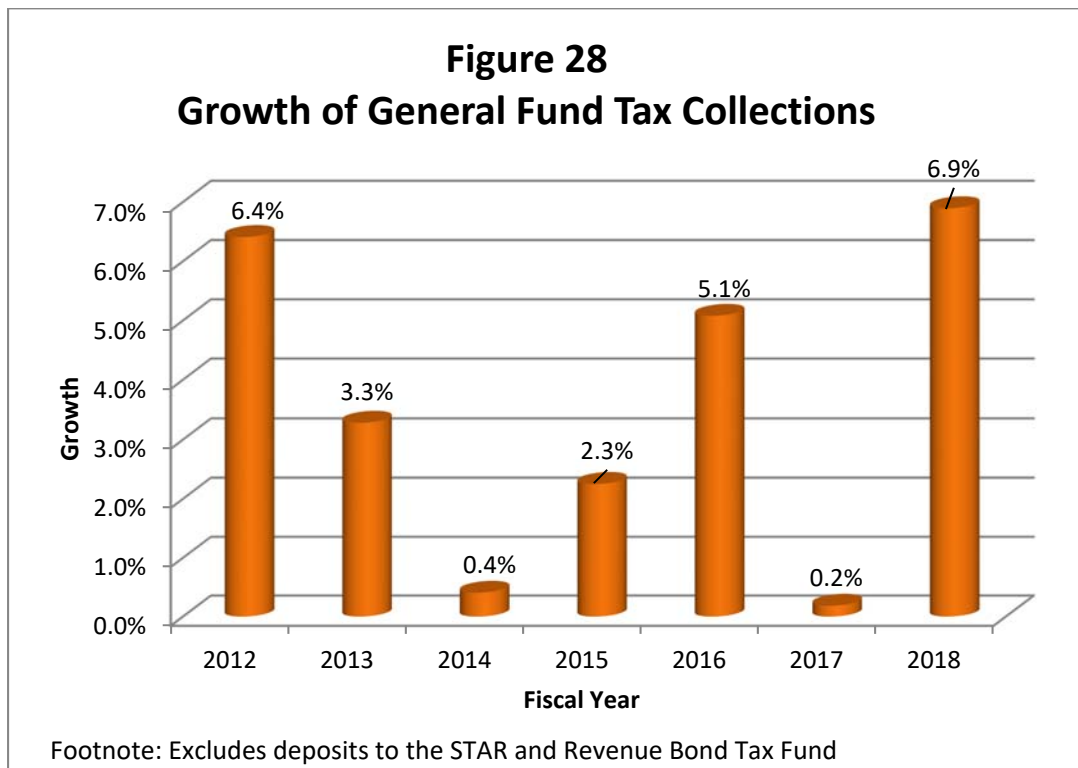
Similar to consumption growth at the national level, in 2016 low oil prices, low interest rates, and rising disposable incomes have contributed to growing real retail sales, albeit slower than consumption growth at the national level, with real retail sales growing 1.6 percent. This difference is partially due to the slower employment growth in New York compared to the national level. This same trend will continue into 2017 with real retail sales dragging behind the growth in consumption at the national level, growing at a rate of 0.9 percent compared to a rate of 2.8 percent nationally.

Revenue Outlook

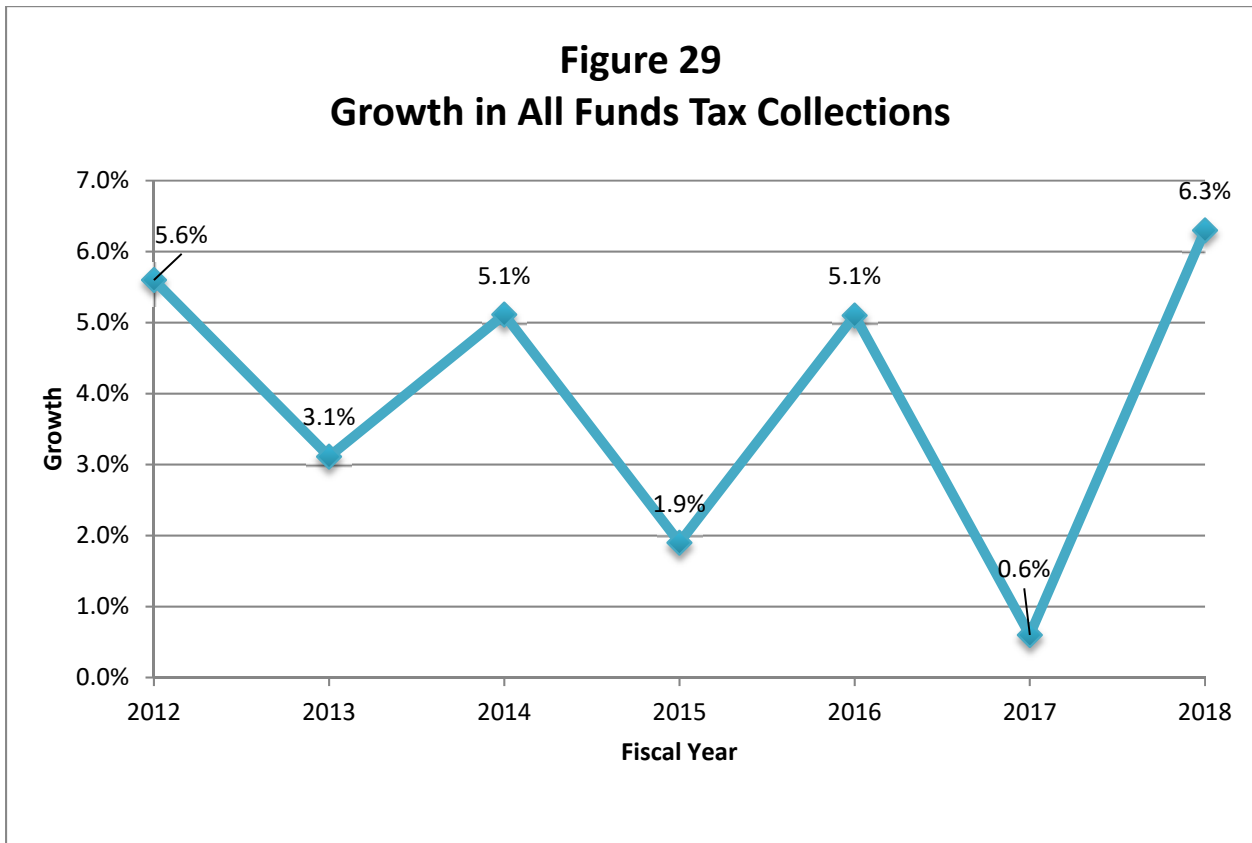
The New York State Senate Finance Committee generates its revenue estimates using IHS Global Insight’s forecasts of national and state economic growth. The economic data is utilized in the New York State Tax Revenue and Economy Model (NYSTREM) – an econometric model developed and operated by IHS Global 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 2017, excluding the deposits to the STAR and Revenue Bond Tax Fund will increase by 0.2 percent to \$61.2 billion. All Funds collections are expected to increase by 0.6 percent to \$75.1 billion in FY 2017. This increase is driven by personal income tax receipts which saw growth in withholding, a result of increased wages, and growth in sales and use taxes due to increased consumer spending. This growth was partially offset by a decline in estimated payments and by a reduction in corporate franchise tax receipts as a result of the business income tax rate reduction effective for the 2016 tax year.



In FY 2018, the Senate Finance Committee projects that General Fund tax collections, excluding deposits to the STAR and Revenue Bond Tax Fund, will increase by 6.9 percent to \$65.4 billion. All Funds collections will increase by 6.3 percent to \$79.9 billion. This increase reflects continued projected growth in the economy and strong growth in estimated tax payments because of strong projected market performance and the expectation that taxpayers will start to realize higher levels of capital gains at the end of the fiscal year when personal income tax cuts at the national level take effect.



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 2017, total General Fund personal income tax collections, net of \$15.0 billion in reserve transactions, are estimated to increase by 0.5 percent to \$47.3 billion. This increase reflects growth in withholding, a result of wage and employment growth. Total receipts were bolstered by a decline in refunds due to a decrease in the administrative cap, partially offset by an increase in advance credit payments due to the Property Tax Relief Credit and the STAR PIT Credit. Beginning in tax year 2016, the benefits of the STAR Program will be given to new homeowners through a tax credit that is pre-paid in the fall, instead of as an exemption on taxpayer's property tax bills.

In FY 2018, total personal income tax collections, net of \$15.3 billion in deposits to the reserve funds, are projected to increase by 7.6 percent to \$50.9 billion. This increase is a result of continued wage and personal income growth, projected in 2017, partially offset by an increase in refunds as a result of the decrease in the administrative cap in FY 2017, which will increase the amount of prior year refunds for FY 2018.

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 2.6 percent to \$37.5 billion, resulting from the projected increase in employment and wage growth; and an additional payroll day.

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. However, 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 2016 to the current fiscal year. Even without growth in bonus payments, increased wages resulted in the continued growth in collections. Withholding collections in FY 2018 are projected to increase by 5.2 percent to \$39.5 billion from the projected increase in employment and wage growth.

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

Estimated tax payments are also made when a taxpayer requests an extension for the submission of 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 decrease by 7.1 percent to \$15.0 billion. This reflects a sharp decrease in the amount of estimated payments paid with taxpayers' requests for extensions to file their annual tax returns. The extensions for the 2015 tax year are particularly low due to taxpayers overpaying, resulting in lower settlement payments being due.

In FY 2018, estimated payments are projected to increase by 14.3 percent, to \$17.1 billion. This increase primarily reflects strong non-wage income growth and the expectation that taxpayers will start to realize higher levels of capital gains at the end of the fiscal year when personal income tax cuts at the national level take effect.

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

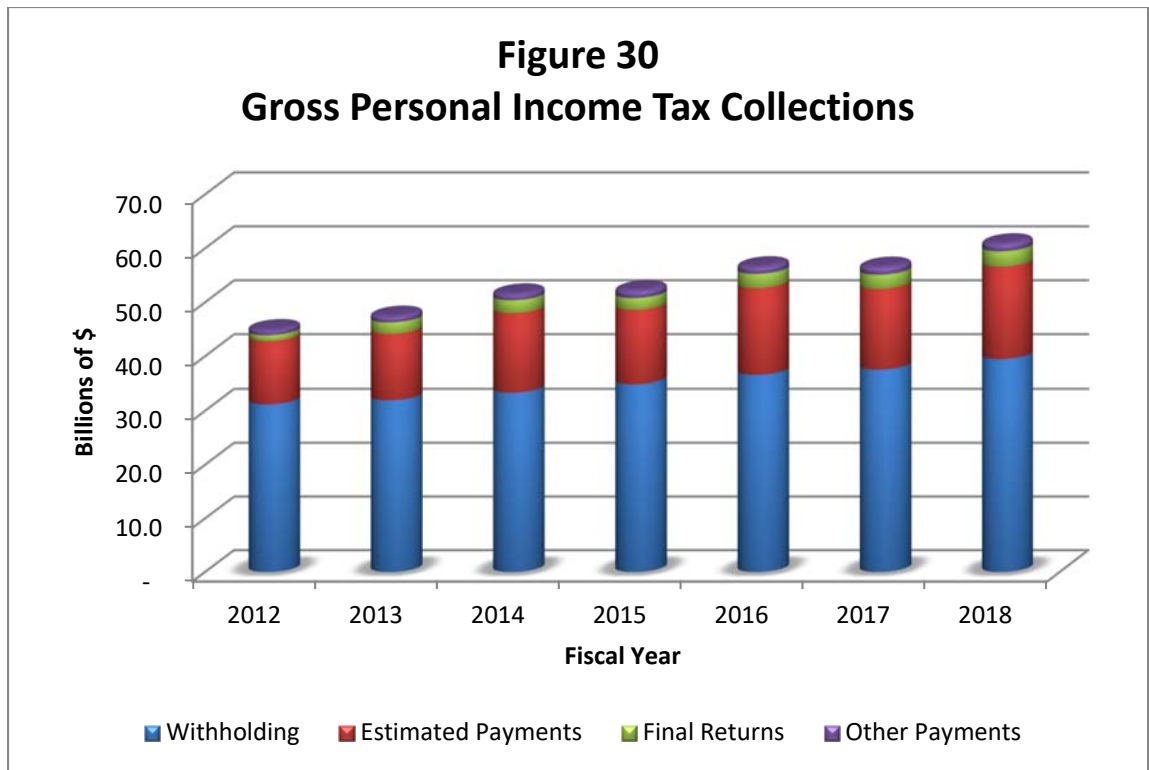
preceding calendar year. As such, additional tax liability due or refunds are considered the “settlement” of a taxpayer’s personal income tax. Payments made through the filing of annual returns are estimated to increase by 0.1 percent in FY 2017. Since final return payments are based on a taxpayer’s income for the previous calendar year, this year-to-year increase is primarily due to the settlements from 2015 returns. In FY 2018, collections from final returns are projected to increase by 8.7 percent, to \$2.9 billion. This is a result of the increased personal income growth in 2017.

The amount of refunds to be paid to taxpayers is estimated to be 3.3 percent lower in FY 2017. The decrease in refunds is primarily due to the lower 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 \$1.75 billion in FY 2017. In the current fiscal year, the amount of refunds decreased by \$319 million, to \$9.2 billion. This decrease is partially attributed to the decrease in the current year refund cap from \$2.55 billion in FY 2016 to \$1.75 billion and decrease in prior-year refunds. These decreases to refunds are partially offset by an increase in advance credit payments due to the Property Tax Relief Credit and the STAR PIT Credit. Beginning in tax year 2016, the benefits of the STAR Program will be given to new homeowners through

a tax credit that is pre-paid in the fall, instead of as an exemption on taxpayer's property tax bills.

For FY 2018, refunds are projected to increase by \$737 million, to \$10 billion. The increase in refunds is a result of the decrease in the administrative cap from FY 2016 to FY 2017, which will increase the amount of prior year refunds for FY 2018.

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 8.2 percent to \$1.417 billion in FY 2017. In FY 2018, other payments are projected to increase by 0.3 percent, to \$1.421 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.

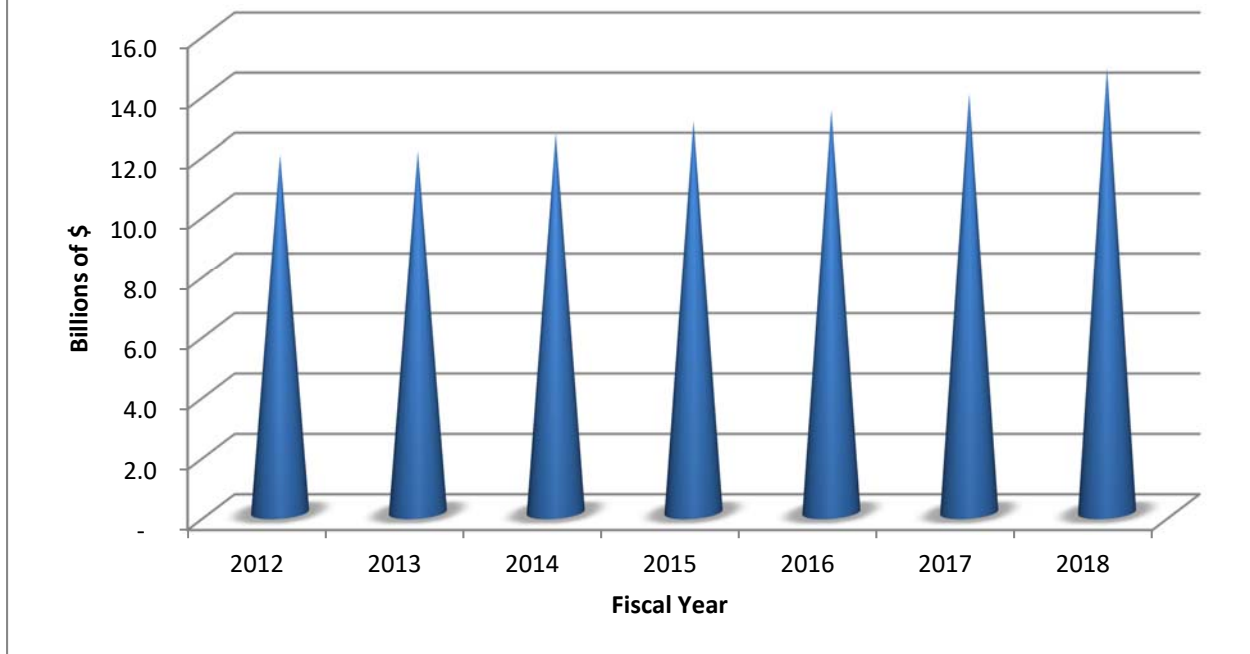
The Revenue Bond Tax Fund (RBTF) is a debt service fund into which twenty-five percent of personal income tax receipts (net of refunds and the STAR deposit) are deposited. This fund is used to pay the debt service on the State’s PIT revenue bonds. Any funds in excess of the required debt service payments are transferred back to the General Fund. Deposits to the RBTF are estimated to increase by 0.6 percent in FY 2017, reflecting the projected growth in personal income tax collections during the year. Deposits into the RBTF are

projected to be 7.5 percent higher in FY 2018. 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 marijuana 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.

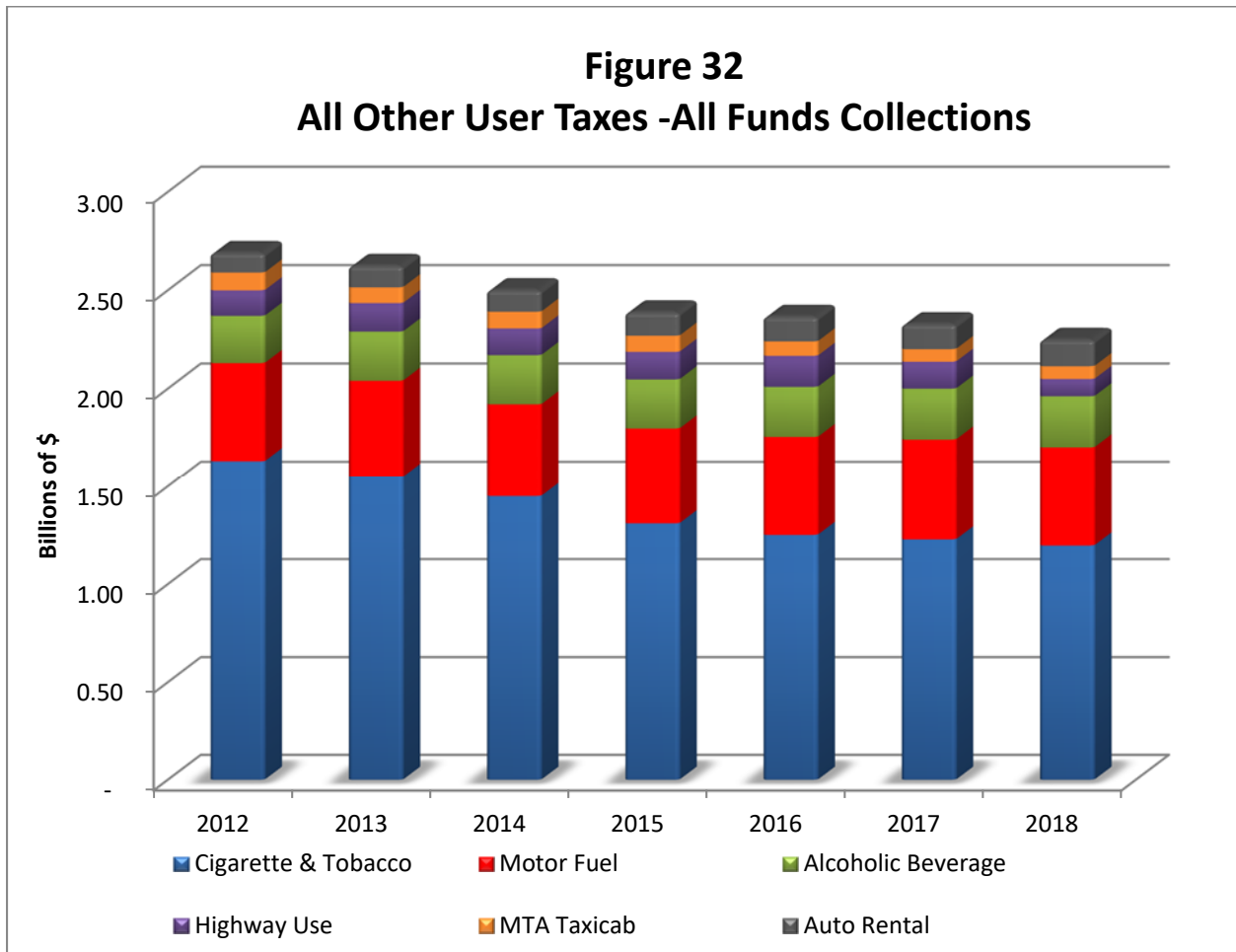
Figure 31
All Funds Sales & Use Tax Collections



Sales and use tax collections comprise a large portion of the tax collections in this category. Receipts from this tax are deposited into the General Fund, a Special Revenue fund (the Metropolitan Transportation Operating Account), and two Debt Service Funds (the Local Government Assistance Tax Fund and Sales Tax Revenue Bond Tax Fund). In FY 2017, General Fund receipts are estimated to increase by 4.1 percent, to \$6.5 billion. On an All Funds basis, sales and use tax collections are estimated to increase by 4.1 percent to \$13.9 billion in FY 2017. The increase in collections reflects growth in consumption as well as income growth.

In FY 2018, General Fund receipts are projected to increase by 6.2 percent to \$6.9 billion. All Funds sales and use tax receipts are projected to increase by 6.1 percent to \$14.7 billion.

This increase in collections reflects the continued increase in consumption and income growth projected for 2017.



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 2017 are estimated to increase by 7.5 percent to \$346 million primarily due to a decline in refunds paid resulting from the change in the tobacco tax administration. All Funds collections for FY 2017 are estimated to decrease by 1.8 percent to \$1.23 billion. All Funds collections are decreasing while

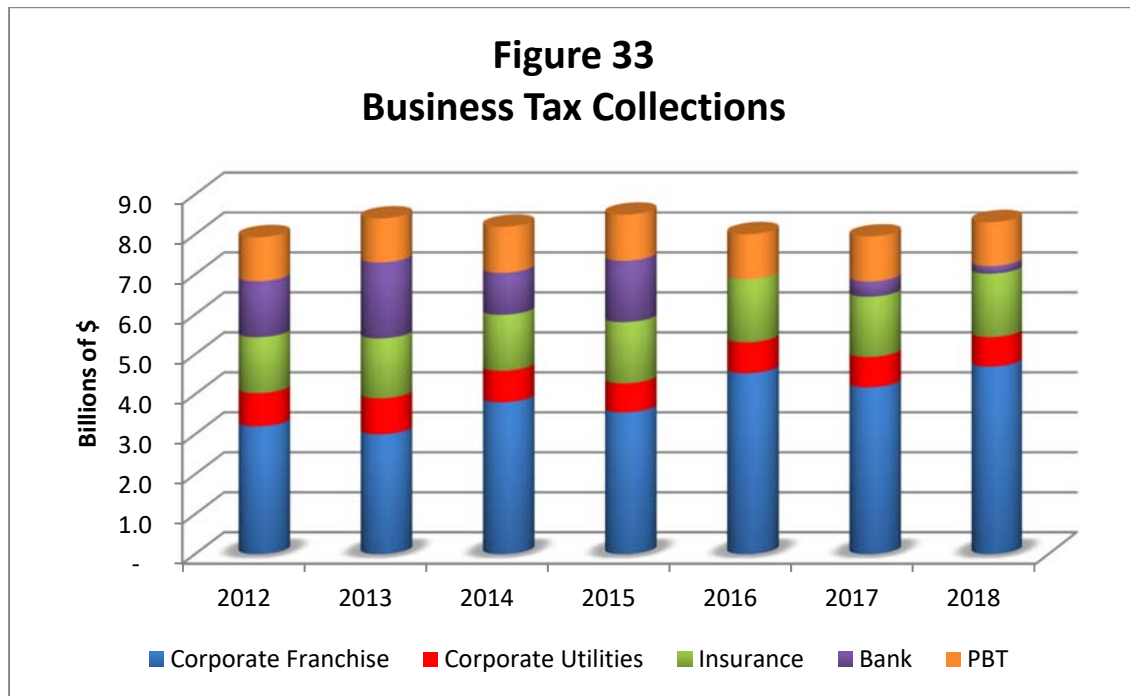
General Fund collections are increasing due to a large increase in collections on tobacco products, while cigarette tax collections are decreasing.

In FY 2018, General Fund cigarette and tobacco tax collections are projected to increase by 0.3 percent to \$347 million. All Funds cigarette and tobacco tax collections are projected to decrease by 2.5 percent to \$1.20 billion in FY 2018, reflecting the continued decline in consumption partially offset by the cigar tax increase proposed by the Executive.

The only other user tax that is deposited to the General Fund is the alcoholic beverage tax, which is estimated to increase by 1.57 percent to \$258.6 million in FY 2017. In FY 2018, these tax collections are projected to increase by 0.4 percent to \$260.3 million.

All Funds collections of the remaining user taxes are estimated to decrease by 2.2 percent to \$841 million in FY 2017. For FY 2018, collections from these other taxes are projected to decrease by 5.9 percent, to \$792 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 0.3 percent to \$5.63 billion in FY 2017. This decline is due primarily to the reduction in corporate franchise tax receipts resulting from the reduction of the business income tax rate effective for the 2016 tax year. In addition, this decline is partially due to an increase in insurance refunds

due to assessments paid to the Life Insurance Guaranty Corporation and a decline in corporation and audit receipts. On an All Funds basis, business taxes are estimated to increase by 0.8 percent to \$7.95 billion.

General Fund business tax collections are estimated to increase by 6.2 percent to \$5.98 billion in FY 2018. This increase is attributable to strong growth in corporate profits and growth in insurance tax premiums. On an All Funds basis, business taxes are estimated to increase by 4.5 percent to \$8.3 billion. This increase is due to factors stated above, 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 2017, partially offset by the estimated 5.0 percent indexing increase in the tax rate that will take effect in January 2018.

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.

**Figure 34
Other Tax Collections**



General Fund receipts of these taxes are estimated to decrease by 26.8 percent to \$1.13 billion in FY 2017. This decrease in receipts is due the increase in the estate tax exclusion amount and a decline in the number of super-large estates. 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 2018, General Fund receipts are projected to decrease by 12.2 percent to \$990 million. This results from the continued increase to the estate tax exclusion.

All Funds collections of other taxes are estimated to decrease by 9.5 percent to \$3.63 billion in FY 2017 and are projected to increase by 0.2 percent to \$3.64 billion in FY 2018. The decrease in the current fiscal year is attributable to weak real estate transfer tax receipts

due to the spin-up of multi-family construction into 2015 and the decline in estate tax receipts, partially offset by growth in MTA Payroll tax receipts. The increase in other tax collections in FY 2018 is due to 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, partially offset by the decline in estate tax receipts

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-second 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.