FEDERAL RESERVE BANK *of* NEW YORK

U.S. Economy in a Snapshot

Research & Statistics Group

June 2019

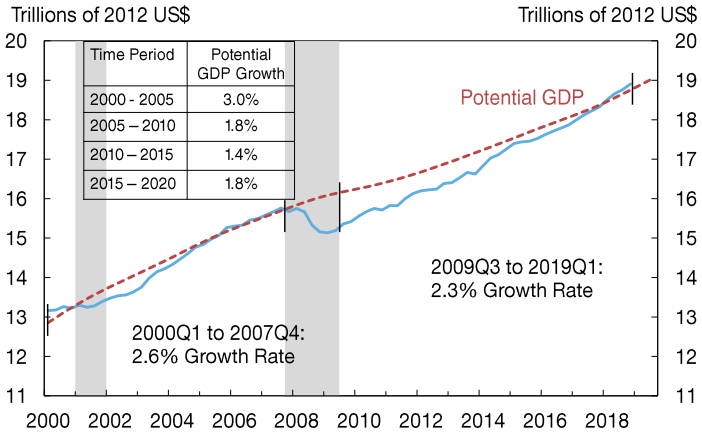
The *U.S. Economy in a Snapshot* compiles observations of staff members of the Federal Reserve Bank of New York's Research and Statistics Group. The views, model results, and analysis presented are solely those of the individual contributors and do not necessarily reflect the position of the Federal Reserve Bank of New York or the Federal Reserve System. The analysis presented herein is based on data released through June 12, 2019.

©2019 Federal Reserve Bank of New York

OVERVIEW

- Real consumer spending fell slightly in April.
  - **Real expenditures on durable goods and services both fell, while real nondurable goods expenditures rose.**
  - **Motor vehicle sales were robust in May.**
- Real business equipment spending declined modestly in 2019Q1, as investment continued to weaken from its pace in 2018.
  - **New orders of nondefense capital goods excluding aircraft have been below shipments since December (except in March), suggesting weak near-term momentum.**
- Housing activity indicators were mixed.
  - **Home sales remained solid in April, likely fueled by a substantial decline in mortgage rates over recent months. However, single-family housing starts and permits remain lackluster. A still-strong labor market and lower mortgage rates potentially could provide support to the housing sector.**
- Payroll growth was muted in May. The unemployment rate, the labor force participation rate and the employment-to-population ratio were all unchanged.
  - **Even with a low unemployment rate, some measures of labor compensation growth have flattened in the past few months.**
- Core PCE inflation firmed a bit in April but remained below the FOMC's longer-run objective.
- U.S. equity indices declined modestly over the past month, amid notable daily volatility. Implied volatility rose slightly. The nominal 10-year Treasury yield and the market-implied expected policy rate path fell significantly. The broad trade-weighted dollar index was little changed. Oil prices fell considerably over the month.

GDP



Time Period	Potential GDP Growth
2000 - 2005	3.0%
2005 – 2010	1.8%
2010 – 2015	1.4%
2015 – 2020	1.8%

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

Note: Shading shows NBER recessions.

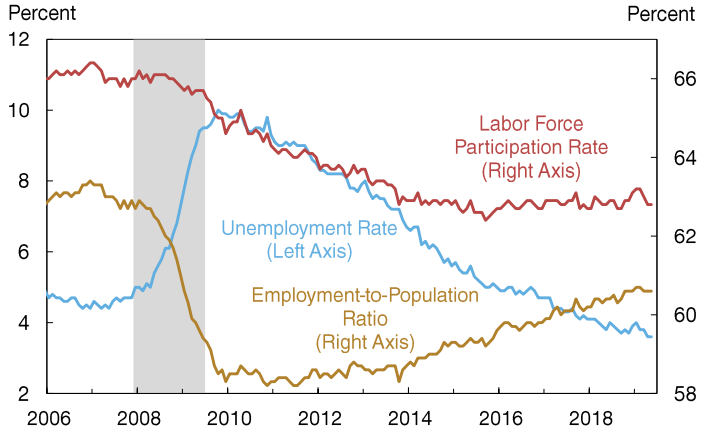
Output moderately above potential GDP estimate

- The level of real GDP in 2019Q1 was about 0.8% above the estimate of real potential GDP from the Congressional Budget Office (CBO).
  - **For comparison, the historical (1949 – 2019) average of this measure of the output gap is -0.6%.**
  - **Over this expansion, real GDP has grown at a 2.3% annual rate, compared to the 1.6% growth rate of real potential GDP.**
  - **The 3.6% unemployment rate in May was below most estimates of its natural rate, including that of the CBO (4.60%).**
- The current output and unemployment gaps signal tight resource constraints in the U.S. economy.
  - **However, capacity utilization rates remain below their historical averages, suggesting looser constraints by that measure.**

©2019 Federal Reserve Bank of New York

OVERVIEW

Labor Market Indicators



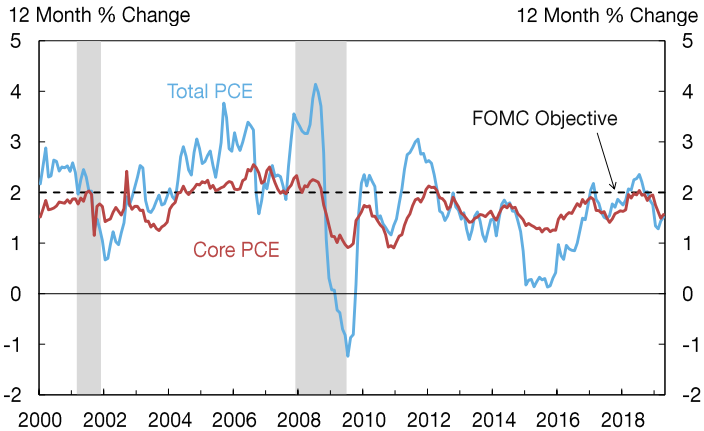
Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

Household survey indicators largely unchanged

- The unemployment rate remained at 3.6% in May, unchanged from April, matching the lowest reading since December 1969.
  - **An alternative measure of unemployment, U6, which includes marginally attached workers and workers who hold part-time jobs for economic reasons, was 7.1% in May, down from 7.3% in April.**
- The labor force participation rate remained unchanged at 62.8% in May.
  - **The labor force participation rate has been essentially flat (albeit with some fluctuations) since the last quarter of 2013.**
- The employment-to-population ratio was unchanged in May at 60.6%.

PCE Deflator



Source: Bureau of Economic Analysis via Haver Analytics

Note: Shading shows NBER recessions.

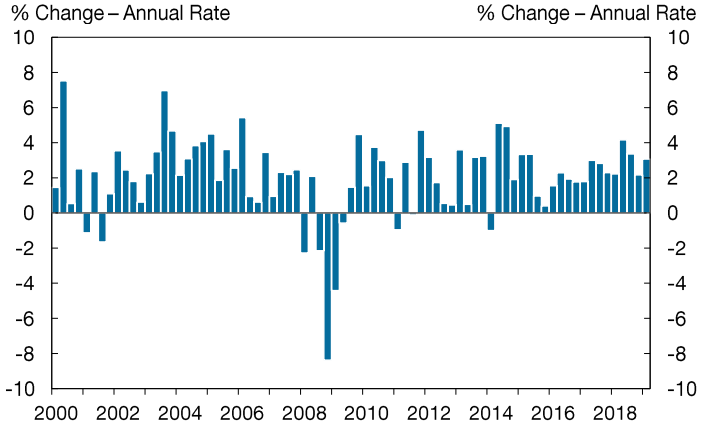
Inflation remains soft

- The total PCE price index rose 0.3% in April after rising 0.2% in March. The core PCE price index (which excludes food and energy prices) increased 0.25% in April, higher than the monthly average in the first quarter of 2019.
  - **Energy prices increased 2.9% in April, and are up 1.7% relative to one year ago. Food prices declined 0.3% and are up 0.8% compared to one year ago.**
- The 12-month changes in the total PCE and core PCE price indices were +1.5% and +1.6%, respectively.
  - **Both total and core PCE inflation have softened over the last few months.**
  - **Headline and core PCE inflation currently lie below the FOMC's 2 percent longer run goal.**

©2019 Federal Reserve Bank of New York

ECONOMIC ACTIVITY

GDP Growth

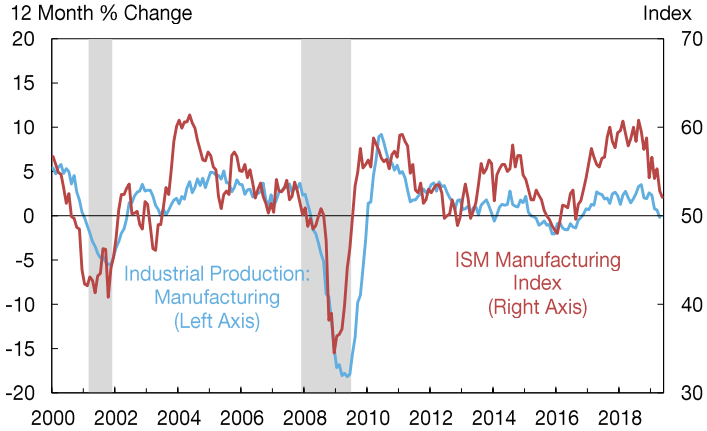


Source: Bureau of Economic Analysis via Haver Analytics

Real GDP growth surprises to the upside in 2019Q1

- Based on the second estimate, real GDP rose 3.1% (annual rate) in 2019Q1. The four-quarter growth rate was 3.2%, the fastest since 2015Q2.
- While the headline number was strong, the underlying details suggest the economy is in transition to a slower growth rate. Growth of final sales to domestic purchasers slowed to 1.5% in 2019Q1 from a recent peak of 4.0% in 2018Q2. Growth of real personal consumption expenditures was just 1.3% (annual rate), down from a 3% annual rate over the second half of 2018. Growth of private fixed investment was also sluggish.
- In contrast, inventory investment remained brisk in 2019Q1, contributing 0.6 percentage point to the overall growth rate. In addition, growth of real exports was robust while imports fell, resulting in a 1.0 percentage point growth contribution.

Manufacturing and ISM Manufacturing Index



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

Note: Shading shows NBER recessions.

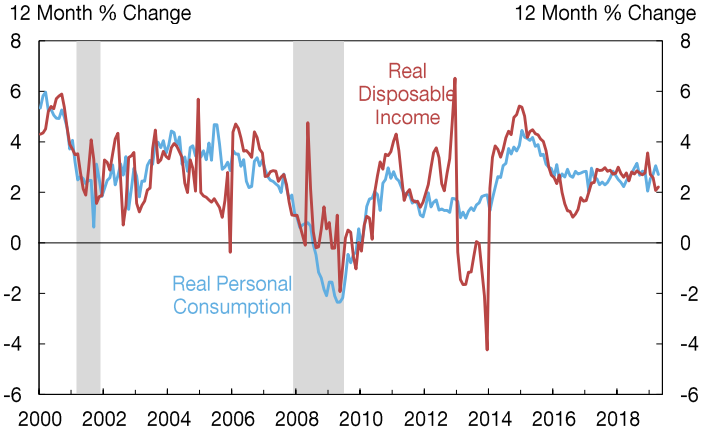
Manufacturing production falls in April

- Manufacturing production fell 0.5% in April.
  - **This is the first month that 12-month manufacturing production growth was negative since October 2016.**
- The ISM Manufacturing Index fell 0.7 points to 52.1 in May.
  - **This reading indicates continued expansion in the manufacturing sector, but at a slower rate than in April.**
  - **Both the ISM Manufacturing Index and manufacturing production are down to their range in 2016Q4.**
- However, regional manufacturing surveys done by the New York, Philadelphia, Richmond and Dallas Feds point to manufacturing activity continuing to grow.

©2019 Federal Reserve Bank of New York

HOUSEHOLDS

Disposable Income and Consumption



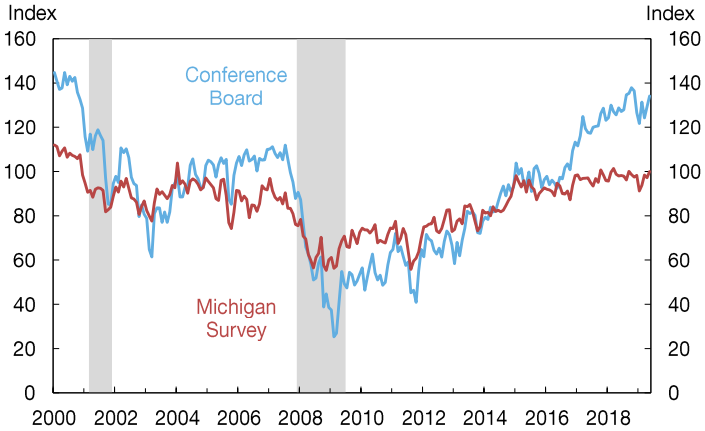
Source: Bureau of Economic Analysis, Federal Reserve Board via Haver Analytics

Note: Shading shows NBER recessions.

Real PCE declines slightly in April

- After strong growth in March (an upward revision of +0.9%), real PCE declined slightly (-0.03%) in April.
  - **Expenditures on durables fell 0.4%, while nondurables increased 0.3%. Expenditures on services fell 0.1%.**
- Real disposable income increased 0.1% in April, after falling 0.2% in March.
  - **Real disposable income has been fairly flat since December.**
- The personal saving rate edged up to 6.2%.
  - **The personal saving rate last peaked at 7.4% in December 2018.**

Consumer Confidence



Source: Conference Board, University of Michigan

Note: Shading shows NBER recessions.

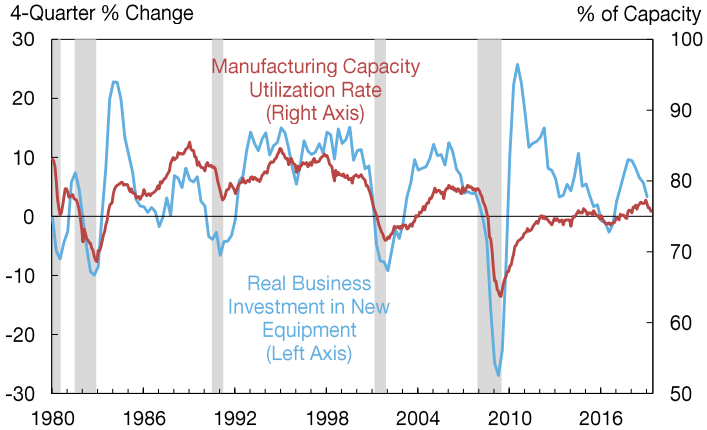
Consumer confidence increases in May

- The Conference Board's Consumer Confidence Index increased to 134.1 in May, from a revised level of 129.2 in April.
  - **This is the second consecutive increase after the index fell to 124.2 in February.**
- The increase in the headline index reflects increases in both the Expectations and the Present Situation components.
  - **The Present Situation Index increased from a revised 169.0 to 175.2, while the Expectations Index rose to 106.6 in May from a revised level of 102.7 in April.**
  - **Perceptions of job availability, along with consumers' short-term outlook on business conditions and employment all improved.**
- Near-term (one-year) household inflation expectations declined to 4.4% from 4.6% in April.
  - **This is the second consecutive decline after the series edged up to 4.6% in March, following a declining trend since October 2018.**

©2019 Federal Reserve Bank of New York

BUSINESS SECTOR

Equipment Investment and Capacity Utilization



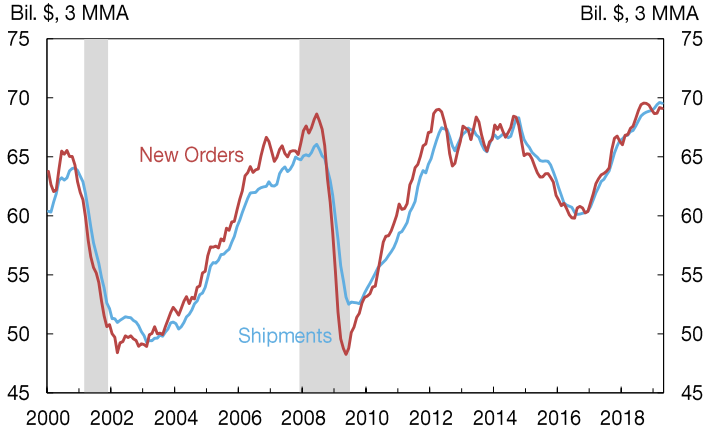
Source: Bureau of Economic Analysis, Federal Reserve Board via Haver Analytics

Note: Shading shows NBER recessions.

Equipment spending falls in 2019Q1

- Real business equipment investment fell at a 1.0% annual rate in 2019Q1. Over the last 4 quarters, equipment spending rose 3.3%, the slowest in the last 2 years.
  - **In 2019Q1, spending rose for transportation equipment, but declined for information, industrial equipment, and other equipment.**
  - **The equipment spending share of nominal GDP remained below its average share in 2013–15.**
- Recent soft equipment investment has occurred against a backdrop of continued low levels of the manufacturing capacity utilization rate.
  - **This rate was 75.7% in April, about 2.5 percentage points below its long-run average.**
  - **Historically, utilization rates near the April level are associated with modest growth of equipment investment.**

Nondefense Capital Goods Excluding Aircraft



Source: Census Bureau via Haver Analytics

Note: Shading shows NBER recessions.

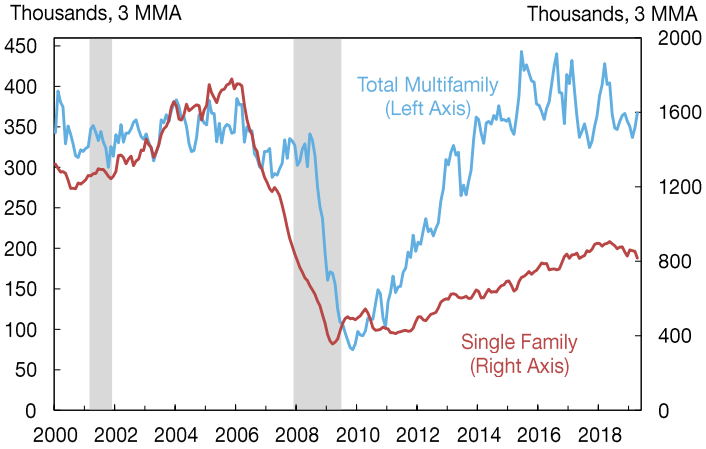
Capital goods orders fall in April

- Shipments of nondefense capital goods excluding aircraft were little changed in April, and were below the monthly average in 2019Q1.
  - **This measure is a proxy for equipment spending that is available at a monthly frequency.**
- New orders of nondefense capital goods excluding aircraft decreased 1.0% in April.
  - **These orders have been on a gradual downward trend since July 2018.**
- Except for March, new orders of nondefense capital goods excluding aircraft have been below shipments since December, suggesting weak near-term momentum in equipment spending.

©2019 Federal Reserve Bank of New York

HOUSING SECTOR

Housing Starts



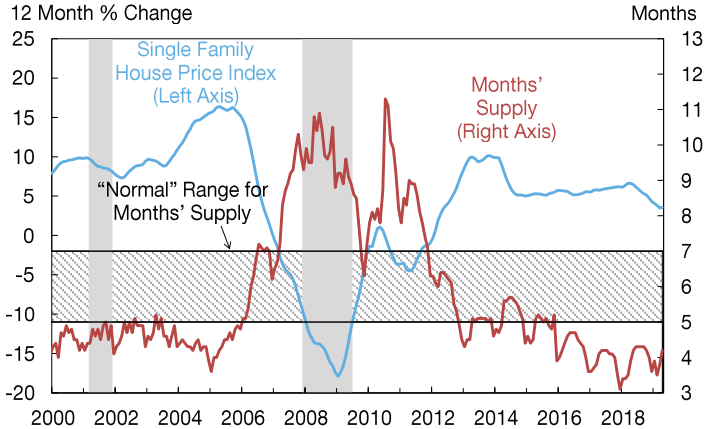
Source: Census Bureau via Haver Analytics

Note: Shading shows NBER recessions.

Housing starts increase in April

- Total housing starts rose a relatively strong 5.7% in April to 1.235 million units at a seasonally-adjusted annual rate (SAAR). The 12-month change was -2.5%.
- Building permits were essentially unchanged in April at 1.29 million units. Single-family permits declined 3.7% while multi-family permits rose 6.8%.
  - **Single-family permits have been on a downward trend since early 2018.**
- Building activity in the housing market improved somewhat in April, aided by lower mortgage interest rates. Mortgage interest rates have declined by about another 30 basis points since April, suggesting some further potential improvement in the housing construction data in coming months.

Single Family Housing Market



Source: CoreLogic, National Association of Realtors via Haver Analytics

Note: Shading shows NBER recessions.

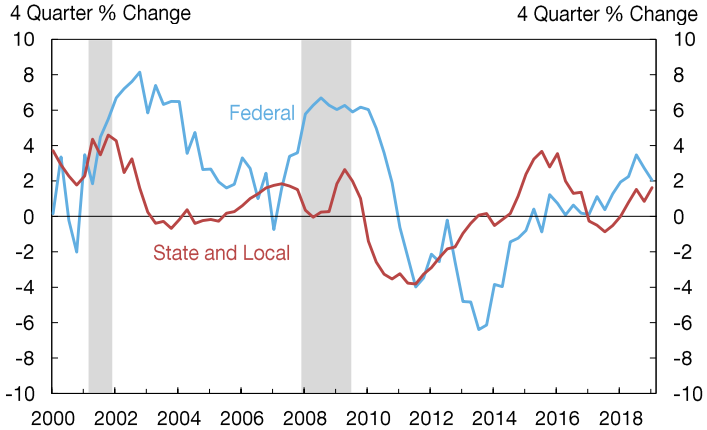
Housing prices continue to grow, but at slower rate

- The CoreLogic single family national home price index rose 3.6% in April on a year-over-year (YoY) basis.
  - **The 12-month growth rate of this index has been at its lowest level since May 2012.**
  - **All states except Connecticut and North Dakota experienced YoY increases in the home price index in April. Idaho experienced the highest YOY increase followed by South Dakota.**
- The inventory of single family homes was 1.61 million units in April, equivalent to a 4.2 months' supply at the current sales pace and up from 3.8 months in March.
  - **Since late 2015, the inventory of single family homes for sales has remained below the normal range of 5-7 months.**
  - **While sales remain low, months' supply has risen over the past year and is now 5.0% above that in March 2018.**

©2019 Federal Reserve Bank of New York

GOVERNMENT SECTOR

Real Government Consumption and Gross Investment



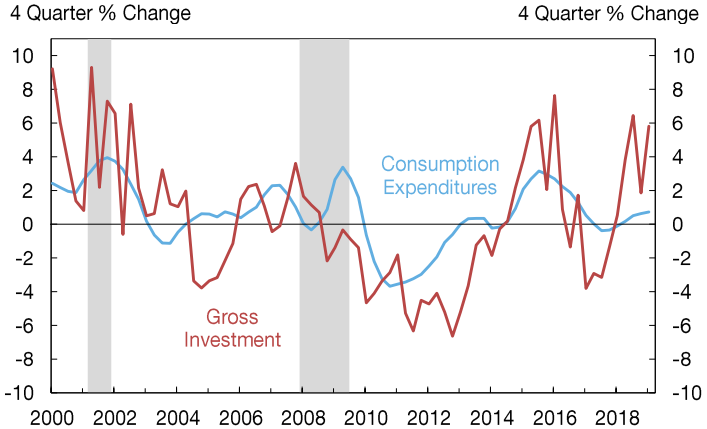
Source: Bureau of Economic Analysis
via Haver Analytics

Note: Shading shows NBER recessions.

Partial gov't shutdown slows federal spending growth

- After increasing at a progressively faster pace over the year ending in 2018Q3, the four-quarter percentage change of real federal spending slowed to 2.7% in 2018Q4 and to 2.0% in 2019Q1. The slowing occurred in the nondefense category as defense spending was not affected by the shutdown.
- Federal spending is expected to rebound in 2019Q2 as postponed spending takes place.
- After slowing in 2018Q4, growth of consumption and gross investment at the state and local level rebounded to 1.6% in 2019Q1, the fastest pace of growth since 2016Q2. The Q4 slowdown and Q1 rebound were concentrated in the structures investment category, which includes infrastructure spending. This type of spending looks to be growing even faster in the second quarter of 2019.

Real State & Local Consumption & Gross Investment



Source: Bureau of Economic Analysis
via Haver Analytics

Note: Shading shows NBER recessions.

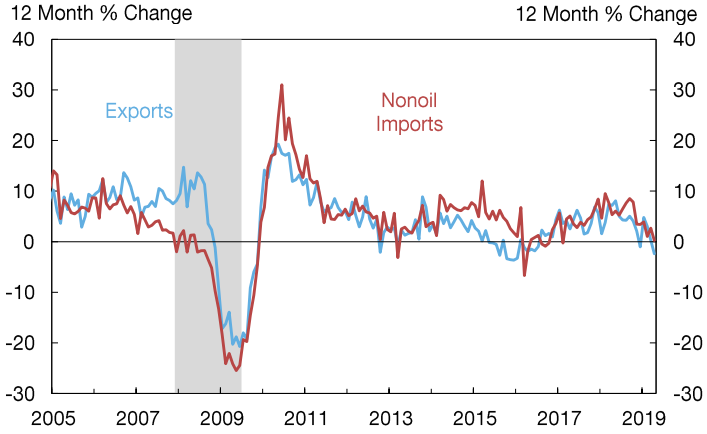
State and local sector rebounds

- State and local government consumption and gross investment spending growth rebounded in 2019Q1, after slowing in 2018Q4.
- The growth slowdown and rebound were both driven by gross investment.
  - **The 4-quarter growth rate of gross investment rose from 1.9% in 2018Q4 to 5.8% in 2019Q1.**
  - **The 4-quarter growth rate of gross investment has now been positive for 5 consecutive quarters, which has not happened since 2015-16.**
- Consumption spending 4-quarter growth ticked up to 0.73%.
  - **State and local consumption grew 0.63% in 2018Q4.**
  - **State and local consumption consists largely of employee salaries and makes up about 80% of the sector's spending.**

©2019 Federal Reserve Bank of New York

INTERNATIONAL DEVELOPMENTS

Real Exports and Nonoil Imports of Goods



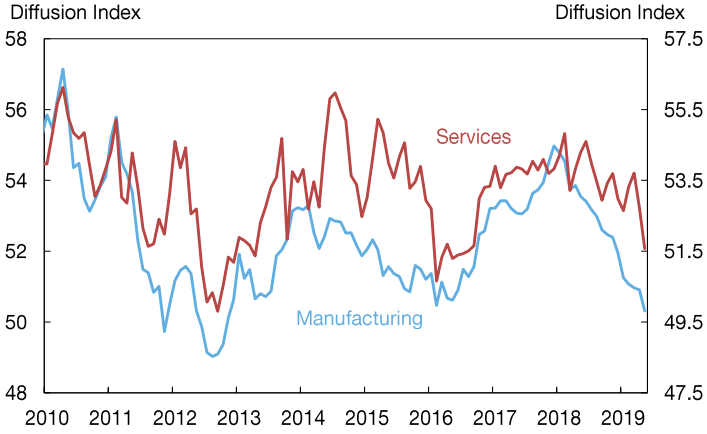
Source: Census Bureau via Haver Analytics

Note: Shading shows NBER recessions.

Trade deficit moves down slightly in April

- The trade deficit decreased slightly to $50.8 billion in April from a $51.9 billion deficit in March. In real terms, both exports and imports fell significantly over the month.
  - **Real goods exports fell 3.4% over the month in April. This export drop was mainly due to lower export volumes of capital goods (excluding autos) and of consumer goods (including autos). Oil goods export volumes increased in April.**
  - **Real nonoil goods imports decreased 2.7% in April. This contraction was broad based, with falling import volumes of autos, capital goods (excluding autos) and consumer goods (excluding autos) leading the way. Oil goods import volumes were down over the month.**
- Net exports added 0.96 percentage point to GDP growth, according to the second estimate of 2019Q1, 7 basis points lower than in the first estimate.

Global Manufacturing and Services PMIs



Source: Markit Economics

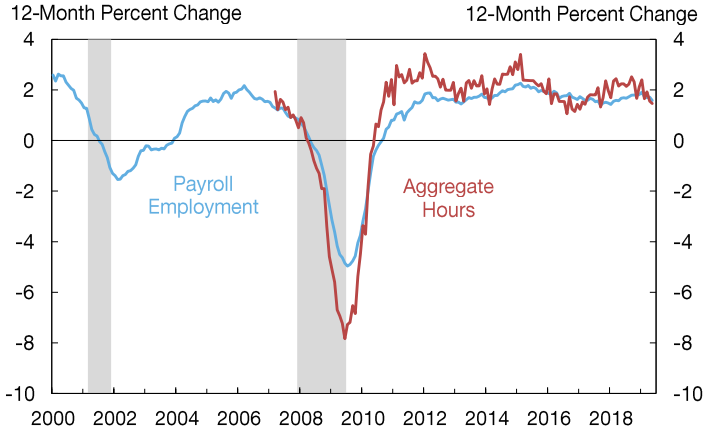
Global surveys point to sharper growth slowdown

- Purchasing managers' indices for manufacturing and services declined in May, signaling a sharper global growth slowdown.
  - **The global manufacturing PMI fell 0.6 point to 49.8, the weakest reading since October 2012.**
  - **The global services PMI fell 1.2 points to 51.6, the weakest reading since August 2016.**
  - **While manufacturing activity has been weakening for over a year, the steep drop in the services index represents a notable break from the earlier resilience of this series.**
- These results would normally be consistent with global GDP growth of 2.2% in the second quarter, down from 2.9% over the prior four quarters.
- New orders indices declined sharply for both manufacturing and services, suggesting that further slowing may lie ahead.

©2019 Federal Reserve Bank of New York

LABOR MARKET

Payroll Employment and Aggregate Hours



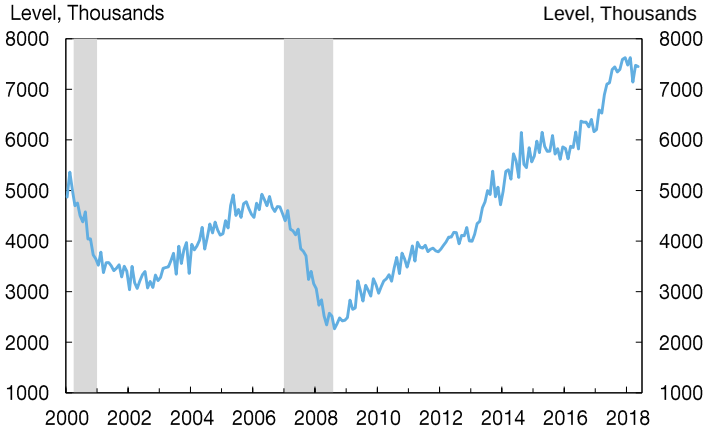
Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

Payroll growth muted in May

- Nonfarm payroll employment increased 75,000 in May, below the lowest forecast in the Bloomberg survey of 80,000.
  - **The Bloomberg median forecast was +175,000.**
- Payroll employment was revised down for both April (from +263,000 to +224,000) and March (from +189,000 to +153,000), resulting in a net downward revision of 75,000.
  - **The latest reading and revisions put the average nonfarm payroll gains in 2019 at 164,000, below the average monthly gains in 2018 of 223,000.**
- Private payroll employment rose by 90,000 in May, while government employment fell by 15,000.

JOLTS - Job Openings



Source: Bureau of Labor Statistics

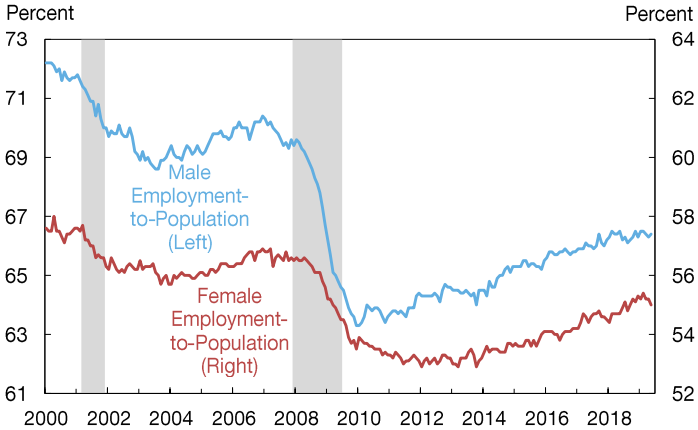
Note: Shading shows NBER recessions.

Vacancy and hire levels remain high as of April

- According to the April JOLTS report, there were 7.4 million job openings as of the last business day of April, essentially unchanged from March.
  - **The job openings rate – representing the number of job openings relative to the sum of employment and job openings – remained at 4.7%.**
- The total number of hires reached a new series high of 5.94 million in April from 5.70 in March.
  - **The former series high of 5.88 million was last attained in October 2018.**

©2019 Federal Reserve Bank of New York

Employment-to-Population Ratio by Gender



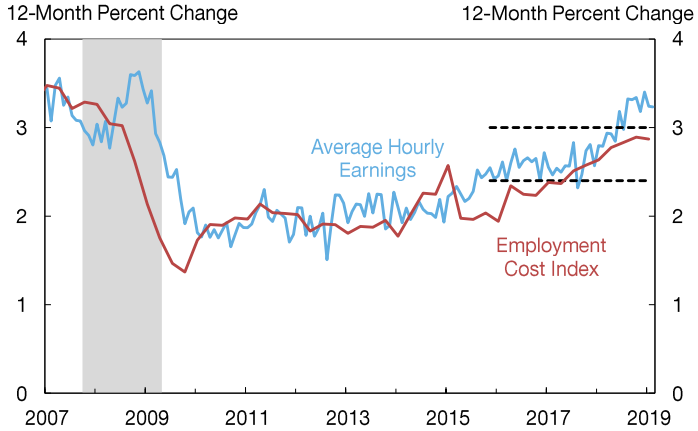
Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

Employment-to-population ratio by gender flattens

- The employment-to-population ratio for males ticked up from 66.3% in April to 66.4% in May, while the female employment-to-population dropped from 55.2% to 55.0%.
- From January 2018 to January 2019, the female employment-to-population ratio increased steadily from 54.4% to 55.3%. Over the same period, the male employment-to-population ratio was unchanged at 66.3%.
  - **Since January 2019, employment growth has flattened for both male and female workers, with employment-to-population ratios declining from 66.5% to 66.4% and from 55.2% to 55.0%, respectively.**

Growth of Average Hourly Earnings and ECI



Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

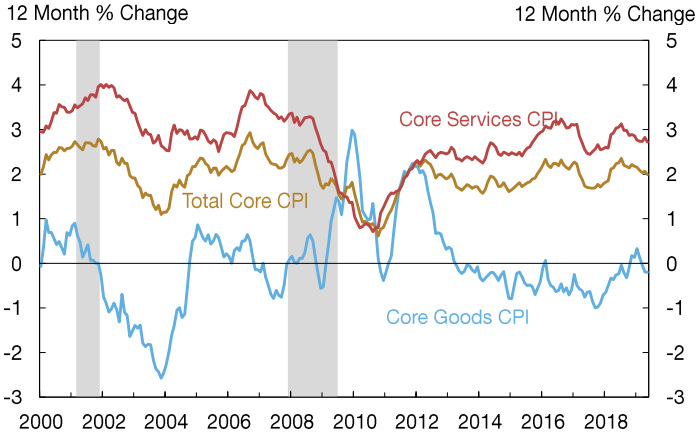
May earnings growth in line with recent readings

- Average hourly earnings rose 0.22% in May (same as April), in line with the average monthly change over 2019Q1 of 0.22%.
  - **On an annual basis, average hourly earnings were up 3.11%, a touch softer than the readings in 2018Q4 and 2019Q1, but above the levels that prevailed earlier.**
- Average weekly earnings increased by 2.81% over a 12-month period, also softer than in 2018 and in 2019Q1.

©2019 Federal Reserve Bank of New York

INFLATION

CPI Inflation: Core Goods and Core Services



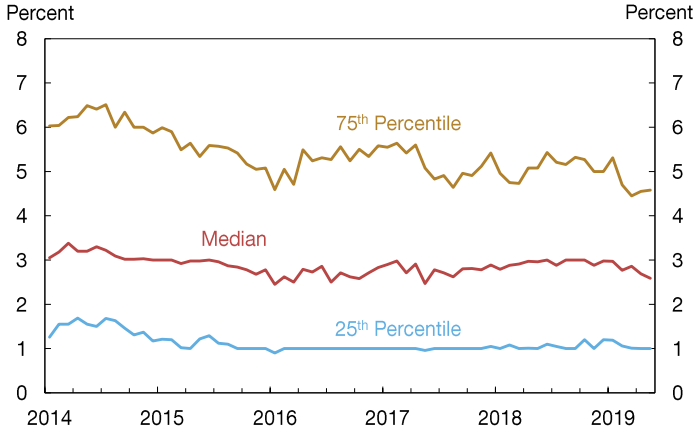
Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

Core inflation disappoints again in May

- Core inflation printed below expectations for the fourth consecutive month.
  - **Core CPI rose 0.1% in May, the same increase as in the previous three months. The 12-month change in the core index was 2.0%, down from a 2.1% change in April.**
- As in March and April, core goods prices fell in May. What sets the May report apart from the previous ones is that core service prices, and shelter in particular, were surprisingly weak.
  - **Core services prices rose 0.2% in May, compared to a 0.3% increase in April. The 12-month change in this index was 2.7%, down from 2.8% in April.**
  - **Core goods prices fell 0.1% in May after decreasing 0.3% in April. The 12-month change in core goods prices in May was -0.2%.**

3-Year Ahead Inflation Expectations



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

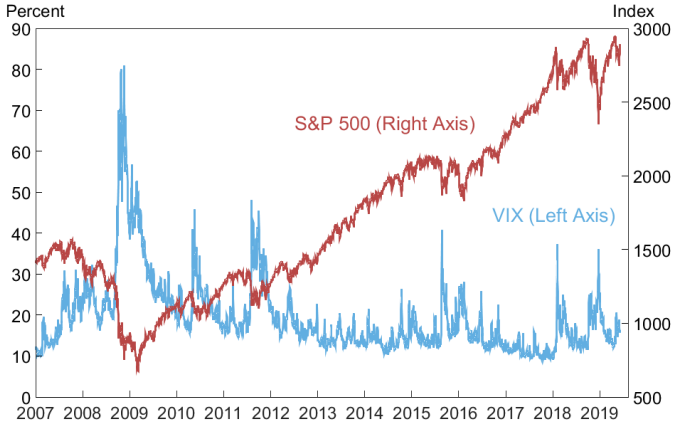
Consumers' inflation expectations drop further in May

- The Federal Reserve Bank of New York's Center for Microeconomic Data released the May 2019 Survey of Consumer Expectations, which shows a decline in median inflation expectations at both the one- and three-year horizons.
  - **Median inflation expectations declined by 0.1 percentage point at both the one-year and three-year horizon in May to 2.5% and 2.6%, respectively—the lowest readings since late 2017.**
- Median inflation uncertainty—or the uncertainty expressed regarding future inflation outcomes—increased at both the one- and three-year horizons.
- Median home price change expectations were stable in May, at 3.0%. This was the sixth consecutive reading at this level.

©2019 Federal Reserve Bank of New York

FINANCIAL MARKETS

U.S. Equity Market Index and Volatility

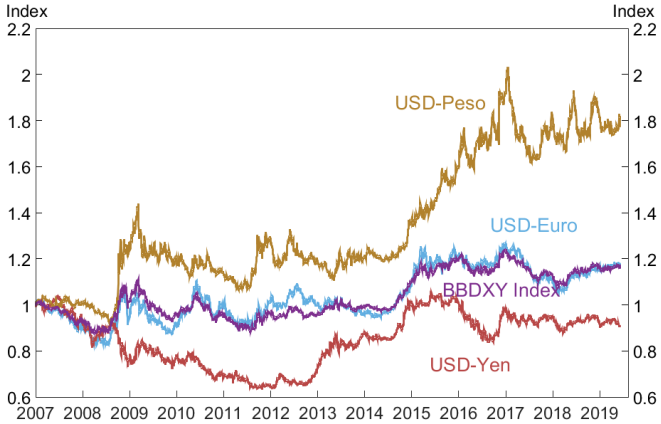


Source: Bloomberg Finance L.P.

U.S. equity markets slightly declined

- U.S. equity markets declined slightly during the last month.
  - **The S&P 500 index lost 1.6% between May 6, 2019 and June 10.**
  - **Since the start of 2019, the S&P 500 index increased 15%.**
- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), was essentially unchanged.
  - **The VIX Index closed at 15.94 on June 10, 2016, 0.5 points above its close on May 6, 2019.**

USD Exchange Rates



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

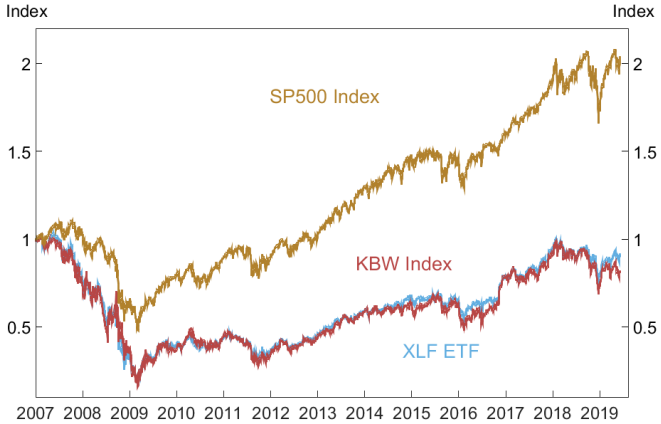
U.S. dollar performance mixed

- The exchange value of the dollar against a basket of global currencies decreased 0.41% between May 6 and June 10.
  - **Over this same period the dollar appreciated by 1.21% against the Mexican peso, but depreciated by 1.02% against the euro and by 2.07% against the Japanese yen.**
- Since the start of 2019, the dollar has depreciated 0.08% against a basket of global currencies.

©2019 Federal Reserve Bank of New York

FINANCIAL MARKETS

U.S. Bank Equities Performance

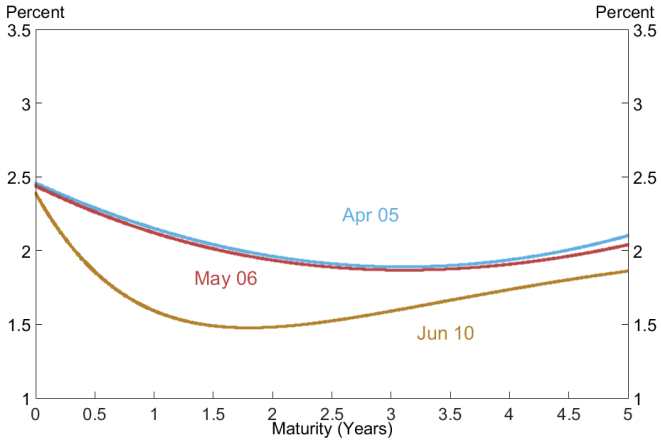


Source: Bloomberg Finance L.P. Note: Start date 01/03/2007 = 1.

Bank stocks lose value

- As measured by the KBW Nasdaq bank index, bank equities decreased 5.7% between May 6 and June 10, 2019.
  - **The index decreased by 4.1 percentage points more than the S&P 500.**
  - **As of June 10, the index is up 10.3% year-to-date.**
- The XLF financial sector ETF decreased 1.9% between May 6 and June 10, 2019.
  - **Since the start of the year, the XLF ETF has gained 13.9% in value.**

Expected Federal Funds Rate



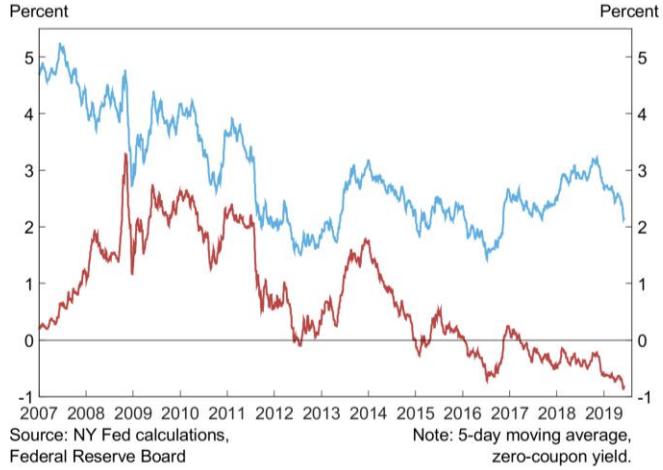
Source: NY Fed calculations, Bloomberg Finance L.P. Note: Estimated using OIS quotes

Implied path for federal funds rate shifts down

- The expected path of the federal funds rate implied by rates on overnight index swaps (OIS) moved down for all maturities over the period from May 6 to June 10, 2019.
  - **The shift for short maturities was more than 50 basis points.**
  - **For intermediate and longer maturities, the expected path of the federal funds rate declined about 30 basis point.**
- The market-implied path remains well below the median path of the FOMC's March 2019 Summary of Economic Projections and the April/May 2019 NY Fed Survey of Primary Dealers at longer horizons.

©2019 Federal Reserve Bank of New York

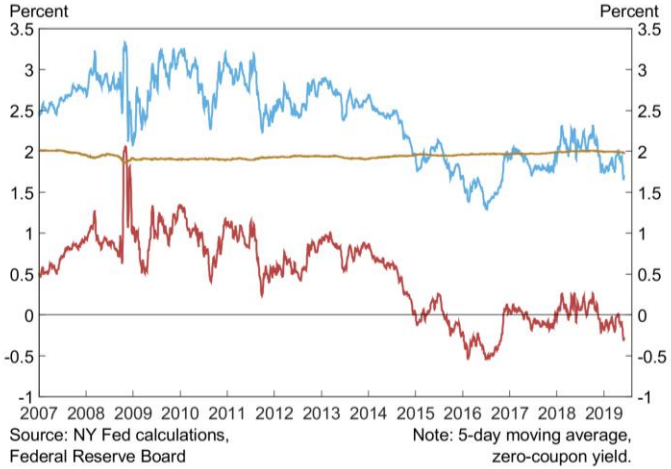
10-Year Treasury and Term Premium



Longer-term Treasury yields decline

- Longer-term Treasury yields decreased since the beginning of May.
  - **The 10-year yield decreased 39 basis points between May 6 and June 10, 2019, reaching fall 2017 levels.**
- Estimates from the Adrian-Crump-Moench term structure model attribute the decline exclusively to a more negative term premium, while the path for the short term interest rate remained broadly unchanged.
  - **The 10-year term premium decreased by 59 basis points between May 6 and June 10, 2019, marking a new all-time low on June 4, 2019 at -82 basis points.**

5-10 Year Forward Decomposition



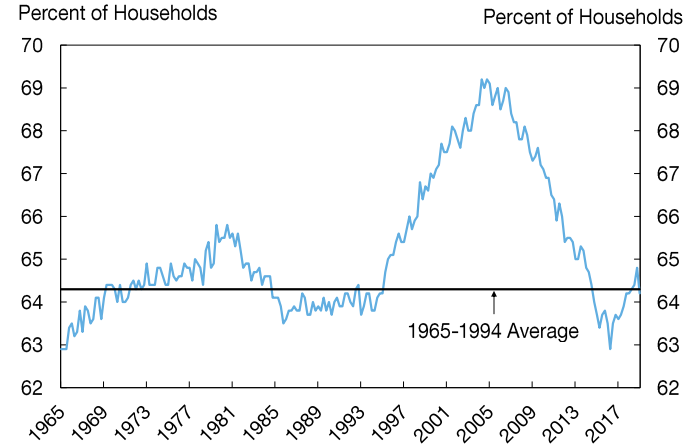
Breakeven inflation falls

- Market-implied TIPS-based measures of long-term inflation expectations ("breakevens") declined in recent weeks.
  - **The five-to-ten year breakeven inflation rate decreased by 21 basis points between May 6 and June 10.**
- According to the Abrahams-Adrian-Crump-Moench model, most of the year-to-date movements in forward inflation compensation continue to reflect movements in the inflation risk premium.
  - **The estimated five-to-ten year inflation risk premium decreased by 18 basis points between May 6 and June 10.**

©2019 Federal Reserve Bank of New York

SPECIAL TOPIC: HOMEOWNERSHIP

Homeownership Rate

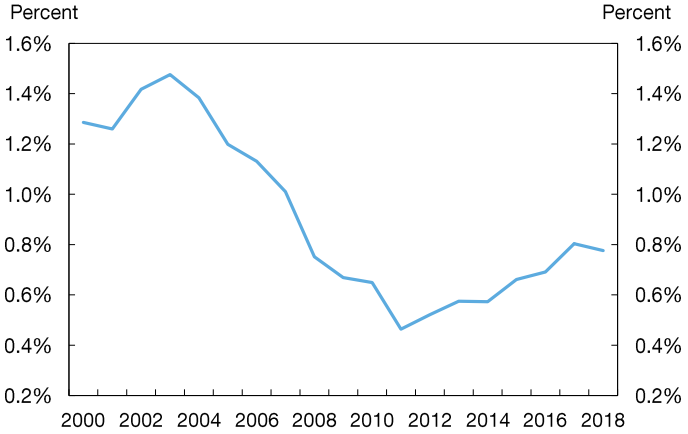


Source: Census Bureau

Homeownership experiences unprecedented cycle

- The homeownership rate (measured as the share of households who own their residence) has historically hovered around its 50-year average, at about 64%.
- The national homeownership rate rose rapidly between 1995 and 2004 to over 69%.
- Between 2006 and 2016, homeownership declined rapidly to below its long-term average, before reverting back to about 64%.
  - **The decline was driven primarily by a fall in the rate of first-time homeownership and by high foreclosure rates.**

Population Share Age 20+ Making First-Time Purchase



Source: New York Fed Consumer Credit Panel / Equifax

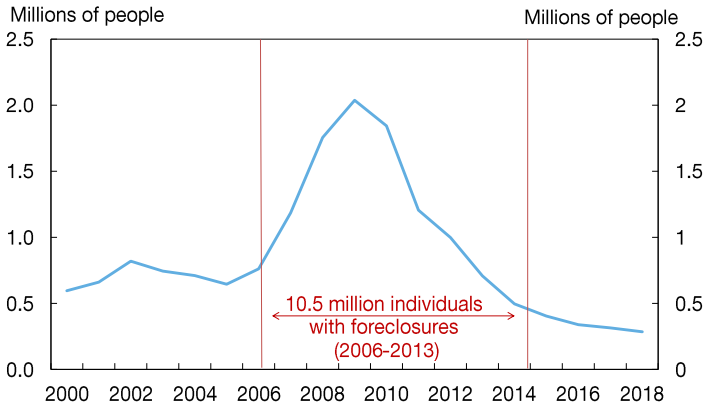
First-time homebuyer boom between 2000-2004

- First-time homebuyers enter homeownership by transitioning from renting or by establishing a new homeowner-household.
- There was a boom in first-time homebuyers between 2000 and 2004, when more than 1.2% of the adult population bought their first home annually.
- First-time homebuying then declined, contributing to the decline in the national homeownership rate. Entry to homeownership has only partly recovered.
  - **In 2011, first-time homebuying reached a low, as 0.5% of the population entered homeownership annually.**
  - **By 2018, that share had risen slightly; 0.8% of the population became homeowners for the first time.**

©2019 Federal Reserve Bank of New York

SPECIAL TOPIC: HOMEOWNERSHIP

Consumers with New Foreclosures

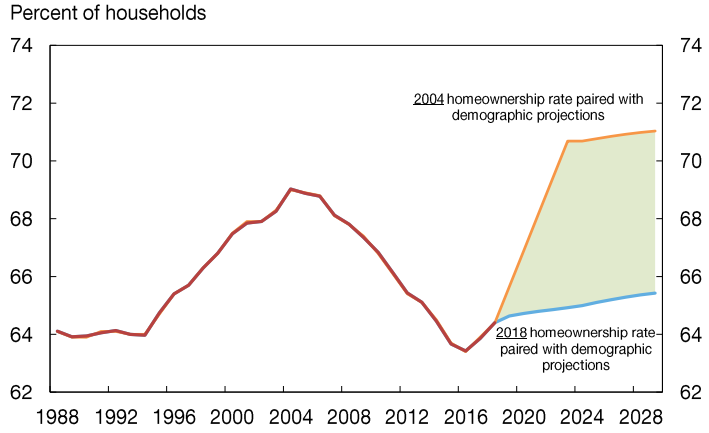


Source: New York Fed Consumer Credit Panel / Equifax. Count shows new foreclosures appearing on consumer credit reports.

Homeownership exits via foreclosures high 2006-13

- One key channel for exiting homeownership is through foreclosures.
- Between 2006 and 2013, there were 10.5 million individuals with new foreclosures on their credit report, a marked increase from historic foreclosure volumes.
- The high number of foreclosures during and after the Great Recession placed substantial downward pressure on the homeownership rate.
- Given the tight mortgage underwriting that has prevailed since the recession, the foreclosure rate has declined to a very low level and is likely to remain low.
  - **Thus, the downward pressure on the homeownership rate through foreclosure is expected to remain minimal.**

Projecting Homeownership



Source: New York Fed Consumer Credit Panel / Equifax

Future path of homeownership

- Homeownership seems to be bouncing back after a long and unprecedented period of decline.
  - **The future path of homeownership is likely to rise given demographic shifts.**
  - **An aging population is likely to be an upward force on the homeownership rate, as homeownership increases with age.**
  - **Chart shows projections based on the evolution of the age distribution under two scenarios: the 2004 high homeownership rates for each age versus the 2018 low homeownership rates for each age.**
- The outlook depends on demand and supply factors.
  - **Demand factors are broadly supportive of a continued rebound through 2030.**
  - **Tight credit may constrain the path of homeownership but will contribute to more sustainable homeownership rates.**

©2019 Federal Reserve Bank of New York