



FEDERAL RESERVE BANK *of* NEW YORK

# U.S. Economy in a Snapshot

Research & Statistics Group

September 2019

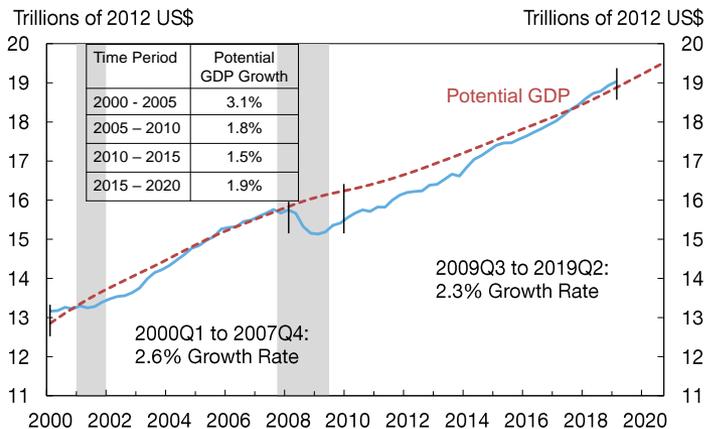
The *U.S. Economy in a Snapshot* compiles observations of staff members of the Federal Reserve Bank of New York's Research and Statistics Group. The views, model results, and analysis presented are solely those of the individual contributors and do not necessarily reflect the position of the Federal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

# OVERVIEW

- Real consumer spending increased solidly in July.
  - Real expenditures on durable and nondurable goods rose robustly, while real services expenditures rose moderately.
  - Retail sales increased modestly in August.
- Real business equipment spending remained sluggish in 2019Q2, and its growth over the first half of 2019 was well below its pace in 2018.
  - New orders of nondefense capital goods excluding aircraft rose moderately and were modestly above shipments in July, but the pattern still suggests tepid near-term momentum.
- Housing activity indicators improved slightly in July.
  - Single-family housing starts and permits have risen over the past two months. Existing home sales firmed in July while new home sales fell. A still-strong labor market and low mortgage rates could provide more support to housing.

- Payroll growth was moderate in August, softer than that in July. The unemployment rate was unchanged, while the labor force participation rate and the employment-to-population ratio both ticked up.
  - Some measures of labor compensation growth have firmed in the past few months.
- Core PCE inflation remains below the FOMC's longer-run objective.
- U.S. equity indices rebounded on balance over the past month, while implied volatility fell. Nominal 10- and 30-year Treasury yields rose sharply in the past several days, but were still below the levels at the end of July, and remained below short-term rates. The market-implied expected policy rate path was modestly below that at the end of July. The broad trade-weighted dollar index rose slightly.

## GDP



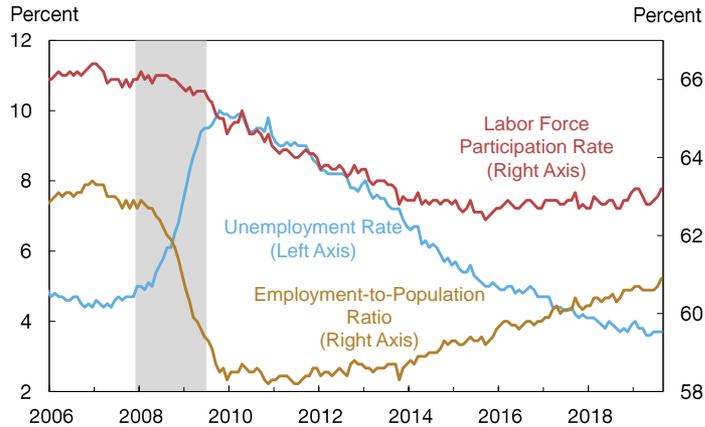
Source: Bureau of Economic Analysis, Congressional Budget Office via Haver Analytics Note: Shading shows NBER recessions.

## Output moderately above potential GDP estimate

- The level of real GDP in 2019Q2 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 3.7% unemployment rate in August was below most estimates of its natural rate, including the CBO's (4.57%).
  - In August, the CBO revised its estimates of potential GDP and the natural rate of unemployment: The revisions were modest.
- The current output and unemployment gaps signal tight resource constraints in the U.S. economy.
  - However, capacity utilization rates remain below historical averages, suggesting looser constraints by that measure.

# OVERVIEW

## Labor Market Indicators



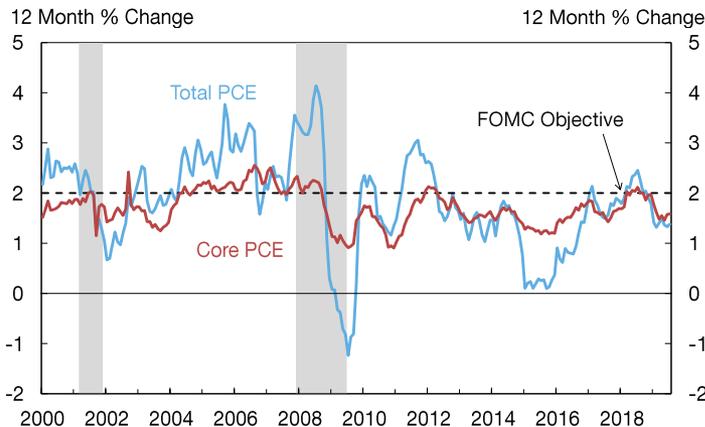
Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

## Participation and employment-to-population edge up

- The unemployment rate held steady at 3.7% in August.
  - An alternative measure of unemployment, U6, which includes marginally attached workers and workers who hold part-time jobs for economic reasons, edged up from 7.0% to 7.2% over the month.
- The employment-to-population ratio increased to 60.9% in August, reaching a new expansion high.
  - The increase in the employment-to-population ratio was concentrated among prime-age workers.
- The labor force participation rate rose to 63.2% in August.
  - The prime-age (25-54) participation rate edged up for men and rose substantially for women.

## PCE Deflator



Source: Bureau of Economic Analysis via Haver Analytics

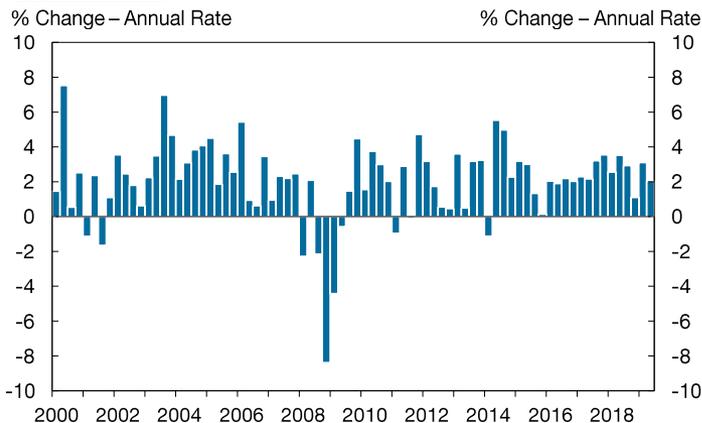
Note: Shading shows NBER recessions.

## Inflation continues to run below 2 percent

- The total PCE price index rose 0.2% in July, up from 0.1% in June. The core PCE price index (which excludes food and energy prices) increased 0.2% in July, a touch lower than in June.
  - Energy prices rose 1.4% in July, and are down 2.0% relative to one year ago. Food prices fell 0.1% and are up 0.9% compared to one year ago.
- The 12-month changes in the total PCE and core PCE price indices were fairly stable at +1.4% and +1.6%, respectively.
  - In the first seven months of 2019, both total and core PCE inflation were softer than they were in 2018.
  - Headline and core PCE inflation remain below the FOMC's 2 percent longer-run goal.

# ECONOMIC ACTIVITY

## GDP Growth

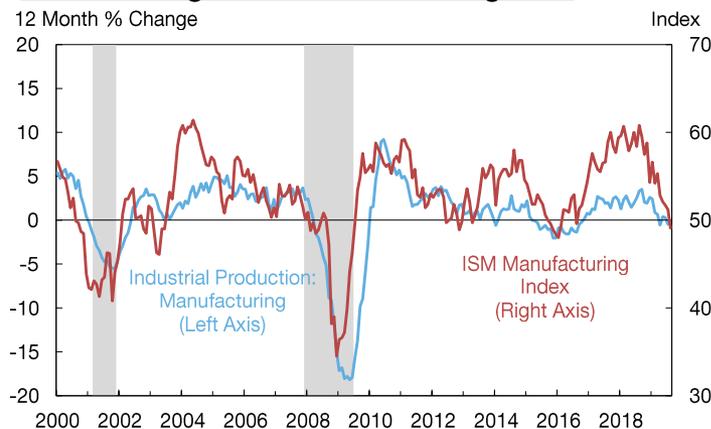


Source: Bureau of Economic Analysis via Haver Analytics

## 2019Q2 real GDP growth revised slightly downward

- Based on the second estimate, real GDP growth was 2.0% (annual rate) in 2019Q2, a slight downward revision from the first estimate of 2.1%. Real GDP growth was 3.1% in 2019Q1 and 2.5% (Q4/Q4) for all of 2018.
- Real personal consumption expenditure rose at a 4.7% annual rate in Q2, an upward revision from the first estimate of 4.3% in Q1. Real PCE growth for the first half of 2019 was 2.9% (annual rate), modestly above the 2.6% growth of 2018.
- Even though they were revised downward, real government consumption and gross investment still grew robustly at both the federal and the state and local levels.
- Both real business fixed investment and real residential investment were weak in the second quarter. The pace of real inventory investment slowed while real exports declined sharply; both components were downwardly revised.

## Manufacturing and ISM Manufacturing Index



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

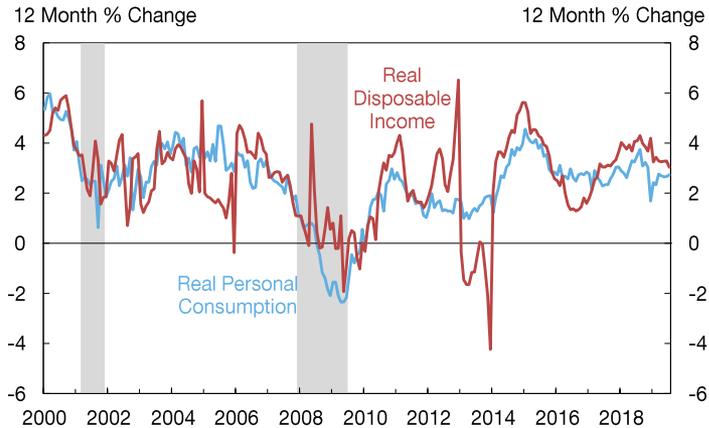
Note: Shading shows NBER recessions.

## Manufacturing activity declines in July

- Manufacturing production decreased 0.4% in July after increasing 0.6% in June.
  - The 12-month change in manufacturing production was -0.5%.**
- The ISM manufacturing headline index decreased in August to 49.1 from 51.2 in July, indicating that economic activity in the manufacturing sector contracted in August.
  - This contraction follows 35 consecutive months of expansion.**
- The regional Fed surveys displayed divergent signals, but on balance, continued to point to weakness in the manufacturing sector.

# HOUSEHOLDS

## Disposable Income and Consumption



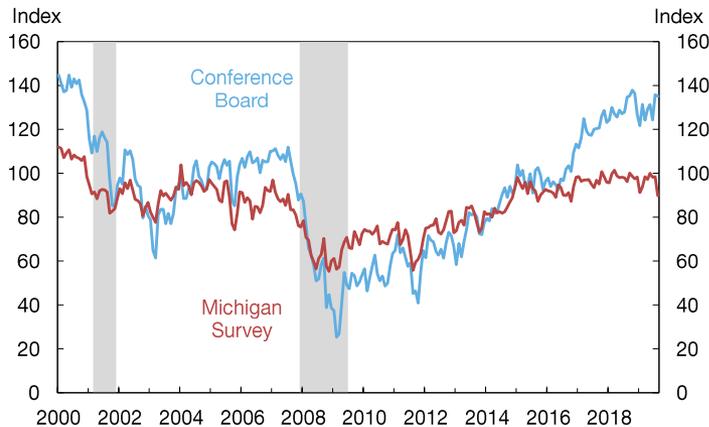
Source: Bureau of Economic Analysis,  
Federal Reserve Board via Haver Analytics

Note: Shading shows NBER recessions.

## Consumers continue to power the economy forward

- Consumption continued on its recent solid trajectory in July, even if income growth was a bit lower than in recent months.
- Real disposable personal income rose 0.1% in July.
  - This weaker performance was partly due to a 1.8% decline in personal interest income.
- Real Personal Consumption Expenditures (PCE) rose 0.4% in July and 2.7% on a 12-month basis, keeping pace with their second quarter performance.
- The saving rate declined to 7.7% in July, down from a peak of 8.8% last February.

## Consumer Confidence



Source: Conference Board,  
University of Michigan

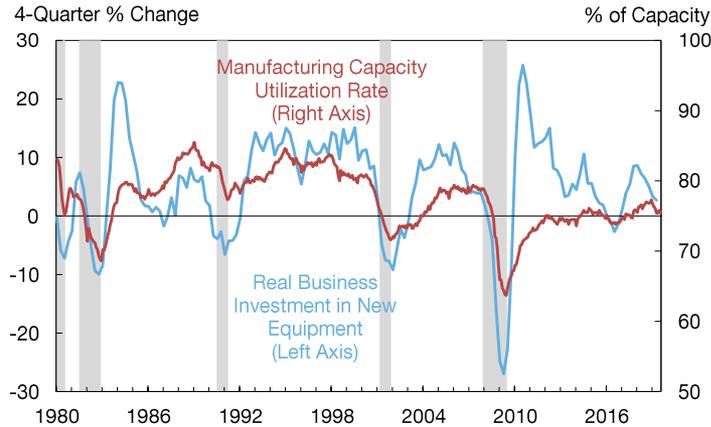
Note: Shading shows NBER recessions.

## Consumer sentiment lowest since October 2016

- The Michigan Index of Consumer Sentiment recorded its largest decline (-9.8) since December 2012.
  - The Michigan measure reached its lowest value since October 2016.
  - The Conference Board measure also fell, but only slightly.
- The large decline in the headline index of the Michigan measure was driven by both the Current Economic Condition and the Expectations components.
  - Employment expectations, which are not factored in the headline index, deteriorated significantly in August.
- The slight decrease in the Conference Board measure was due to the decline in the Expectations component.
  - Consumers' short-term outlook on business conditions and employment deteriorated in August.

# BUSINESS SECTOR

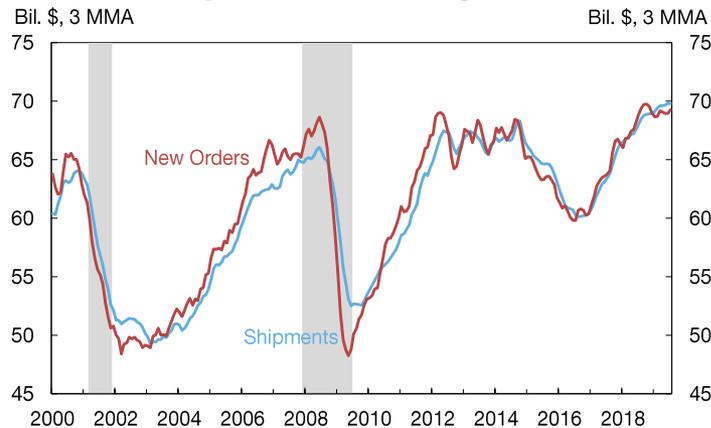
## Equipment Investment and Capacity Utilization



## Equipment spending remains sluggish in 2019Q2

- Real business equipment investment rose 0.7% (annual rate) in 2019Q2, after falling slightly in Q1. Over the last 4 quarters, equipment spending rose 2.7%, the slowest since 2017Q1.
  - In 2019Q2, spending rose solidly for information equipment, increased moderately for industrial and other equipment, and declined for transportation equipment.
  - The equipment spending share of nominal GDP remained below its average share in 2013–15.
- Recent sluggish equipment investment has occurred against a backdrop of continued low levels of the manufacturing capacity utilization rate.
  - This rate was 75.4% in July, 2.9 percentage points below its long-run average.
  - Historically, utilization rates near the July level are associated with modest growth of equipment investment.

## Nondefense Capital Goods Excluding Aircraft

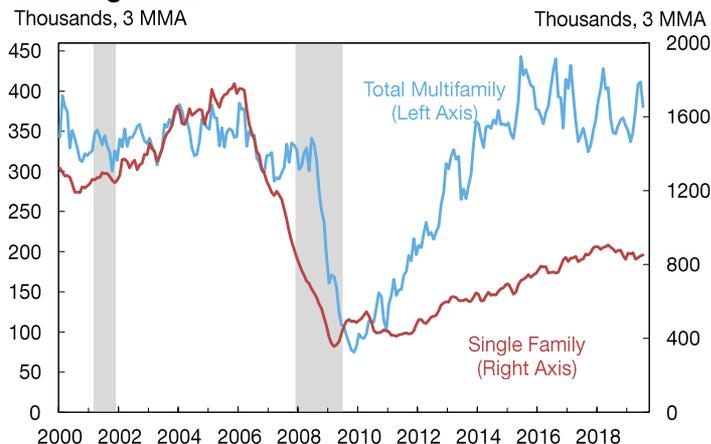


## Capital goods shipments fall moderately in July

- Shipments of nondefense capital goods excluding aircraft declined 0.6% in July. The July level was below the average monthly level in 2019Q2.
  - This measure is a proxy for investment spending that is available at the monthly frequency.
- Orders of nondefense capital goods excluding aircraft moved up 0.2% in July, the third consecutive monthly increase in these orders.
- Even with the recent increases in new orders, these were only slightly above shipments in July (and still below on a 3-month average basis), suggesting continued sluggish near-term momentum.

# HOUSING SECTOR

## Housing Starts



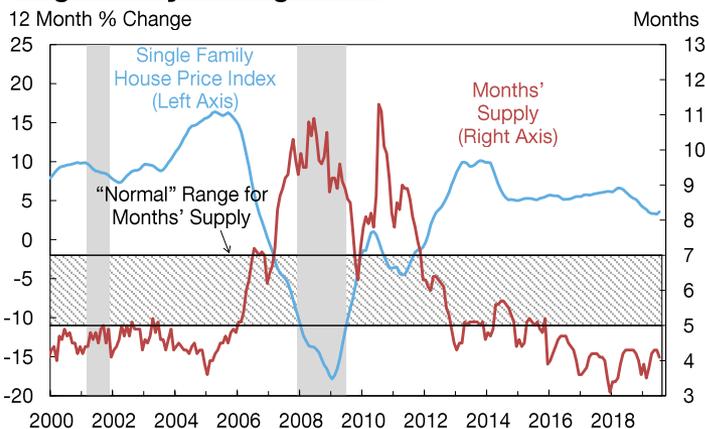
Source: Census Bureau via Haver Analytics

Note: Shading shows NBER recessions.

## Total housing starts decline again in July

- Total housing starts declined by 4% in July to 1.19 million units (seasonally-adjusted annual rate), following a 1.8% fall in June. Since July 2018, total housing starts are up a modest 0.6%.
- The decline in total housing starts was entirely in the multi-family sector. Multi-family starts fell 16.2% in July following a 16.4% decline in June. At just 315,000 units, multi-family starts in June were the lowest since August 2017. However, multi-family permits rose 19.3% in July to 433,000 units.
- Single-family housing starts rose 1.3% in July to 876,000 units. This follows a 6.2% increase in June. Single-family permits have increased for three consecutive months. The single-family sector appears to be responding to the roughly 125 basis points decline of mortgage rates since the beginning of 2019.

## Single Family Housing Market



Source: CoreLogic, National Association of Realtors via Haver Analytics

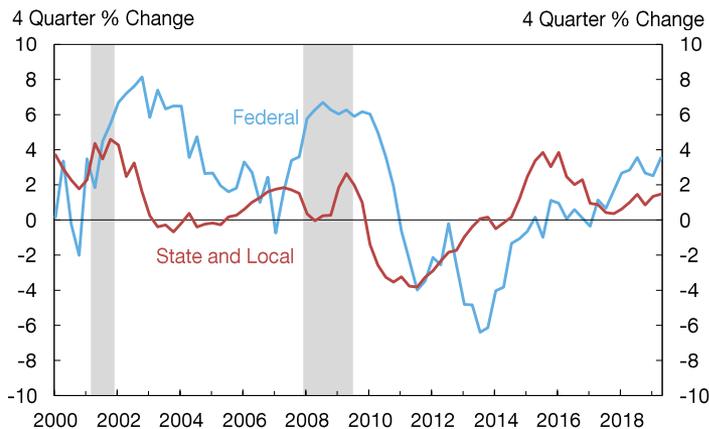
Note: Shading shows NBER recessions.

## Supply of existing homes for sale remains tight

- As a rule of thumb, when the month's supply of homes listed for sale at the current sales pace is in the 5 to 7 months range, home prices tend to be stable. Above 7 months, home prices tend to fall, below 5 months home prices tend to increase. This relationship is evident at both the national level and the regional level.
- Since late 2015, the month's supply has been consistently below 5, and in late 2017 fell to just 3.1, lower than at any time during the housing boom of the mid- 2000s. This tight supply has been associated with steady home price appreciation.
- Despite the tight supply, over the past year the rate of home price appreciation has slowed. Analysts attribute this slowing to the tax bill passed in late 2017, which raised the after-tax cost of owning a home for some prospective buyers, and declining affordability, particularly for first-time buyers.

# GOVERNMENT SECTOR

## Real Government Consumption and Gross Investment



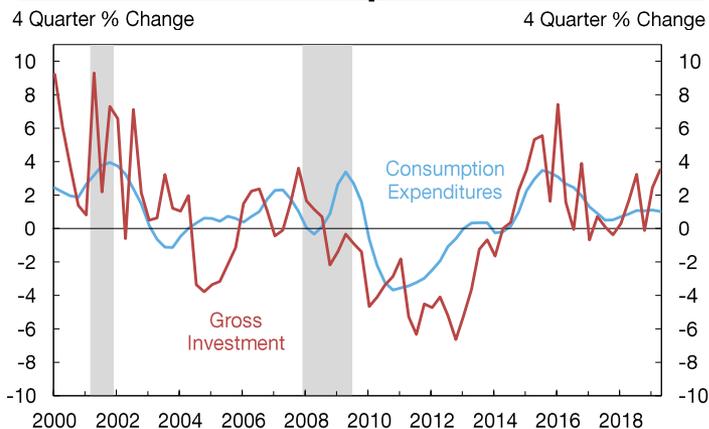
Source: Bureau of Economic Analysis via Haver Analytics

Note: Shading shows NBER recessions.

## Growth of real government spending strong in 2019Q2

- Over the four quarters ending in 2019Q2, real federal consumption and gross investment was up 3.5% while spending at the state and local level was up 1.5%.
- Federal spending rebounded in Q2 following the slowing in spending in Q1 resulting from the partial government shut-down. Spending for national defense was up 4.7% over the four quarters ending in 2019Q2, while nondefense spending was up 1.9%. Growth of federal spending is expected to slow but remain positive over the next several quarters.
- Real spending by state and local governments has been strengthening since the end of 2017. As of 2019Q2, the four-quarter change was up to 1.5%.

## Real State & Local Consumption & Gross Investment



Source: Bureau of Economic Analysis via Haver Analytics

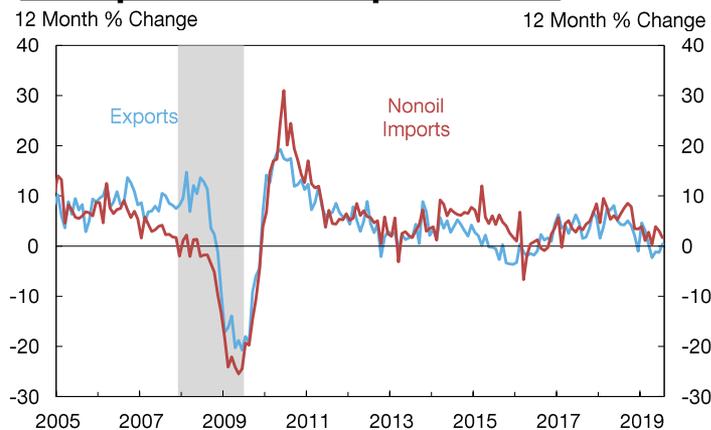
Note: Shading shows NBER recessions.

## State and local government spending grows

- State and local government consumption and gross investment continued to rebound in the second quarter of 2019.
- State and local gross investment spending growth accelerated in Q2, rising 3.5% over the four quarters ending in Q2.
  - This category includes public works and infrastructure projects.**
- Consumption growth has held steady at about 1% annually for the last year.
  - Consumption expenditures consist largely of employee salaries and make up over 80% of the sector's spending.**

# INTERNATIONAL DEVELOPMENTS

## Real Exports and Nonoil Imports of Goods



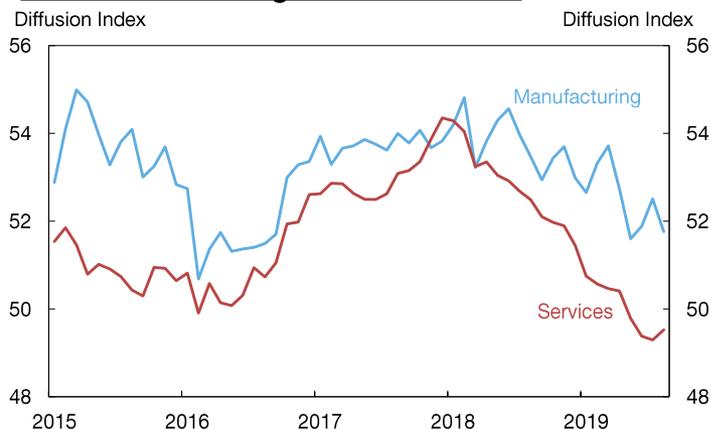
Source: Census Bureau via Haver Analytics

Note: Shading shows NBER recessions.

## Trade deficit declines in July

- The trade deficit decreased to \$54 billion in July from a \$55.5 billion deficit in June. In real terms, exports increased over the month, whereas imports remained essentially unchanged.
  - Real goods exports were up 0.4% over the month in July, owing to higher exports of capital and consumer goods. Oil goods export volumes fell in July.
  - Real nonoil goods imports declined 0.4% in July and this was mostly due to lower imports of capital goods (excluding autos). Real oil goods imports increased over the month.
- Net exports subtracted 0.72 percentage point of GDP growth according to the second estimate of GDP in 2019Q2, 7 basis points more than in the first estimate.

## Global Manufacturing and Services PMIs



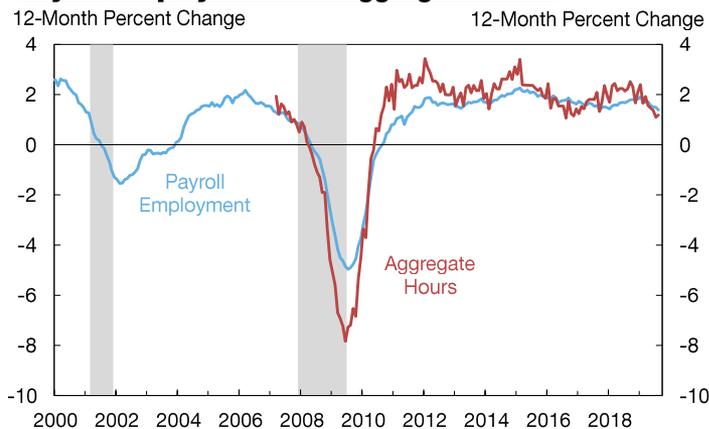
Source: Markit Economics

## Global surveys point to sluggish growth

- Purchasing managers' indices for manufacturing and services moved in opposite directions in August, but remain at levels consistent with a sluggish global economy.
  - The global manufacturing PMI rose 0.3 points to 49.5, the fourth consecutive print below the break-even line of 50.
  - The global services PMI fell 0.8 points to 51.8, just above the multi-year low recorded in May.
  - Both series have been on a downward path since early 2018.
- These results would normally be consistent with global growth of 2.2% in the third quarter, about 0.7 percentage point below most estimates of global potential.
- New orders indices for both manufacturing and services fell to multi-year lows, suggesting that further slowing may lie ahead.

# LABOR MARKET

## Payroll Employment and Aggregate Hours



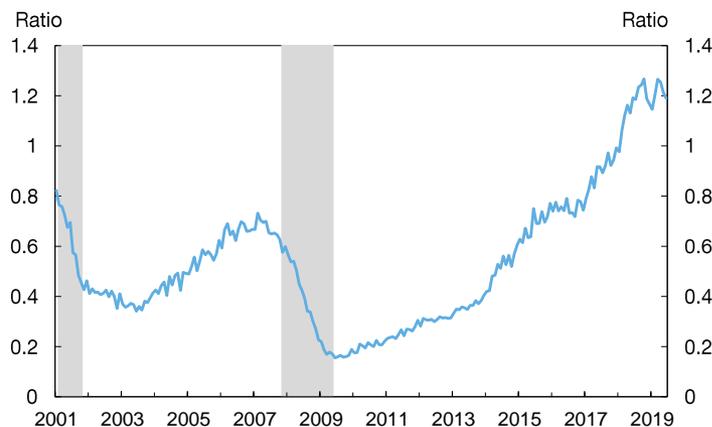
Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

## August brings somewhat softer payroll growth

- Nonfarm payrolls increased by 130,000 in August.
  - The increase in payrolls fell short of the median forecast in the Bloomberg survey of 160,000.
  - Payroll employment was revised down for both June and July, yielding a net downward revision of 20,000.
- Private payrolls grew by 96,000 in August, well below the year-to-date average of 145,000.
  - Government payroll growth was bolstered by hiring of temporary workers for the 2020 Census (+25,000).
- Average weekly hours ticked up to 34.4 from 34.3 the month prior.
  - The 12-month percent change in aggregate hours in August was 1.18%, a full percentage point below its 2018 average of 2.18%.

## Ratio of Job Openings to Unemployed



Source: Bureau of Labor Statistics

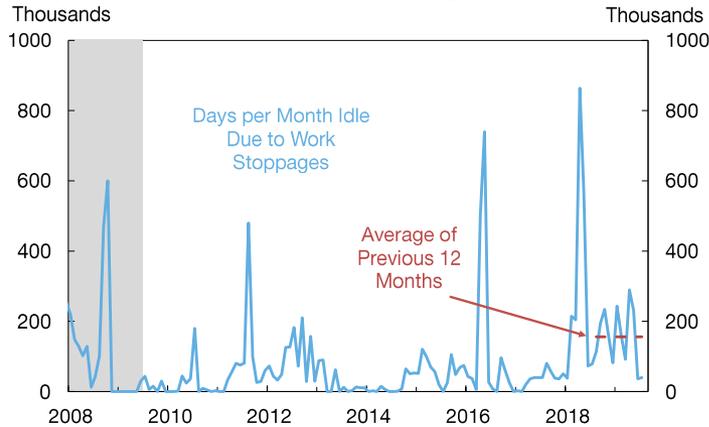
Note: Shading shows NBER recessions.

## Strong but moderating level of job openings

- The ratio of job openings to unemployed workers, a measure of labor market tightness, was 1.19 in July, slightly below its average for the previous twelve months of 1.21.
  - This ratio has exceeded one since March 2018, implying there are more job openings than unemployed people to fill those jobs, excluding those not in the labor force.
  - The ratio of job openings to unemployed workers dipped slightly in July from 1.21 in June.
- The job openings rate – representing the number of vacancies relative to the sum of employment and vacancies – dipped to 4.5% in July, down from 4.6% in June.
  - The job openings rate previously reached a series-high of 4.8% in January 2019.

# LABOR MARKET

## Days Idle Due to All Work Stoppages in Effect



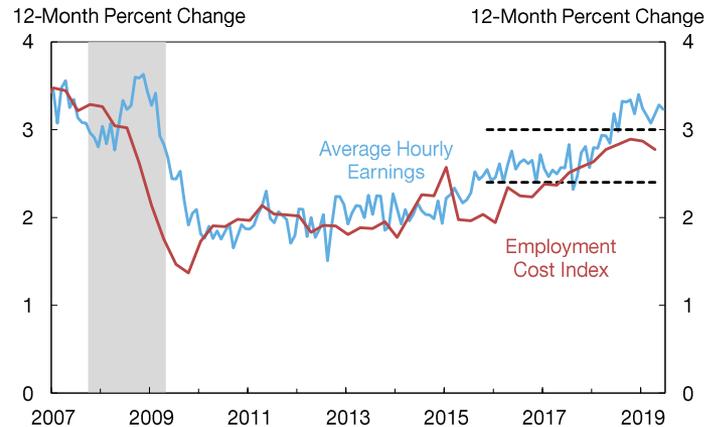
Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

## Sustained strike activity following lively 2018

- In the last twelve months, work stoppages in effect have resulted in an average of 156,000 days idle per month.
  - Days idle due to work stoppages – the product of the number of workers involved in a stoppage and its length in days – is a proxy for strike activity.
  - The 12-month average of days idle due to work stoppages is well above previous levels.
- 308,000 workers participated in a work stoppage involving 1,000 or more individuals in the first seven months of 2019.
  - Last year, 485,000 workers participated in a work stoppage, a three-decade high.
  - From 2008 to 2017, an average of only 65,000 workers engaged in a work stoppage per year.

## Growth of Average Hourly Earnings and ECI



Source: Bureau of Labor Statistics via Haver Analytics

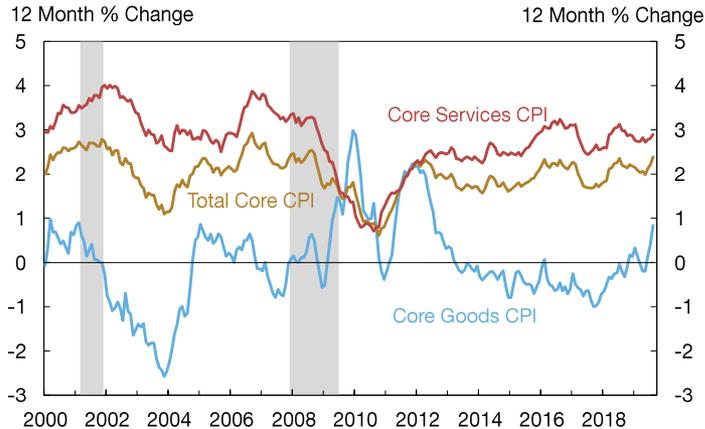
Note: Shading shows NBER recessions.

## Strong earnings growth continues in 2019

- Average hourly earnings rose by 0.39% from \$28.00 in July to \$28.11 in August.
  - Average hourly earnings were up by 3.23% on an annual basis, in line with 2019 levels.
  - In 2018, annualized hourly earnings growth averaged just 2.96%.
- In August, average weekly earnings increased to \$966.98, up 0.6% from July.
  - The 12-month change in average weekly earnings was 2.93%.
  - This growth is slightly softer than 2018 and the first quarter of 2019.

# INFLATION

## **CPI Inflation: Core Goods and Core Services**



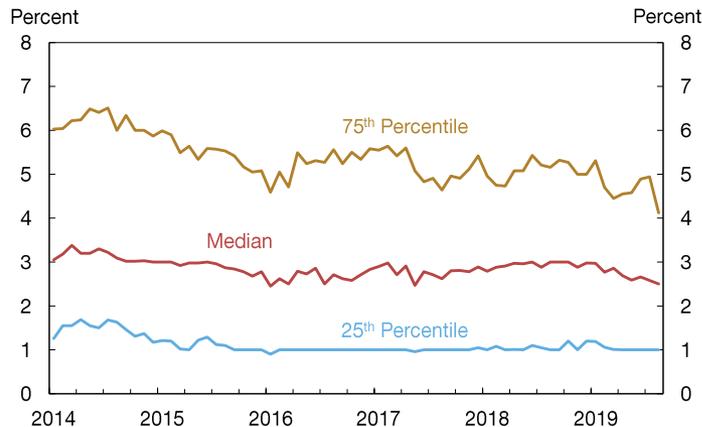
Source: Bureau of Labor Statistics  
via Haver Analytics

Note: Shading shows NBER recessions.

## **Core inflation is strong again in August**

- The August report suggests that core inflation is finally moving towards the FOMC's longer-run goal.
  - Core CPI rose 0.3% in August, the same increase as in the previous two months. The 12-month change in the core index was 2.4%, up from a 2.2% change in July.
- Core services (services ex-energy) prices rose 0.3% in August, as they did in June and July.
  - The 12-month change in this index was 2.9%, up from 2.8% in July.
- Core goods (commodities ex-food and energy) prices rose 0.2% in August, the same increase as in July.
  - The 12-month change in core goods prices was 0.8%, up as much as 1% relative to only three months ago.

## **3-Year Ahead Inflation Expectations**



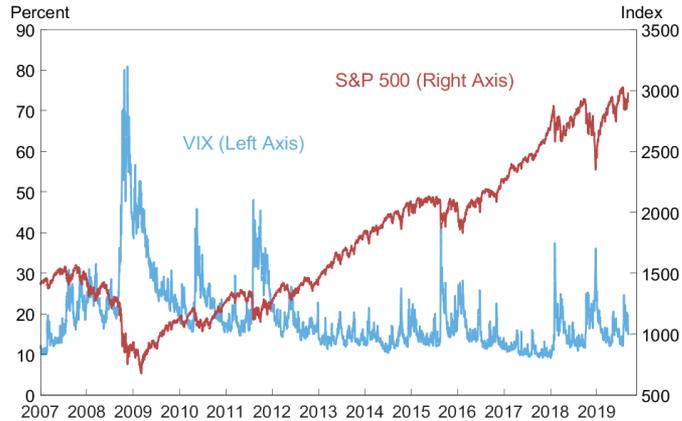
Source: Survey of Consumer Expectations.  
Federal Reserve Bank of New York

## **Consumers less optimistic in August**

- Inflation expectations declined.
  - Median inflation expectations declined by 0.2 percentage point at the one-year horizon to 2.4% (a new series low), and by 0.1 percentage point at the three-year horizons to 2.5% in August.
- Home price expectations reached new series lows.
  - Median home price change expectations declined by 0.1 percentage point to a new series low of 2.9%. This is the first decline since December 2018, after 8 consecutive readings of 3.0%.
- Consumers were less optimistic about own their financial situations.
  - Expectations about employment, growth in earnings, spending, income, and household financial situation declined.

# FINANCIAL MARKETS

## U.S. Equity Market Index and Volatility



Source: Bloomberg Finance L.P.

## U.S. equity markets rise

- U.S. equity markets rose over the past month.
  - The S&P 500 index increased 4.7% between August 5 and September 9, and is just 1.6% below its July 26 record high.
  - The index is higher by 18.8% year to date.
- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), declined over the past month.
  - The VIX Index closed at 15.3 on September 9, down from, 24.6 on August 5, and close to its year-to-date average.

## USD Exchange Rates



Source: Bloomberg Finance L.P.

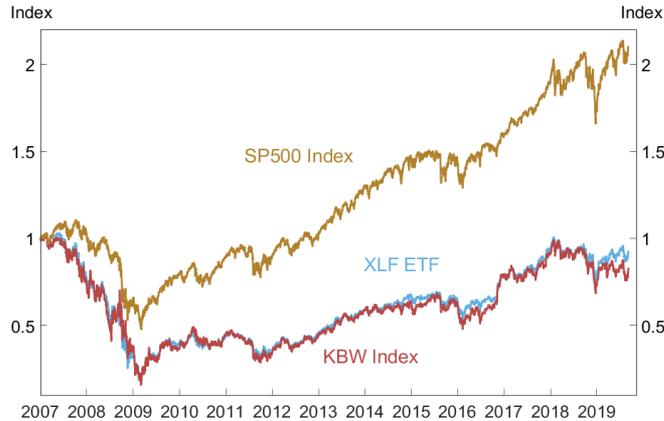
Note: Start date 01/03/2007 = 1.

## U.S. dollar little changed

- The exchange value of the dollar against a basket of global currencies increased 0.3% between August 5 and September 9.
  - Over this same period the dollar appreciated by 1.4% against the euro and 1.2% against the Japanese yen, and depreciated 0.2% against the Mexican peso.
- Since the start of 2018, the dollar has appreciated 1.0% against a basket of global currencies.

# FINANCIAL MARKETS

## US Bank Equities Performance



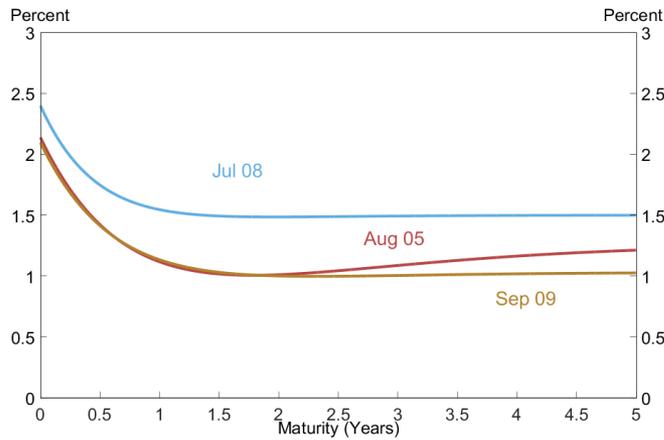
Source: Bloomberg Finance L.P.

Note: Start date 01/03/2007 = 1.

## Bank stocks perform in line with broader market

- As measured by the KBW Nasdaq bank index, bank equities increased 3.8% between August 5 and September 9.
  - As of September 9, the index was up 14.2% year to date.
- The XLF financial sector ETF increased 4.4% between August 5 and September 9.
  - As of September 9, the index was up 17.0% year to date.

## Expected Federal Funds Rate



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

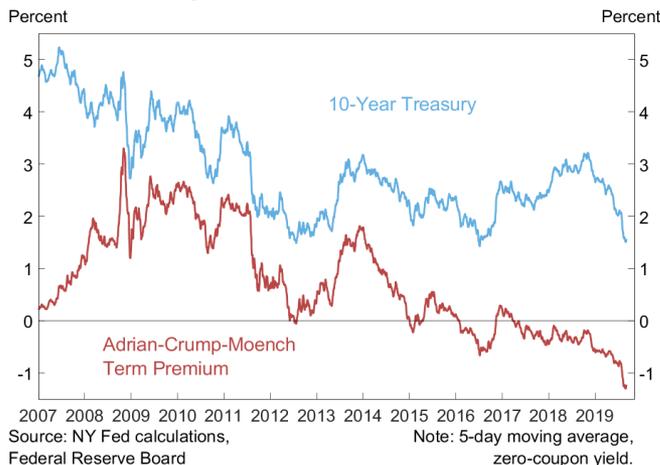
Note: Estimated using OIS quotes

## Implied path for federal funds rate little changed

- The expected path of the federal funds rate implied by rates on overnight indexed swaps (OIS) decreased modestly for longer maturities and was essentially unchanged for shorter maturities between August 5 and September 9.
- The market-implied path remains well below the median path from the FOMC's June 2019 Summary of Economic Projections and the July 2019 NY Fed Survey of Primary Dealers.

# FINANCIAL MARKETS

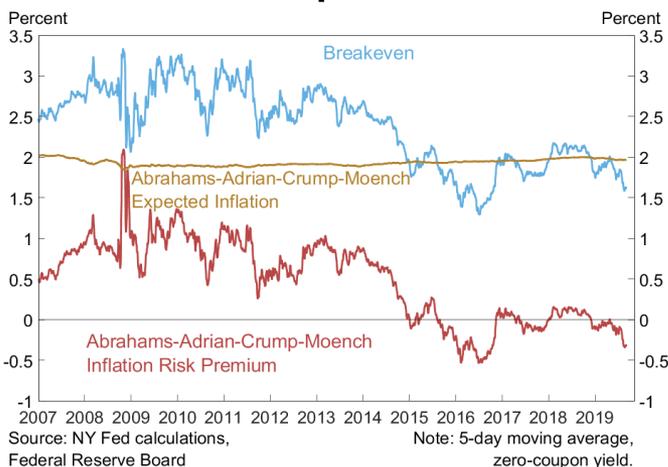
## 10-Year Treasury and Term Premium



## Longer-term Treasury yields decline

- Longer-term Treasury yields declined notably over the past month.
  - The 10-year yield decreased about 35 basis points between August 5 and September 9, reaching its lowest level in three years.
- Estimates from the Adrian-Crump-Moench term structure model attribute most of the decrease to a more negative term premium as opposed to a lower path for the short term interest rate.
  - The 10-year term premium decreased 26 basis points between August 5 and September 9, reaching a new all-time low of -130 basis points.

## 5-10 Year Forward Decomposition

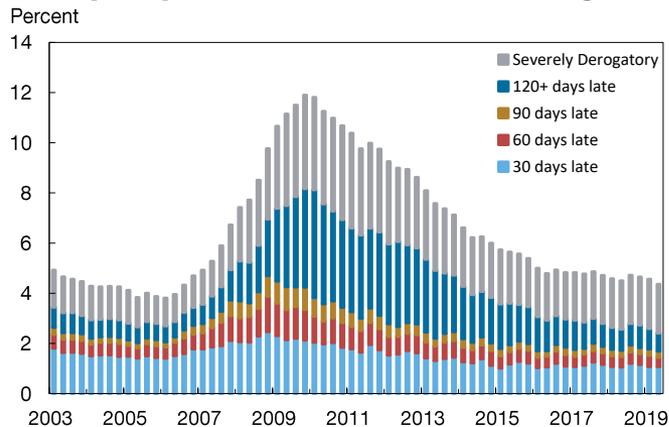


## Breakeven inflation declines

- Market-implied TIPS-based measures of long-term inflation expectations (“breakevens”) declined over the past month.
  - The five-to-ten year breakeven inflation rate was 1.61% on September 9, down 13 basis points since August 5 and down 19 basis points year to date.
- According to the Abrahams-Adrian-Crump-Moench model, the year-to-date movements in forward inflation compensation largely reflect movements in the inflation risk premium.
  - The estimated five-to-ten year inflation risk premium has decreased 24 basis points year to date.

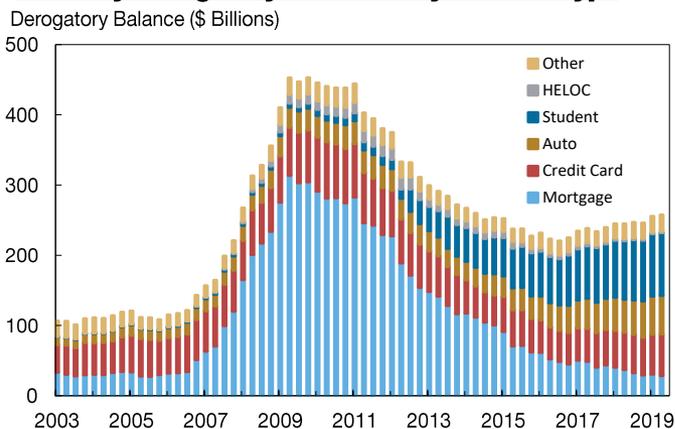
# SPECIAL TOPIC: SEVERELY DEROGATORY DEBT

## Delinquency Rate: Total Balance Outstanding



Source: New York Fed Consumer Credit Panel / Equifax

## Severely Derogatory Balances by Product Type



Source: New York Fed Consumer Credit Panel / Equifax

## Delinquency from the consumer perspective

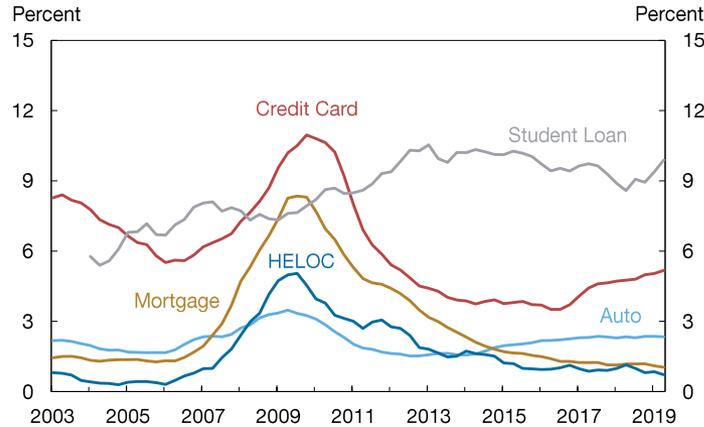
- Data from credit bureaus are designed to assess borrowers. They reflect how much a borrower owes, and whether they are current or behind on payments.
  - A simple aggregation of delinquent balances as a percentage of total outstanding balances creates delinquency rates, which reflect the health of the consumer finance.
- Lenders continue to update debts on credit reports even after charge-offs.
  - Charged-off balances can persist in the “severely derogatory” category, as the borrowers continue to be collected on.
  - Lenders exclude previously charged off debt in their calculation of delinquency rates.
- Nearly half of past-due balances on credit reports are “severely derogatory,” meaning the loans are associated with a default, charge-off, repossession, or foreclosure.

## Student loans overtake mortgage debt

- The composition of the “severely derogatory” balances has changed over time.
  - Severely derogatory balances swelled during and following the Great Recession, as the mortgage foreclosure pipeline grew.
  - Now, defaulted student loans are the largest component. Because student loans are not dischargeable during bankruptcy and remain indefinitely on a credit report, unpaid student loans become stagnant in the severely derogatory category.

# SPECIAL TOPIC: SEVERELY DEROGATORY DEBT

## Transition into Serious Delinquency by Loan Type



Source: New York Fed Consumer Credit Panel / Equifax

## Delinquency transition rates inform loan performance

- Transition rates measure the flow of balances into serious delinquency and are independent of heterogeneous accounts of defaults and charge-offs.
- This is a uniform measure that allows comparisons across loan types.
- Transitions into 90+ days past due (reported as an annual rate) have been:
  - **Rising for student loan, credit card and, until recently, auto loan balances.**
  - **Falling for housing-related debt: first- and junior-lien mortgages, as well as home equity lines of credit.**
- The transition rates show very similar trends to the default rates reported by lenders.