FEDERAL RESERVE BANK *of* NEW YORK

U.S. Economy in a Snapshot

Research & Statistics Group

March 2017

The *U.S. Economy in a Snapshot* compiles observations of staff members of the Federal Reserve Bank of New York's Research and Statistics Group. The views, model results, and analysis presented are solely those of the individual contributors and do not necessarily reflect the position of the Federal Reserve Bank of New York or the Federal Reserve System. The analysis presented herein is based on data released through March 16, 2017.

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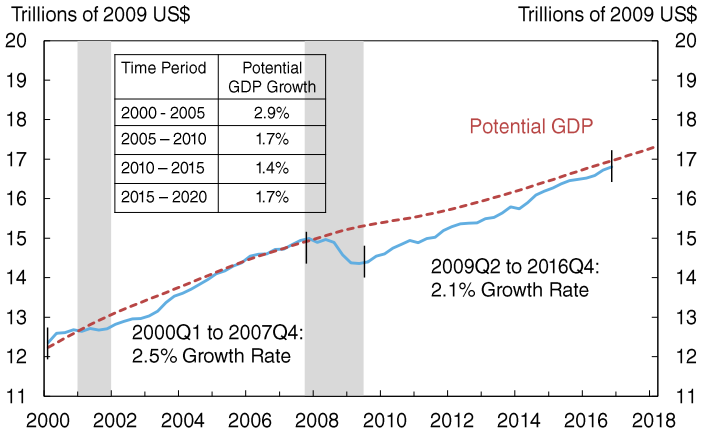
OVERVIEW

- Real consumer spending was soft in January, suggesting slower real PCE growth in Q1 than in recent quarters.
  - **Auto sales in January and February have shown a step-down compared to Q4 and there were further declines in energy services expenditures due to mild weather.**
- January data suggested somewhat stronger near-term momentum for business equipment spending in 2017Q1.
- Surveys suggest sizable improvement in manufacturing conditions, but production data still indicate sluggish growth. Single-family housing starts appear to remain on a gradual uptrend, but new single-family home sales may have peaked in late 2016.
- Payroll growth was solid again in February. The unemployment rate fell, while the labor force participation rate and employment-population ratio rose in the month.
  - **Some labor compensation measures are pointing to firmer wage growth.**
- Headline and core price data were strong in January, suggesting inflation is continuing its progress towards the FOMC's goal.
- U.S. equity indexes and nominal long-term Treasury yields moved higher. After trading in a narrow range for an extended period of time, oil prices recently pulled back over concerns of oversupply in the market.

GDP



Time Period	Potential GDP Growth
2000 - 2005	2.9%
2005 – 2010	1.7%
2010 – 2015	1.4%
2015 – 2020	1.7%

Source: Bureau of Economic Analysis, Congressional Budget Office via Haver Analytics

Note: Shading shows NBER recessions.

Output is modestly below its potential level

- The gap between real GDP and the Congressional Budget Office's (CBO) measure of real potential GDP was about 0.9% in 2016Q4.
  - **The CBO projects that the growth rate of real potential GDP will remain fairly subdued for the next few years.**
  - **The February unemployment rate of 4.7% is near many estimates of its natural rate, including that of the CBO (4.74%).**
  - **Compared to these alternative unemployment gap estimates, the CBO output gap still indicates more resource slack.**
- Historically, inflation has tended to be restrained when the economy is operating below real potential GDP.

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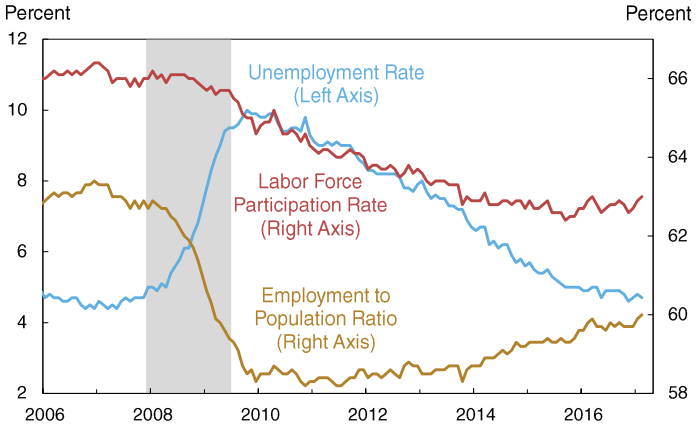
OVERVIEW

Labor Market Indicators



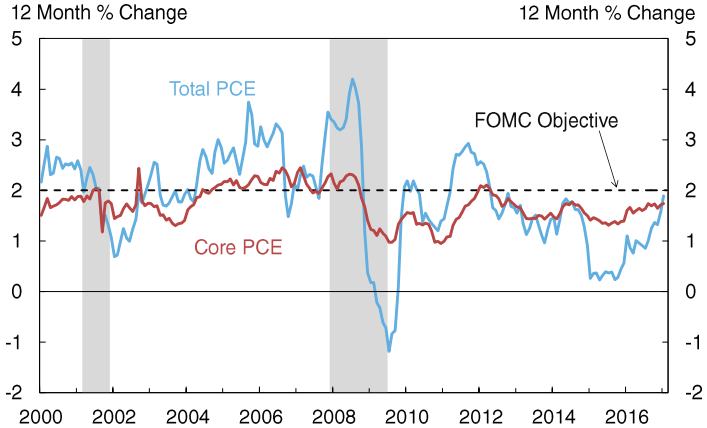
Source: Bureau of Labor Statistics
via Haver Analytics

Note: Shading shows NBER recessions.

Labor market conditions continue to strengthen

- The unemployment rate declined from 4.8% in January to 4.7% in February.
  - **The median duration of unemployment fell in February from 10.2 weeks to 10.0 weeks, and the share of long-term unemployed (27+ weeks) in the pool of unemployed workers fell from 24.4% to 23.8%.**
- The labor force participation rate increased in February to 63.0% from 62.9%.
- The employment-population ratio rose 0.1 percentage point in February to 60.0%.
  - **This is the highest level of the series since February 2009.**

PCE Deflator



Source: Bureau of Economic Analysis
via Haver Analytics

Note: Shading shows NBER recessions.

Headline inflation has moved close to 2%

- The total PCE deflator rose 0.4% in January, following a 0.2% increase in December. The core PCE deflator (which excludes food and energy prices) rose 0.3% in January, after rising 0.1% in the previous month.
  - **The marked rise in the core PCE deflator reflected sharp increases in some goods prices that tend to be volatile.**
  - **Energy prices registered a 4.2% increase in January, and they are up 11.8% from a year ago.**
  - **Food prices were flat in January, and they are down 1.4% from a year ago.**
- The 12-month change in the total PCE deflator was 1.9% in January. The 12-month change in the core PCE deflator was 1.7%, compared to 1.6% in January 2016.

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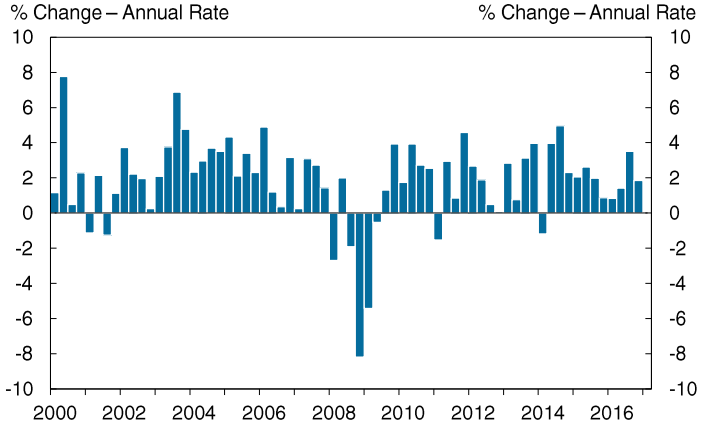
ECONOMIC ACTIVITY

GDP Growth

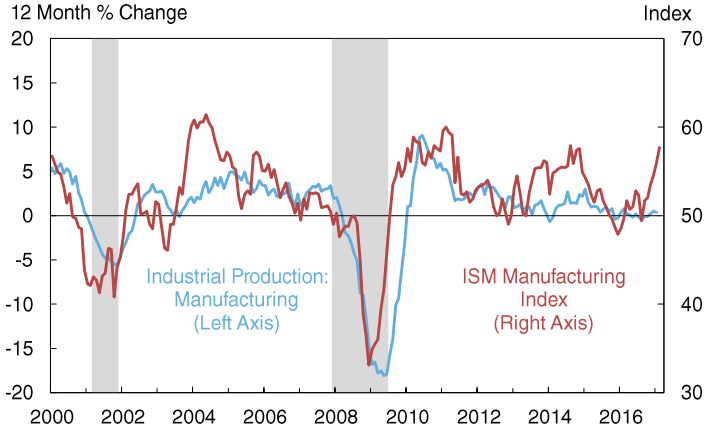


Source: Bureau of Economic Analysis via Haver Analytics

No change to estimated growth in 2016Q4

- According to the second estimate, real GDP rose at a 1.9% annual rate in 2016Q4, unrevised from the first estimate.
- There was a moderate upward revision to real PCE growth that was offset by downward revisions to nonresidential fixed investment and to state and local government spending.
  - **There were essentially no changes to the growth contributions from inventory investment or from net exports.**

Manufacturing and ISM Manufacturing Index



Source: Institute for Supply Management, Federal Reserve Board via Haver Analytics

Note: Shading shows NBER recessions.

Improving outlook for manufacturing sector

- Manufacturing activity rose 0.3% in January, following a 0.2% increase in December.
- The ISM manufacturing index rose to 57.7 in February from 56 in January, registering its highest reading since August 2014.
  - **February marked the 6th consecutive month in which the index was above 50 – the threshold that divides expansion from contraction in the manufacturing sector.**
  - **February's increase was driven largely by increases in the new orders and inventories subcomponents.**
- All Federal Reserve manufacturing surveys showed improvement in February.

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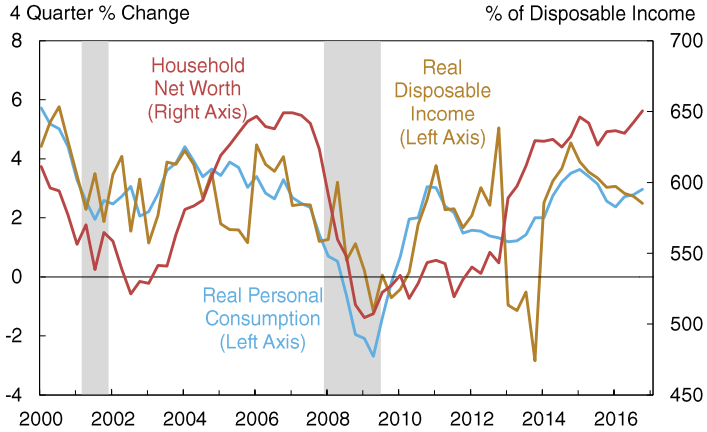
HOUSEHOLDS

Disposable Income, Consumption, and Wealth



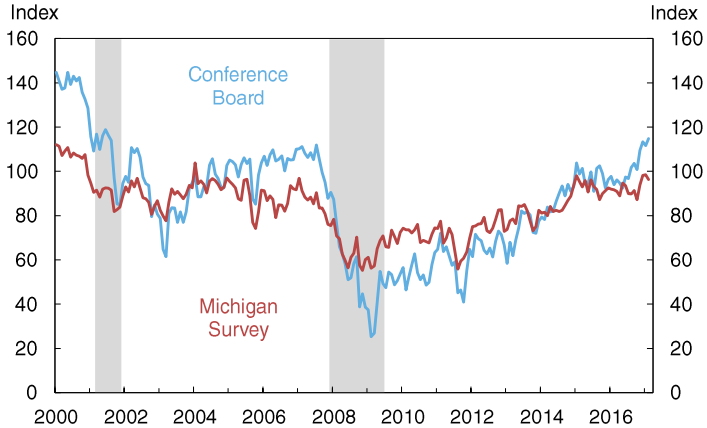
Source: Bureau of Economic Analysis, Federal Reserve Board, via Haver Analytics

Note: Shading shows NBER recessions.

Consumer spending retreats in January from Q4 pace

- Real personal consumption expenditures grew at a 3.0% annual rate in Q4, supported by solid growth in household net worth.
  - **Household net worth climbed to a record high in Q4 from rising equity prices and a steady climb in home prices.**
- After increasing 0.3% in December, real personal consumption expenditures fell 0.3% in January.
  - **The decline primarily reflected lower spending on services, notably utilities, and on durable goods.**
  - **Real disposable income declined 0.2% in January, following an increase of 0.1% in December.**
- The personal saving rate inched up 0.1 percentage point in January to 5.5%.

Consumer Confidence



Source: Conference Board, University of Michigan

Note: Shading shows NBER recessions.

Consumer confidence at or near multi-year high

- The Conference Board's Consumer Confidence Index continued to climb in February.
  - **The index gained 3 points to reach 114.8—its highest reading since 2001.**
  - **The Present Situation component rose 3½ points to 133.4, a cyclical high; the Expectations index was also up modestly.**
- The Reuters/Michigan Index of Consumer Sentiment edged back down from a cyclical high in February.
  - **The index retreated 2 points to 96.3, but remains close to its 13-year high set in January.**
  - **Last month's dip was driven entirely by its expectations component, which nevertheless remains at an elevated level.**

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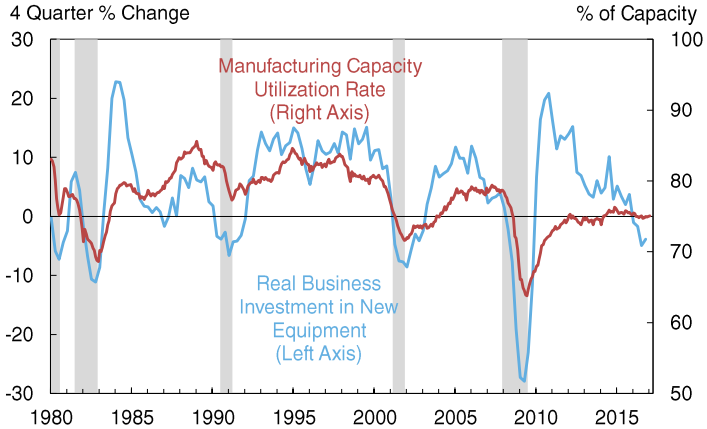
Equipment Investment and Capacity Utilization



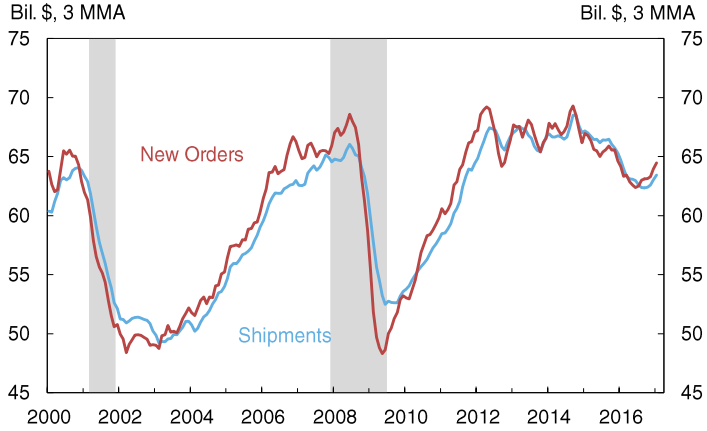
Source: Bureau of Economic Analysis, Federal Reserve Board via Haver Analytics

Note: Shading shows NBER recessions.

Investment in equipment rose modestly in Q4

- Real business equipment spending rose 1.9% (annual rate) in 2016Q4, the first increase in five quarters; the four-quarter change, however, was -3.9%.
  - **In 2016Q4, investment in industrial equipment and information equipment rose moderately, while investment in transportation equipment and "other" equipment fell slightly.**
- A key reason for weak equipment investment recently is the low level of the manufacturing capacity utilization rate.
  - **This rate was 75.1% in January, well below its longer-term average of 78.5%.**
  - **The utilization rate has fluctuated in a narrow range in recent years, even as capacity growth has been slow; the utilization rate in January was the same as that in March 2014.**

Nondefense Capital Goods Excluding Aircraft



Source: Census Bureau via Haver Analytics

Note: Shading shows NBER recessions.

Positive signals from capital spending indicators

- Monthly data on new orders and shipments of nondefense capital goods excluding aircraft are high frequency indicators of business investment in new equipment.
- Despite a monthly decline in January, the 3-month moving average of shipments and new orders of such goods has continued to increase since October 2016.
  - **Both series, however, remain well below their peaks in late 2014 and are also below the average level from 2012-15.**
- New orders have been above shipments since mid-2016.
  - **Based on historical patterns, this difference between new orders and shipments is consistent with higher growth in equipment spending over the near term.**

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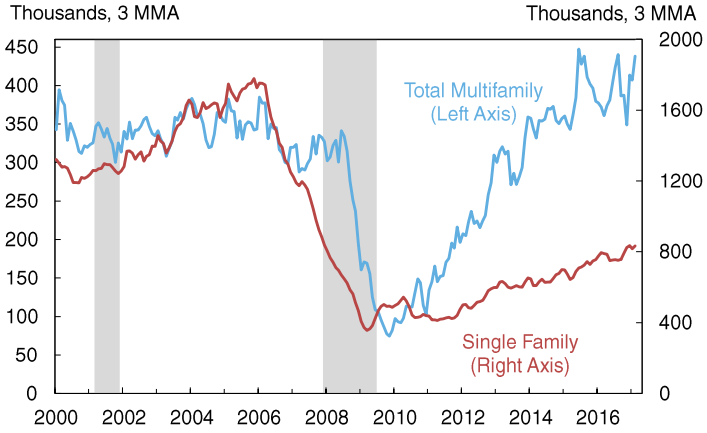
HOUSING SECTOR

Housing Starts

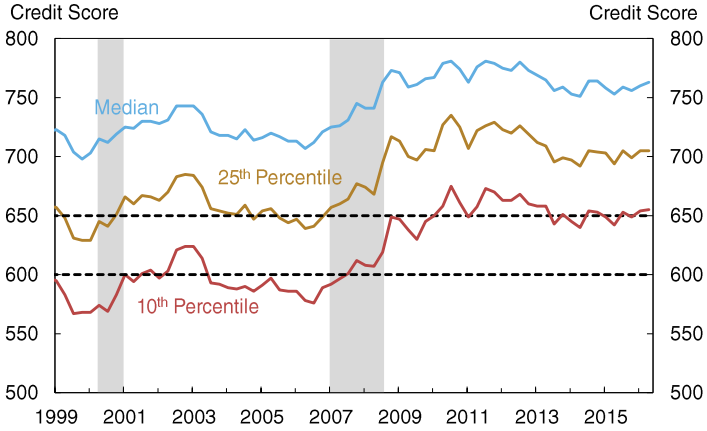


Source: Census Bureau via Haver Analytics Note: Shading shows NBER recessions.

Housing starts continue to trend higher

- Total housing starts increased 3% in February to 1.288 million units, 1.9% above the consensus expectation (1.264 million).
- Single-family starts remain at levels below those of the mid-2000s but continue to trend upward at a moderate rate.
- Multi-family starts appear to have plateaued at a level somewhat above those that prevailed in the mid-2000s.

Credit Score at Mortgage Origination



Source: FRBNY Consumer Credit Panel/Equifax Note: Shading shows NBER recessions.

Mortgage underwriting standards slightly looser

- Credit standards have loosened only modestly since 2012, after tightening sharply between 2007 and mid-2009.
- Lending standards also remain tight compared to levels in the early 2000s, which preceded the subprime boom.
- Nearly 67.5 million people in the population of adults with credit reports currently have scores below 650.
  - **The share of originations to borrowers below this level has fallen from 25% to 10% since the Great Recession.**

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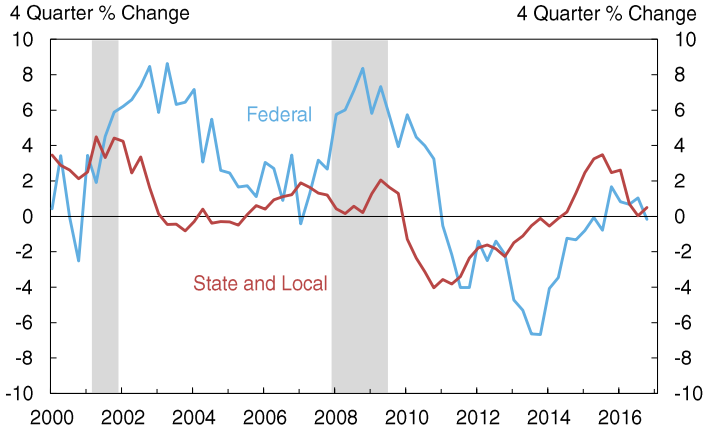
GOVERNMENT SECTOR

Real Government Consumption and Gross Investment



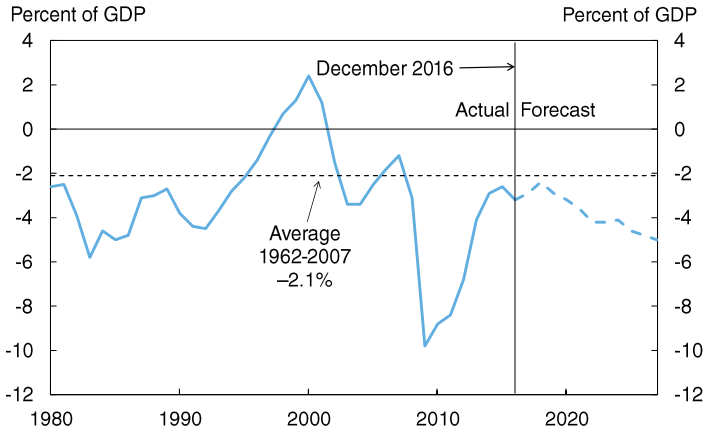
Source: Bureau of Economic Analysis via Haver Analytics

Note: Shading shows NBER recessions.

Government sector was roughly flat in 2016

- After a modest expansion in 2015, total real government consumption and gross investment was flat in 2016.
  - **Real government consumption and gross investment grew 0.25% over the four quarters ending in 2016Q4.**
- Federal purchases declined slightly for the year.
  - **Nondefense spending rose about 2.5% for the year, while defense spending fell 2%.**
- State and local government purchases rose 0.5%.
  - **State and local consumption spending, dominated by employee compensation, rose 0.7%, while gross investment remained sluggish (-0.4%).**
  - **State and local consumption and gross investment comprise about 60% of the total government sector.**

Federal Deficit (CBO Current Law Baseline)



Source: Congressional Budget Office; Bureau of Economic Analysis via Haver Analytics

Federal deficit-GDP ratio predicted to rise

- From a recent peak of 9.8% of GDP in fiscal year (FY) 2009, the federal deficit declined to 2.4% of GDP in FY2015; it then increased to 3.2% of GDP in FY2016 as revenue growth slowed and outlays growth increased.
  - **Under current policy and the CBO's underlying macroeconomic assumptions, the federal deficit is projected to steadily increase and reach 5% of GDP in FY2027.**
  - **Debt held by the public has increased from 35.2% of GDP in FY2007 to 77% of GDP in FY2016; it is projected to rise under the CBO baseline to 89% of GDP by FY2027, the highest since 1947.**
- These projections are not significantly different from the January 2016 CBO baseline.

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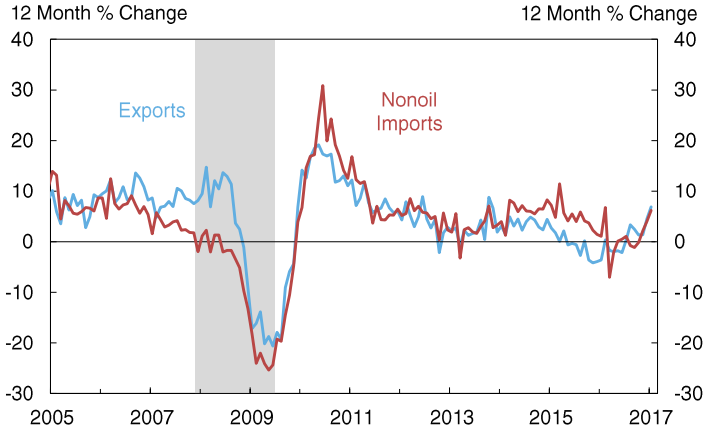
INTERNATIONAL DEVELOPMENTS

Real Exports and Nonoil Imports of Goods



Source: Census Bureau via Haver Analytics

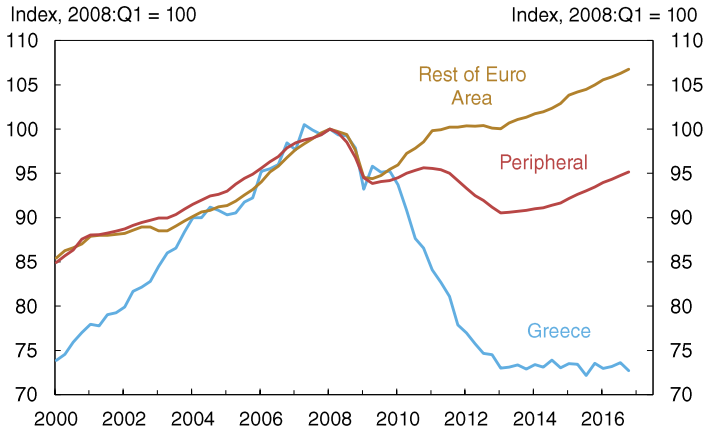
Note: Shading shows NBER recessions.

Trade deficit highest in nearly five years

- The trade deficit increased $4.2 billion to $48.5 billion in January.
  - **Real exports of goods increased 0.4 percent in January from a month earlier, in part reflecting increases in industrial supplies and auto vehicle and parts.**
  - **Export volumes of capital goods excluding autos, however, partially retraced their large December gain.**
  - **Real nonoil imports increased 1.4 percent in January due to strong growth in consumer goods and auto vehicle and parts.**

- Net exports subtracted 1.7 percentage points from GDP growth in Q4.
  - **Real imports increased 10.7 percent at a seasonally-adjusted annual rate in Q4, while real exports fell 1.6 percent.**

Real GDP in the Euro Area



Source: National Sources via Haver Analytics

Note: Peripheral includes Italy, Portugal and Spain.

Country GDP growth remains mixed across euro area

- Over the six quarters ending 2015Q4, average real GDP growth in the euro area was 1.5 percent (annual rate), with this pace quickening to 1.7 percent in 2016.
  - **The headline number, however, reflects large differences in economic performance across its member states, and follows recessions in 2008-09 and 2011-13.**

- Euro area real GDP is 2.4 percent higher than in 2008Q1.
  - **Notwithstanding recent strong growth rates, the peripheral economies of Italy, Spain and Portugal remain on aggregate about 5 percent below the pre-crisis level.**
  - **Greek GDP has fallen 27 percent since 2008Q1 and remains near its 1999 level.**
  - **In the remainder of the euro area, however, real GDP has surpassed the pre-crisis level by about 7 percent.**

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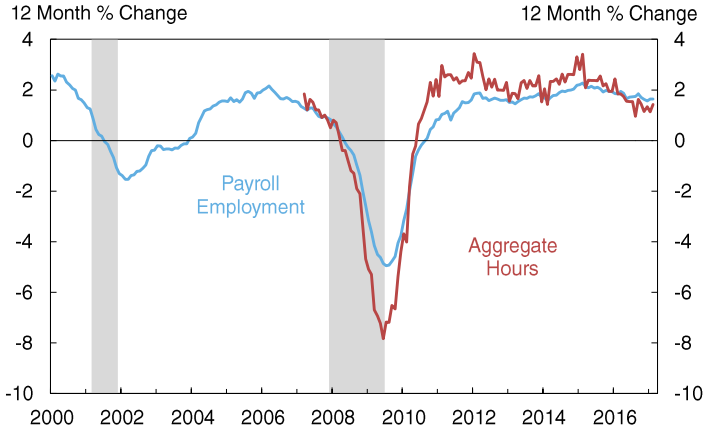
LABOR MARKET

Payroll Employment and Aggregate Hours



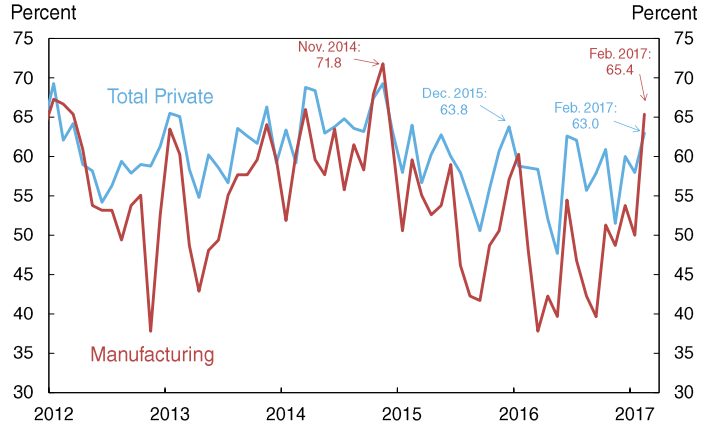
Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

Payroll employment growth robust in February

- February nonfarm payroll employment rose by 235,000.
  - **Additionally, net revisions in December 2016 and January 2017 totaled +9,000.**
- February private employment increased by 227,000 and government employment increased by 8,000.
- Average weekly hours remained at 34.4 hours for the third consecutive month.
  - **With the rise in payrolls, aggregate hours worked by all private employees rose 0.2% in February.**

One-Month Diffusion Indices



Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

Employment gains seen across industries

- Both the overall and manufacturing-specific one-month diffusion indices, which reflect the balance of industries increasing and decreasing their employment over the month, increased sharply in February.
- The overall one-month diffusion index rose to 63.0 in February.
  - **This is the highest reading for the index since December 2015.**
- Within the manufacturing sector, the one-month diffusion index was 65.4 in February.
  - **This is the highest reading for the index since November 2014.**

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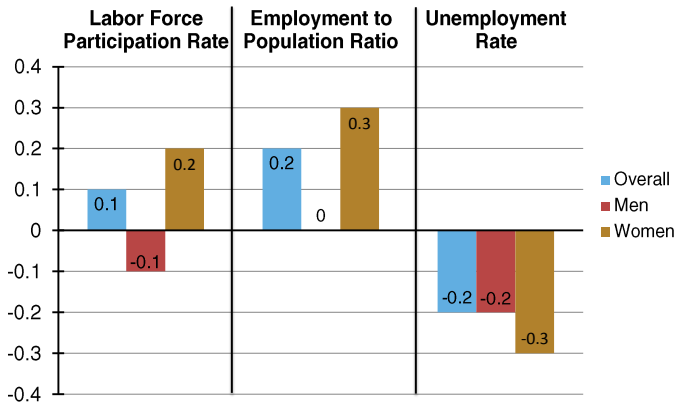
12-Month Change in Key Indicators by Gender

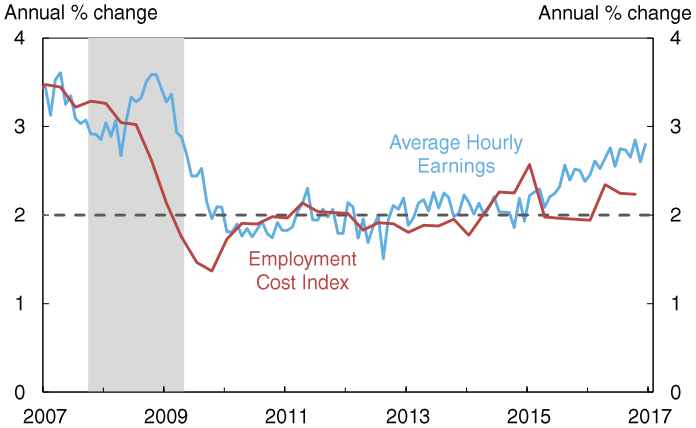


Source: Bureau of Labor Statistics
via Haver Analytics

Changes in indicators differ across gender

- Changes in key labor market indicators in February reflected changes among women.
  - **Women's labor force participation rate increased to 57.0%, the employment-population ratio increased to 54.3%, and the unemployment rate fell to 4.6%.**
- Major labor market indicators for men were unchanged.
  - **The labor force participation rate, employment-population ratio, and the unemployment rate remained at 69.3%, 66.0%, and 4.8%, respectively.**
- Over the last year, movements in these indicators were also more pronounced for women.
  - **The employment-population ratio rose by 0.3 percentage point for women, while the ratio was unchanged for men.**

Growth of Average Hourly Earnings and ECI



Source: Bureau of Labor Statistics
via Haver Analytics

Note: Shading shows NBER recessions.

Some evidence of stronger compensation growth

- Average hourly earnings rose by 0.23% in February and increased by 2.8% over the last twelve months.
  - **The year-over-year growth rate exceeded its 4th quarter average in 2016 (2.75%).**
- Average weekly earnings also increased 0.23% in February, from $895.43 to $897.50.
  - **The year-over-year growth rate for average weekly earnings was 2.5%, 0.2 percentage point above the average in 2016.**
- The employment cost index rose about 2.25% for the 12 months ending December 2016.

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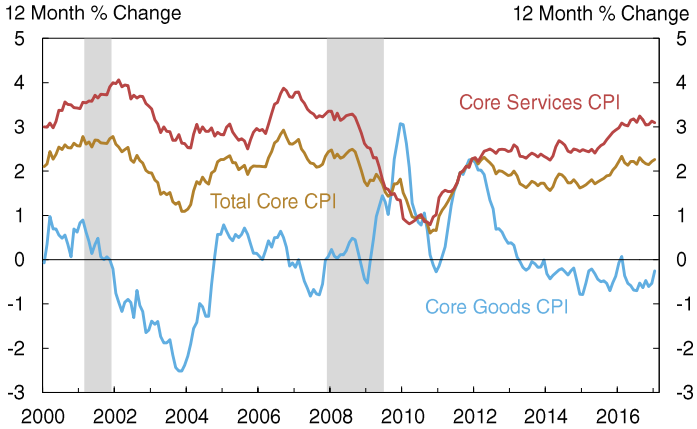
INFLATION

CPI Inflation: Core Goods and Core Services



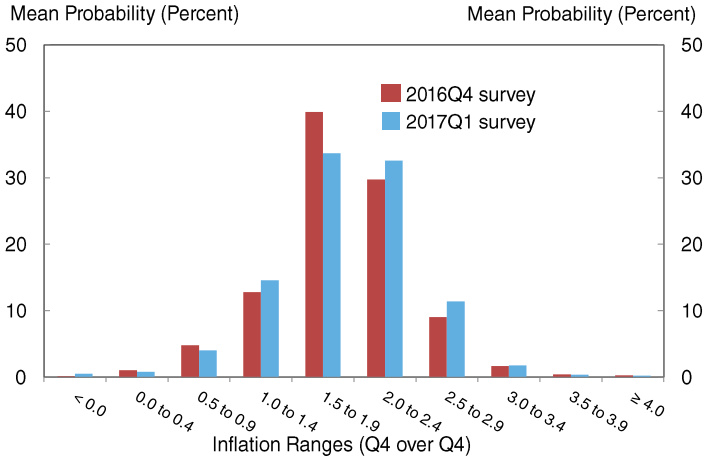
Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

Core CPI inflation moves up in January

- Core CPI prices increased 2.3% in January from a year earlier, up from 2.2% in December.
  - **Core CPI inflation rose a strong 0.3% in January.**
- Core CPI services prices continue to grow at a stable and firm pace.
  - **The 12-month change in core services prices was 3.1%, the same as in December.**
- There was a sharp increase of 0.4% in core CPI goods prices in January, the largest monthly increase since October 2009.
  - **Core CPI goods prices, however, are still down 0.2% from a year ago.**

Mean Probabilities for Core PCE Inflation in 2017



Source: US Survey of Professional Forecasters

Forecasters see higher core PCE inflation in 2017

- The US Survey of Professional Forecasters provides density (histogram) forecasts that show the probability that inflation will fall into 10 separate ranges.
- Compared to last quarter, survey respondents have raised the probability that core PCE inflation measured from 2016Q4 to 2017Q4 will be above 2.0 percent.
  - **The Q1 survey was fielded from late January through early February, with results released on February 10.**
- Forecasters see the likelihood that core PCE inflation will fall in the 1.5-1.9% or 2.0-2.4% ranges as roughly equal, with the probability of each outcome at a little over 30%.
  - **The probability that core PCE inflation will be between 2.5 and 2.9 percent is now above 10%.**

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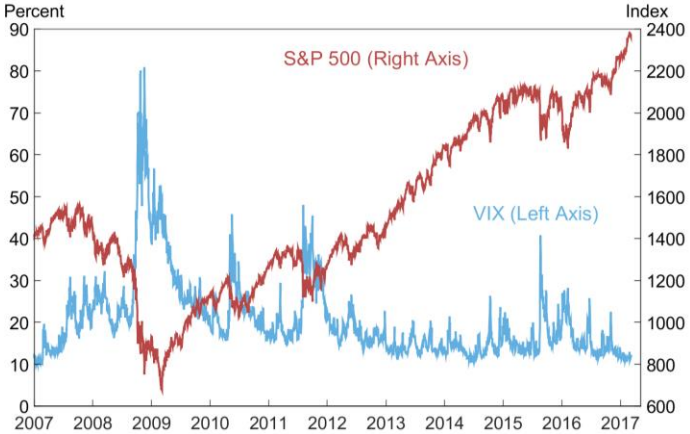
FINANCIAL MARKETS

US Equity Market Index and Volatility

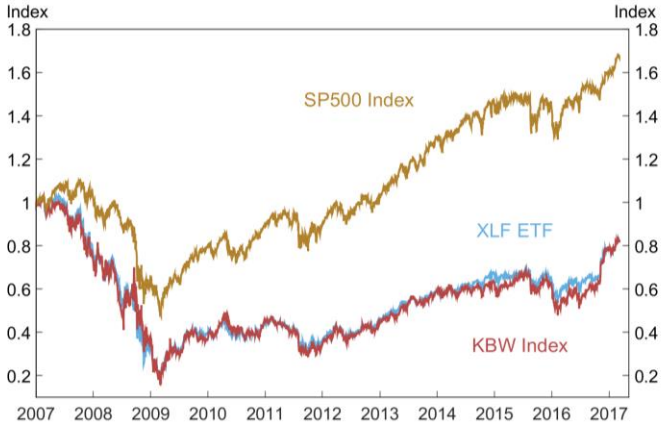


Source: Bloomberg Finance L.P.

U.S. equity markets continue to rally

- U.S. equity markets rallied to new all-time highs in February and early March.
  - **The S&P 500 index rose 4.1% in February and the first part of March (through March 10) and is up 6.0% in 2017.**
- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), remains low.
  - **The VIX Index was little changed in February and early March and remains at the lower end of its historical range.**

US Bank Equities Performance



Source: Bloomberg Finance L.P. Note: Start date 01/03/2007 = 1.

US bank stocks outpace market

- U.S. bank equities outperformed broader equities in February and early March.
  - **As measured by the KBW Nasdaq bank index, bank equities increased 5.8% between January 31 and March 10, versus 4.1% for the S&P 500 index.**
  - **The XLF financial sector ETF increased 6.3% over the same period.**
- For 2017 year-to-date, U.S. bank equities have performed similarly to the overall market, after strongly outperforming it in the fourth quarter of 2016.
  - **The KBW index is up 5.4% through March 10, the XLF ETF is up 6.6%, and the S&P 500 is up 6.0%.**
  - **In contrast, during the fourth quarter of 2016, the KBW index rose 29.6%, the XLF ETF was up 20.5%, and the S&P 500 gained 3.2%.**

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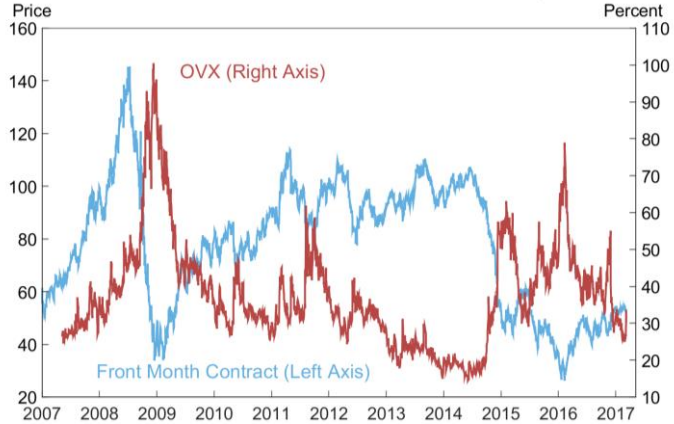
Front Month Oil Futures vs CBOE Oil Volatility

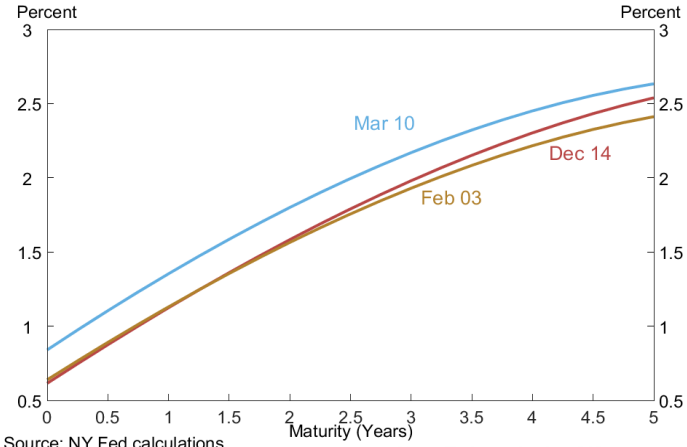


Source: Bloomberg Finance L.P.

Oil prices decline

- Oil prices, as measured by the front month contract for WTI crude oil, closed at $48.50 per barrel on March 10, down 10.9% from the recent high on February 23 and down 9.7% for 2017.
- Option-implied oil market volatility, as measured by the CBOE Crude Oil ETF Volatility Index (OVX), increased from its recent low of 25.0 on February 27 to 33.5 on March 10.

Expected Federal Funds Rate



Source: NY Fed calculations, Bloomberg Finance L.P.

Note: Estimated using OIS quotes.

Implied path for federal funds rate shifted up

- The expected path for the federal funds rate implied by rates on overnight indexed swaps (OIS) shifted up in February and early March.
  - **The path implies about 50 basis points of tightening over the next year and about 100 basis points over the next two years.**
- The current market-implied path remains somewhat below the median path from the FOMC's March 2017 Summary of Economic Projections and, for the most part, the January/February 2017 NY Fed Primary Dealer Survey.

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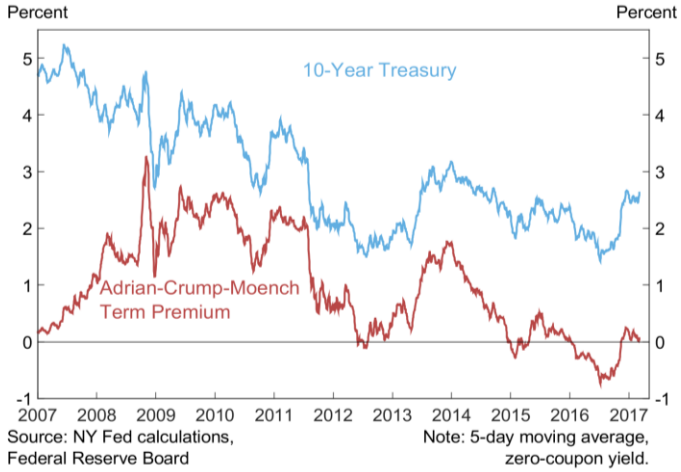
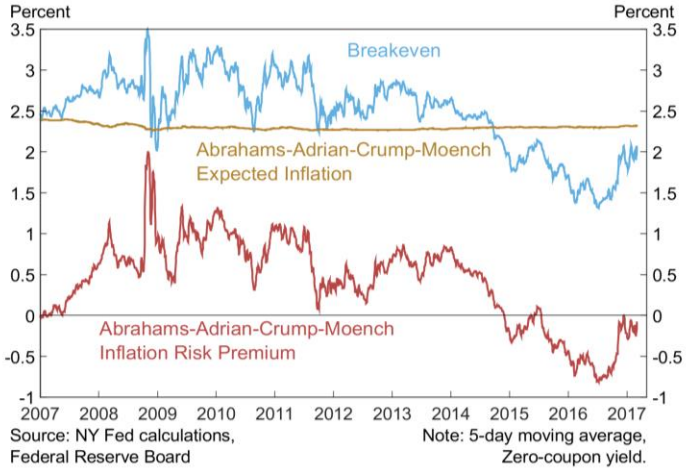
10-Year Treasury and Term Premium



Longer-term Treasury yields rise slightly

- Long-term Treasury yields rose slightly in February and early March.
  - **The 10-year yield closed at 2.63% on March 10, up 6 basis points from January 31 and up just one basis point from the end of 2016.**
- Estimates of the Adrian-Crump-Moench term structure model attribute the increase to a higher path for the short-term rate (as opposed to a higher term premium).
  - **Since January 31, the expected path of the short-term rate rose 17 basis points, whereas the term premium declined 11 basis points.**

5-10 Year Forward Decomposition



Breakeven inflation little changed

- Market-implied TIPS-based measures of long-term inflation expectations ("breakevens") were little changed in February and early March.
  - **The five-to-ten year breakeven inflation rate was 2.06% on March 8, down one basis point since January 31, after rising 20 basis points in January.**
- According to the Abrahams-Adrian-Crump-Moench model, the inflation risk premium was also little changed in February and early March, while expected inflation has remained stable.
  - **The estimated five-to-ten year inflation risk premium declined two basis points between January 31 and March 8, after rising 15 basis points in January.**

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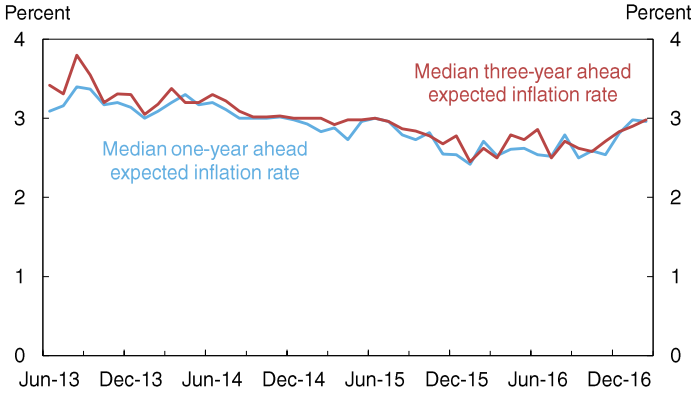
SPECIAL TOPIC: SURVEY OF CONSUMER EXPECTATIONS

Inflation Expectations

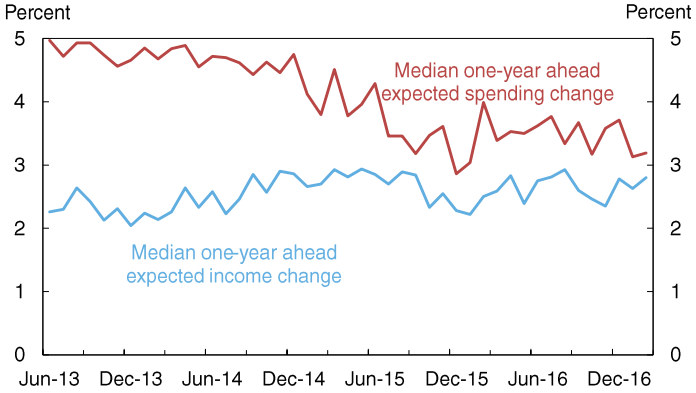


Source: Survey of Consumer Expectations
Federal Reserve Bank of New York

Medium-term inflation expectations tick up

- According to the February 2017 FRBNY Survey of Consumer Expectations (SCE), median inflation expectations at the three-year ahead horizon rose from 2.9% in January to 3.0% in February, their highest level since June 2015.
- Median year-ahead inflation expectations were 3.0%, unchanged from January.
- The median expectation of the year-ahead gasoline price change dropped from 5.1% in January to 4.4%, its lowest level since January 2016.
  - **The median expectation of the year-ahead food price change dropped to 4.4%, its lowest level since the series' start in June 2013.**

Income and Spending Growth Expectations



Source: Survey of Consumer Expectations
Federal Reserve Bank of New York

Small rise in income and spending growth expectations

- Median expected household income growth increased to 2.8% in February, up from 2.6% in January.
  - **The increase was most notable for higher-income (above $100,000) respondents, whose median expectation rose from 2.7% in January to 2.9%.**
- Median household spending growth expectations also increased slightly from 3.1% in January to 3.2%.
  - **Spending growth expectations remain subdued compared to an average of 3.5% for 2016, 3.7% for 2015, and 4.7% for 2014.**

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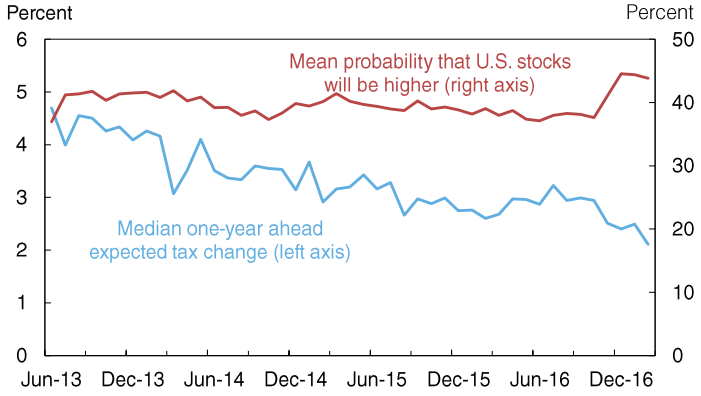
SPECIAL TOPIC: SURVEY OF CONSUMER EXPECTATIONS

Expectations about Changes in Taxes & U.S. Stocks

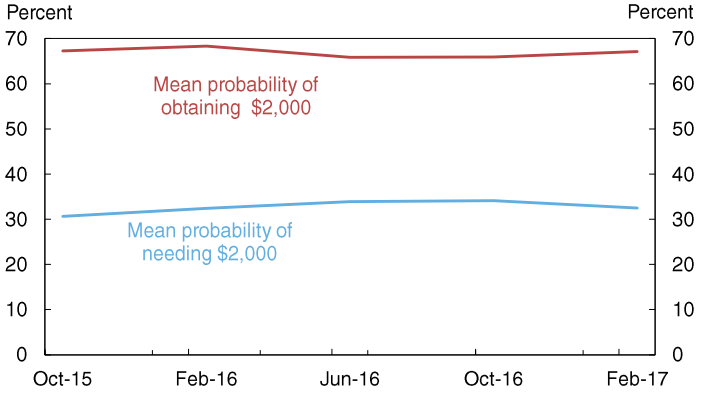


Source: Survey of Consumer Expectations
Federal Reserve Bank of New York

Marked drop in tax rate change expectations

- Median expectations regarding the year-ahead change in taxes (at current income level) have been on a downward trend, especially since the November election.
  - **This year has seen the median decline sharply from 2.5% in January to 2.1% in February, the lowest level since the series' start in June 2013.**
- Following the November election, the mean perceived probability that U.S. stock prices will be higher 12 months from now has remained elevated.
  - **The series reached a high of 44.6% in December 2016 compared to an average of 38.1% for the first 10 months of 2016.**
  - **The February 2017 reading was 43.9%.**

Financial Fragility of U.S. Households



Source: SCE Credit Access Survey
Federal Reserve Bank of New York

Slight improvement in households' financial fragility

- The SCE Credit Access Survey provides updates (every 4 months) on households' credit market experiences and expectations.
- The average probability of needing $2,000 for an unexpected expense in the next month was 32.5% in February 2017, towards the middle of the narrow range (30.7%-34.1%) observed since the series' start in October 2015.
- The average probability of obtaining $2,000 (if an unexpected need arose within the next month) was 67.2% in February 2017.

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