FEDERAL RESERVE BANK *of* NEW YORK

U.S. Economy in a Snapshot

Research & Statistics Group

March 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 March 18, 2019.

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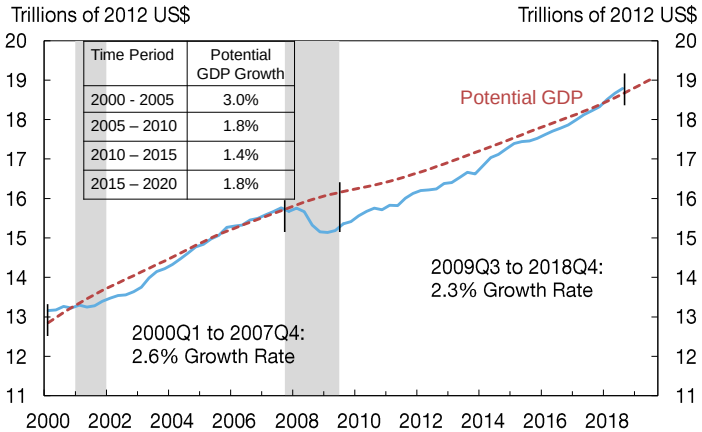
OVERVIEW

- Real consumer spending weakened significantly in December.
  - **However, retail sales in January and consumer confidence in February each rebounded from prior declines.**
- Growth in business equipment spending firmed in 2018Q4 relative to the previous two quarters, but remained below the pace in 2017.
  - **New orders of capital goods (excluding aircraft) increased in January but remained slightly below shipments, suggesting some slowing of momentum over the near term.**
- Housing activity indicators rebounded in January.
  - **However, building permits data provided mixed signals about conditions in the housing sector.**
- Payroll growth was soft in February. The unemployment rate declined, while the employment-to-population ratio and the labor force participation rate remained unchanged.
  - **Various measures of labor compensation continue to indicate a gradual firming of wage growth.**
- Core inflation moderated in February but remains roughly consistent with the FOMC's longer-run objective.
- U.S. equity indices continued to rebound modestly over the past month, while volatility declined. The nominal 10-year Treasury yield decreased slightly. The broad trade-weighted dollar index rose slightly. Oil prices increased modestly 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 2018Q4 was about 0.7% above the estimate of real potential GDP from the Congressional Budget Office (CBO).
  - **Over this expansion, real GDP has grown at a 2.3% annual rate, compared to the 1.6% growth rate of real potential GDP.**
  - **Over this year, the CBO projects that real potential GDP will grow 2.2%.**
  - **The 3.8% unemployment rate in February 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.**

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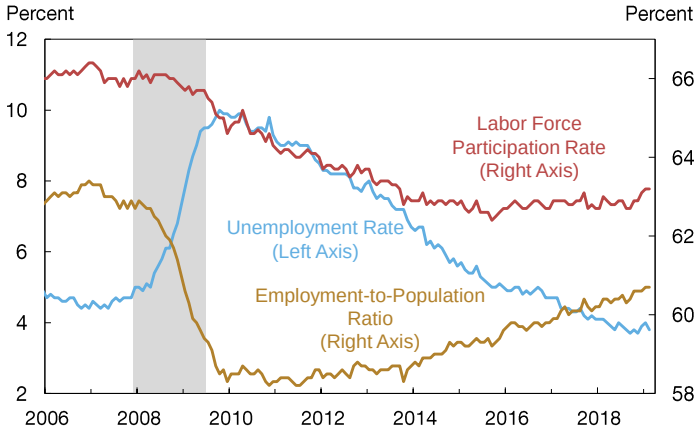
OVERVIEW

Labor Market Indicators



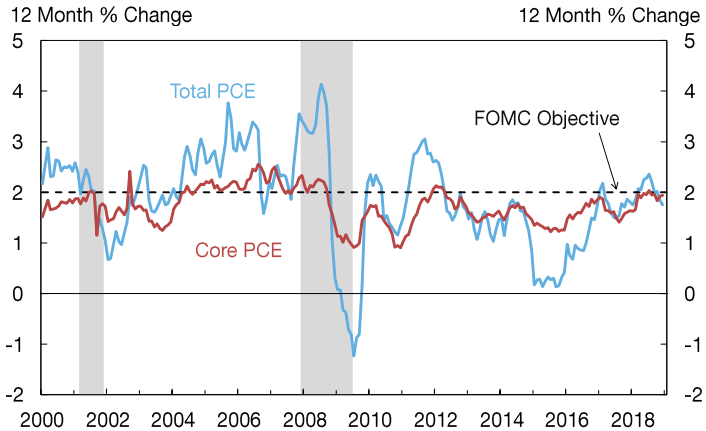
Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

Household employment remains strong in February

- The labor force participation rate was unchanged at 63.2% in February, the highest participation rate since September 2013.
- The employment-to-population ratio remained at 60.7% in February.
  - **The employment-to-population ratio among prime-age workers (ages 25-54) remained at 79.9%.**
- The unemployment rate fell to 3.8% in February from 4.0% in January.
  - **An alternative measure of unemployment, U6, which includes marginally attached workers and workers who hold part-time jobs but prefer full-time jobs, noticeably declined from 8.1% in January to 7.3% in February.**

PCE Deflator



Source: Bureau of Economic Analysis via Haver Analytics

Note: Shading shows NBER recessions.

Inflation remains near FOMC's longer-run objective

- The total PCE price index rose 0.1% in December, similar to November and lower than in October. The core PCE price index (which excludes food and energy prices) increased 0.2% in December, similar to November and a step up from October.
  - **Energy prices declined 2.9% in December, and are down 0.4% relative to one year ago. Food prices rose 0.1% and are up 0.6% compared to one year ago.**
- The 12-month changes in the total PCE and core PCE price indices were +1.8% and +1.9%, respectively.
  - **Total PCE inflation has dipped slightly below 2% after several months at or above 2%.**
  - **Headline and core PCE inflation appear to remain at levels near the FOMC's 2 percent longer run goal.**

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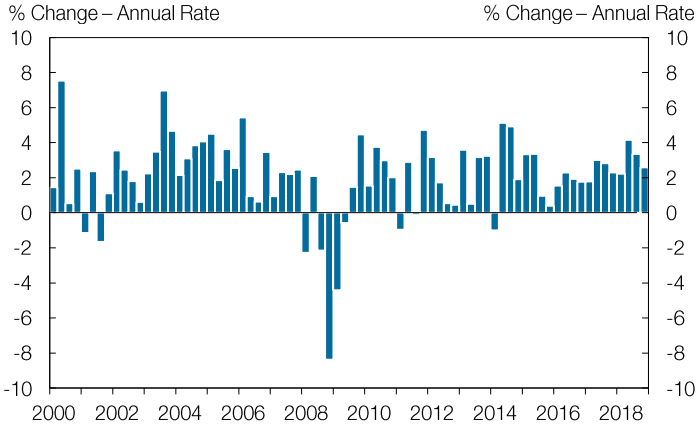
ECONOMIC ACTIVITY

GDP Growth

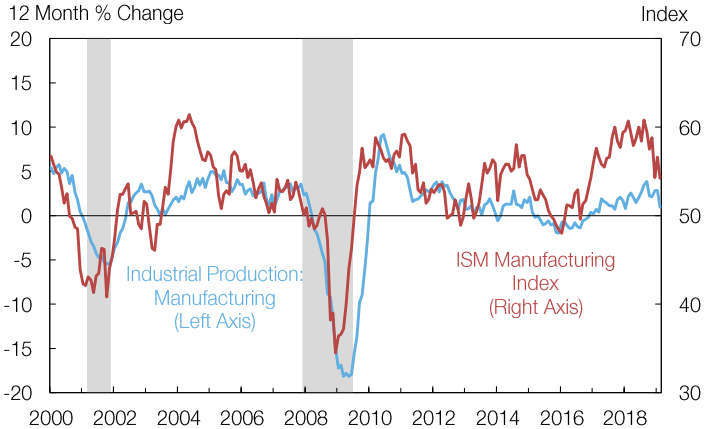


Source: Bureau of Economic Analysis via Haver Analytics

Real GDP growth slows in 2018Q4

- The initial estimate of growth of real GDP in 2018Q4 was 2.6% (annual rate). This represents a marked slowing from the 3.8% average pace of growth over 2018Q2 and Q3.
- Growth of real Personal Consumption Expenditures slowed relative to the previous two quarters, whereas growth of business fixed investment came in stronger than expected, led by very strong growth of investment in intellectual property products.
- In sum, growth of final sales to domestic purchasers slowed somewhat in 2018Q4. Exports grew despite a weakening of global growth, but inventory investment in Q4 moved up from the already rapid pace of Q3, suggesting a payback in the first quarter of 2019.

Manufacturing and ISM Manufacturing Index



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

Note: Shading shows NBER recessions.

Manufacturing activity contracts in February

- Manufacturing production decreased by 0.4% in February following a 0.5% decrease in January.
  - **Manufacturing production rose by 1.0% in February on a 12-month change basis.**
- The ISM PMI decreased 2.4 percentage points to 54.2 in February.
  - **The index indicates that manufacturing continues to expand, but at a slower pace than January.**
  - **The Prices index fell slightly, remaining below 50, indicating decreasing prices.**
- Regional Fed manufacturing surveys are mixed in February.

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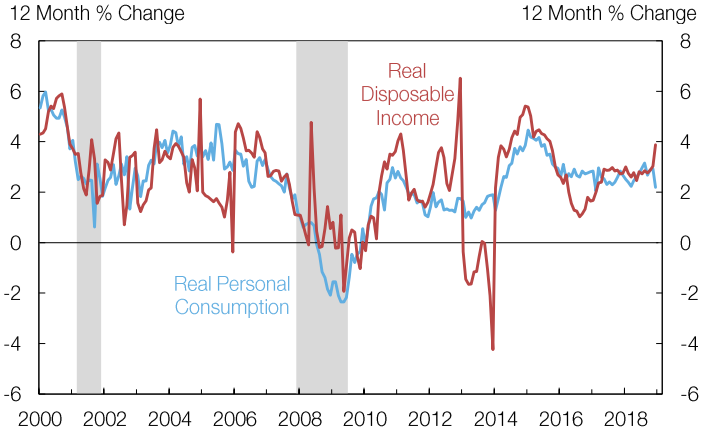
HOUSEHOLDS

Disposable Income and Consumption



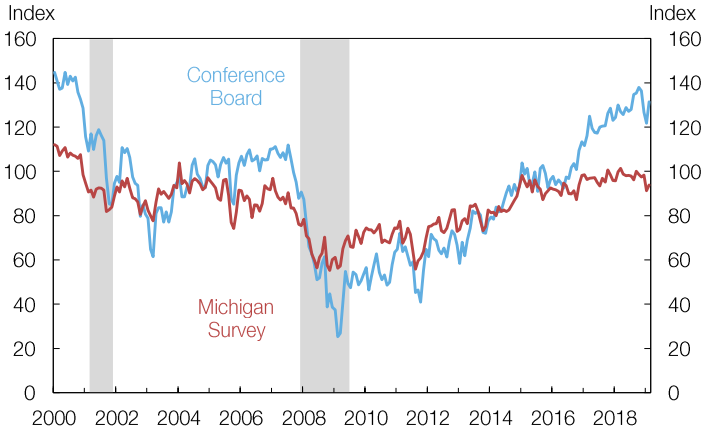
Source: Bureau of Economic Analysis, Federal Reserve Board via Haver Analytics

Note: Shading shows NBER recessions.

Weak consumption, solid income in December

- Real personal consumption fell 0.6% in December, after increasing 0.5% in November.
  - **Durable and nondurable expenditures declined 1.9% and 1.2%, respectively. Services fell 0.2%.**
  - **The 12-month changes in all these categories were below the corresponding changes of recent months.**
- Real personal disposable income increased 1.0% in December, following an increase of 0.2% in November.
  - **Nominal personal disposable income increased 1.1% in December and fell 0.2% in January.**
  - **Employee compensation increased 0.5% in December and 0.3% in January.**
- The personal saving rate was 7.6% in December, sharply up from 6.1% in November.

Consumer Confidence



Source: Conference Board, University of Michigan

Note: Shading shows NBER recessions.

Consumer confidence bounces back in February

- The Conference Board's Consumer Confidence Index increased by over 9 points in February, from a revised level of 121.7 in January.
  - **The index has been on a declining trend since October 2018 and with the February increase, it reached a level that exceeds the 2018 average.**
- The increase in the headline index was primarily driven by the rise in the Expectations Index (up from a revised level of 89.4 in January to 103.4).
  - **Consumers' short-term outlook on business conditions and employment improved.**
- Near-term (one-year) household inflation expectations declined to 4.3 percent from 4.4 percent in January.
  - **The series had been on a downward trend since October 2018.**

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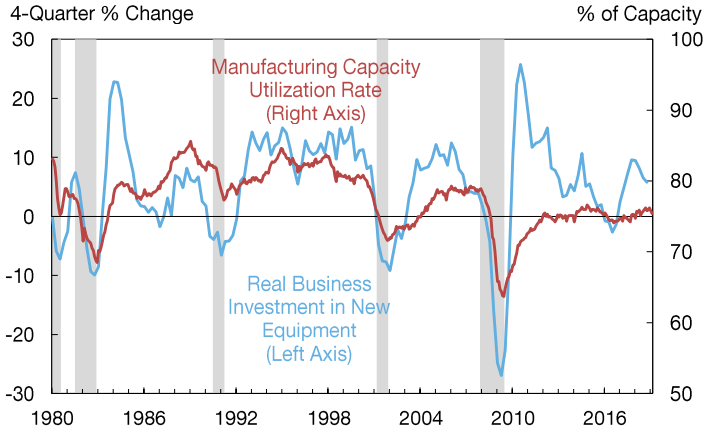
BUSINESS SECTOR

Equipment Investment and Capacity Utilization



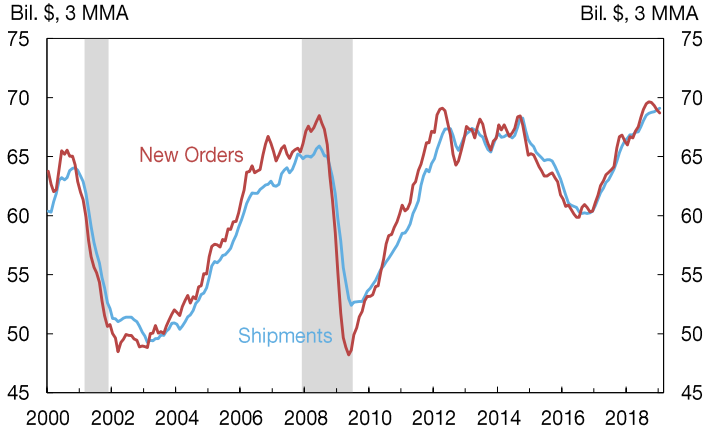
Source: Bureau of Economic Analysis, Federal Reserve Board via Haver Analytics

Note: Shading shows NBER recessions.

Slower equipment spending growth in 2018

- Real business equipment investment grew at a 6.7% annual rate in 2018Q4. For 2018 (Q4/Q4), equipment spending rose 5.8% after rising 9.6% in 2017.
  - **Compared to 2017, growth slowed in 2018 for all major categories of equipment except transportation equipment.**
  - **The equipment spending share of nominal GDP remained slightly below its average share in 2013–15.**
- Recent soft equipment investment has occurred against a backdrop of continued relatively low levels of the manufacturing capacity utilization rate.
  - **This rate was 75.4% in February, almost 3 percentage points below its long-run average.**
  - **Historically, utilization rates near 75% 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 remain subdued in January

- Shipments of nondefense capital goods excluding aircraft rose 0.8% in January.
  - **This measure is a proxy for equipment spending that is available at a monthly frequency.**
- New orders of nondefense capital goods excluding aircraft increased 0.8% in January after declining appreciably in the previous two months.
- New orders of nondefense capital goods excluding aircraft were below shipments in December and January, suggesting weak near-term momentum in equipment spending.

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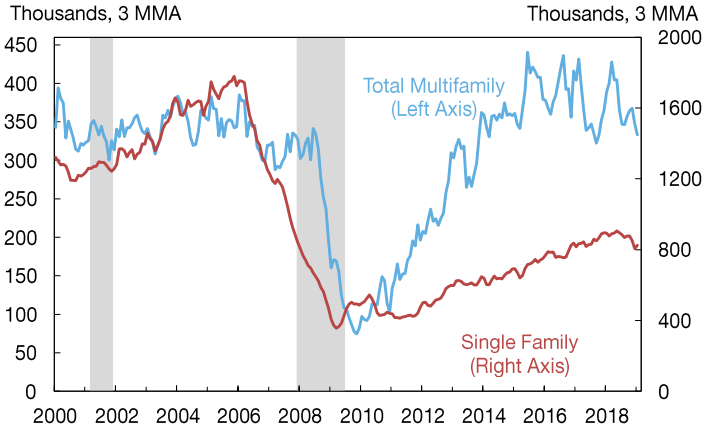
HOUSING SECTOR

Housing Starts



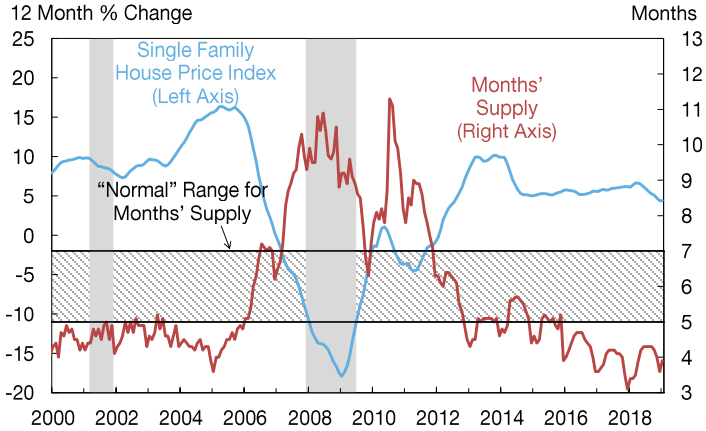
Source: Census Bureau via Haver Analytics

Note: Shading shows NBER recessions.

Housing starts rebound in January

- Total housing starts rose 18.6% in January from a downwardly revised December level. At 1.23 million units, the January level of total starts was 3.4% above the consensus expectation. Single-family starts rose an impressive 25.1% while multi-family starts rose by a more modest 2.4%.
- Looking past the month-to-month volatility, multi-family starts continued to decline in January while single-family starts moved higher.
- The data on building permits tell a different story. Multi-family permits have rebounded and now seem to suggest a renewed gradual upward trend. In contrast, single-family permits remain on a gradual down trend. These data likely provide the better signal about conditions in the housing construction sector.

Single Family Housing Market



Source: CoreLogic, National Association of Realtors via Haver Analytics

Note: Shading shows NBER recessions.

Housing prices continue to grow, albeit at slower rate

- The CoreLogic single family national home price index rose 4.4% in January on a year-over-year (YoY) basis.
  - **While home price growth continued, it slowed relative to earlier in 2018, when increases were around 6%.**
  - **All states except North Dakota and Louisiana experienced YoY increases in the home price index in December.**
- The inventory of single family homes was 1.41 million units in December, equivalent to a 3.9 months' supply at the current sales pace and up from 3.6 in December.
  - **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, the year-over-year change in supply has increased notably in recent months.**

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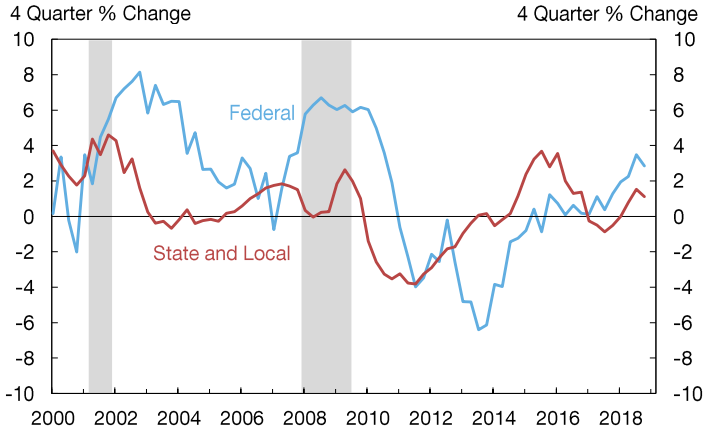
GOVERNMENT SECTOR

Real Government Consumption and Gross Investment



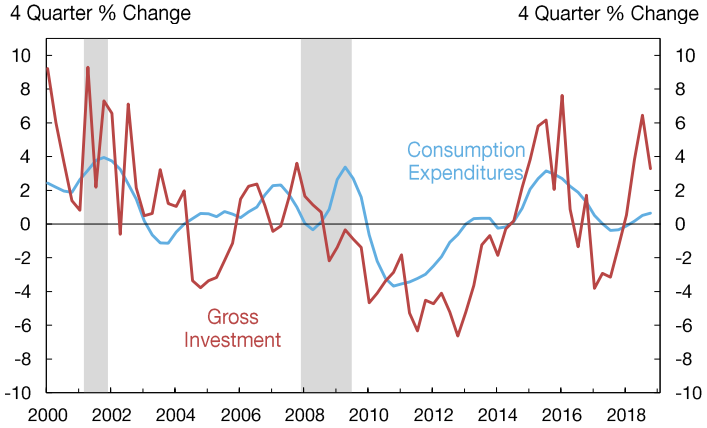
Source: Bureau of Economic Analysis
via Haver Analytics

Note: Shading shows NBER recessions.

Growth of government spending slows in 2018Q4

- The effect of the recent partial government shutdown is evident in the Q4 data on real government spending at both the federal and state and local levels.
- The four-quarter percentage change of real federal spending slowed to 2.9% in Q4 from 3.5% in Q3. All of the slowing occurred in the nondefense category as defense spending was not affected by the shutdown.
- At the state and local level, growth of consumption and gross investment slowed to 1.1% in Q4 from 1.5% in Q3. All of the slowing occurred in the investment category, as state and local infrastructure investment is often paid for in part by grants from the federal government.
- The level of government spending is likely to be held down again in 2019Q1, but should rebound in Q2.

Real State & Local Consumption & Gross Investment



Source: Bureau of Economic Analysis
via Haver Analytics

Note: Shading shows NBER recessions.

State and local investment growth slows

- State and local government consumption and gross investment spending growth slowed in 2018Q4.
- The growth slowdown was driven by gross investment.
  - **The 4-quarter growth rate of gross investment fell from 6.4% in Q3 to 3.3% in Q4.**
  - **This decline may have been related to the federal government shutdown, since a large share of state infrastructure spending is funded from federal grants.**
  - **If so, investment spending may also be weak in 2019Q1.**
- Consumption spending 4-quarter growth ticked up to 0.65%.
  - **State and local consumption grew 0.51% in Q3.**
  - **State and local consumption consists largely of employee salaries and makes up about 80% of the sector's spending.**

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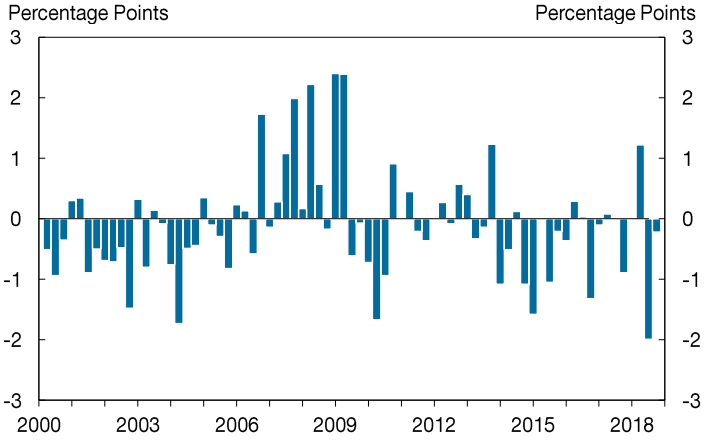
INTERNATIONAL DEVELOPMENTS

Net Exports: Contribution to GDP Growth

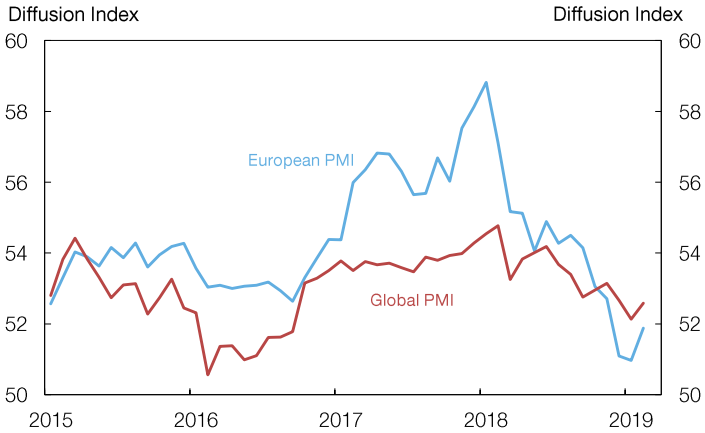


Source: Bureau of Economic Analysis via Haver Analytics

Net exports moderately lower 2018Q4 GDP growth

- According to the advance release, net exports subtracted 0.2 percentage point of GDP growth in Q4.
  - **Real exports grew 1.6% (seasonally-adjusted annual rate) and real imports increased 2.7% (SAAR).**
  - **Relative to Q3, real export growth accelerated rather rapidly, whereas real import growth slowed.**
- The trade deficit grew to $59.8 billion in December from a $50.3 billion deficit in November.
  - **Real goods exports fell 1.5% over the month in December. The decrease was mainly driven by lower export volumes of capital goods (excluding autos) and food, feeds and beverages.**
  - **Real goods imports grew 3.4% from November to December owing to higher import volumes of capital and consumer goods as well as higher oil goods imports.**

European and Global PMI



Source: Markit, JPMorgan Chase

Global surveys point to sluggish growth

- Global growth has slowed over the past several quarters, with the euro area seeing a particularly sharp slowdown.
  - **Global growth averaged 2.6% during the second half of 2018, down from 3.5% in 2017.**
  - **Growth in the euro area averaged just 0.7% during the second half of 2018, down from 2.7% in 2017.**
- Purchasing managers' surveys indicate that sluggish growth has continued into the new year.
  - **Despite edging higher in February, the global PMI remains at just 52.6, consistent with roughly 2.8% growth.**
  - **Despite a larger move higher in February, the euro area PMI remains at just 51.9, consistent with roughly 1.4% growth.**

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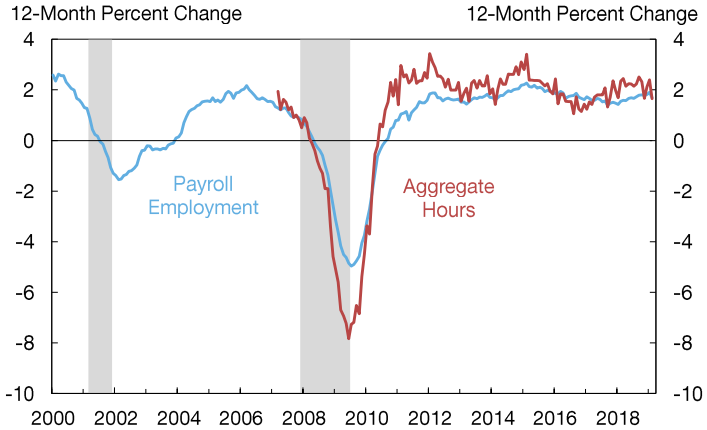
LABOR MARKET

Payroll Employment and Aggregate Hours



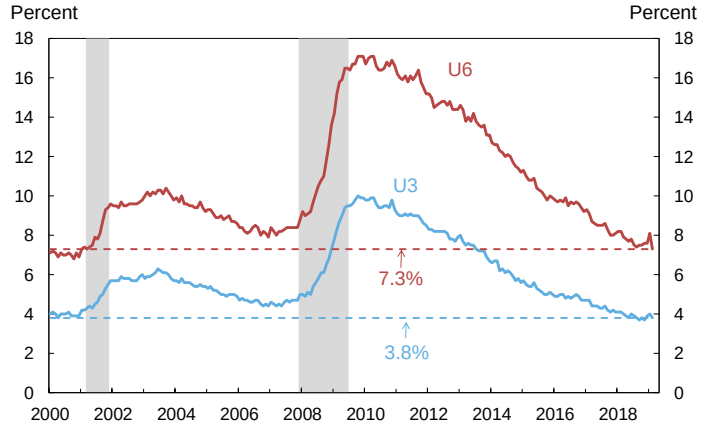
Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

Reduced employment growth in February

- Nonfarm payroll employment increased by 20,000 in February, well below the Bloomberg median forecast of +180,000.
  - **Payroll employment was revised upward for January (from +304,000 to +311,000) and for December (from +222,000 to +227,000), resulting in a net upward revision of 12,000.**
  - **With the latest reading, which is the lowest since September 2017, the three month moving average remains high at 186,000.**
- Private payroll employment rose by 25,000 in February.
  - **Employment in goods-producing industries fell by 32,000, while employment in services-producing industries increased by 57,000.**

Alternative Unemployment Rates



Source: Bureau of Labor Statistics

Note: Shading shows NBER recessions.

Fall in workers part-time for economic reasons

- The unemployment rate was 3.8% in February, noticeably below the 4.0% recorded in January.
- An alternative measure of unemployment, U6, which includes marginally attached workers and workers who hold part-time jobs but prefer full-time jobs, recorded a noticeable decline from 8.1% in January to 7.3% in February.
  - **To a large extent, this decline is due to a decline in workers that are part-time for economic reasons, which may have been elevated in January because of the partial federal government shutdown.**
  - **Over the last 12 months, U6 declined by 0.9 percentage points.**

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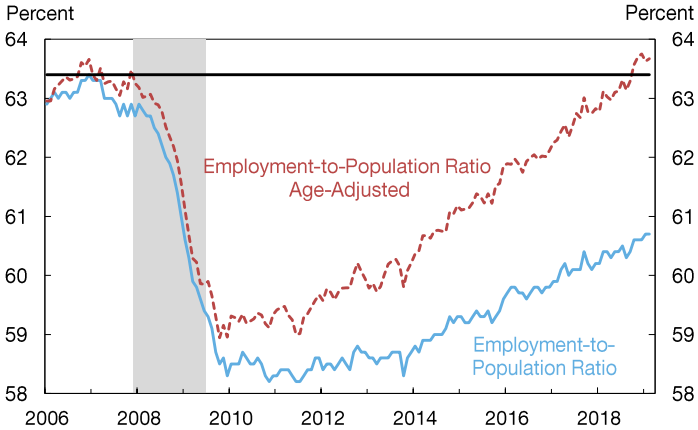
Demographically-Adjusted Employment Rate



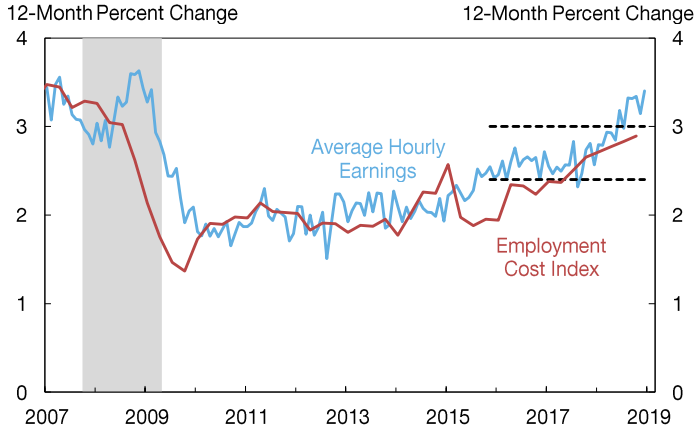
Source: Bureau of Labor Statistics and Authors' Calculations

Note: Shading shows NBER recessions.

Employment hits post-recession milestones

- Over the last five years, the employed share of the population has steadily increased.
  - **The employment-to-population ratio increased from a post-recession low of 58.2% in July 2011 to its current post-recession high of 60.7% in February 2019.**
- While employment has increased since the end of the last recession, much of the recovery has been muted by the effects of an aging population.
  - **In the two years prior to the Great Recession, the employed share of the population reached a high of 63.4%.**
  - **Holding constant demographics as they were in 2006, the employment-to-population ratio would have first surpassed its pre-recession high of 63.4% in October 2018. The demographically-adjusted employment-to-population ratio was 63.7% in February 2019.**

Growth of Average Hourly Earnings and ECI



Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

Sustained growth in average earnings

- Average hourly earnings rose 0.40% in February, and were up 3.40% on an annual basis.
  - **This series has been consistently above 3% since October 2018, pointing to a marked increase from the 2.4-3.0% range in which the average hourly earnings changes had been fluctuating from 2016 until September 2019.**
- Average weekly earnings increased by 3.1% over a 12-month period.

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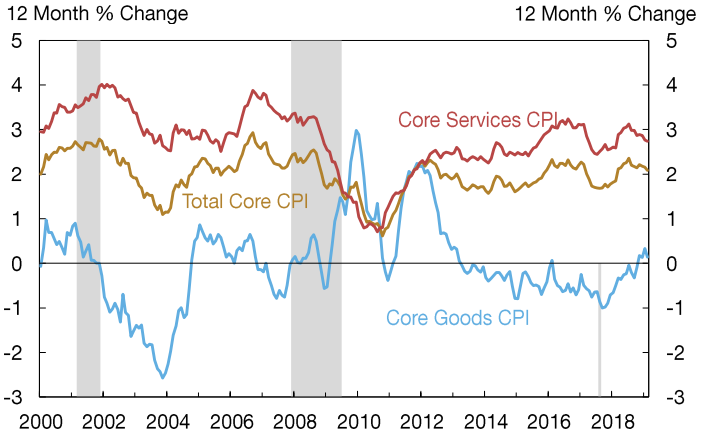
INFLATION

CPI Inflation: Core Goods and Core Services



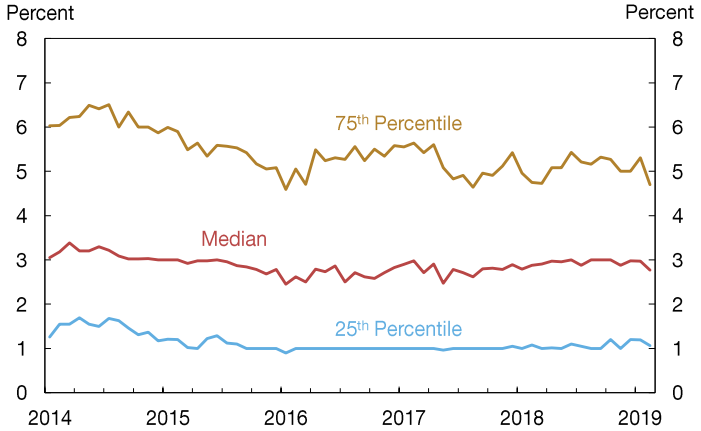
Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

Core inflation firm in January but weak in February

- Core CPI was up 0.1% in February after rising 0.2% in January. The 12-month change in the core index was 2.1% in February.
- Core goods prices fell 0.2% in February after increasing for four consecutive months.
  - **The 12-month change in core goods prices in February was 0.1%, down from 0.3% in January.**
- Core services prices rose 0.2% in February, the same increase as in January.
  - **The 12-month change in this index has been steadily declining from a 3.1% peak reached in July to 2.7% in February.**

3-Year Ahead Inflation Expectations



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

Consumers' inflation expectations decline in February

- The Federal Reserve Bank of New York's Center for Microeconomic Data released the February 2019 Survey of Consumer Expectations, which shows a decline in the median inflation expectations at both the one-year and three-year horizons.
  - **Both series declined by 0.2 percentage points to 2.8% in February, after having remained essentially unchanged since April 2018.**
- Median home price change expectations remained steady at 3.0% for the third consecutive month. This was the lowest reading of the series.
- The median one-year ahead expected changes in the cost of medical care declined to a series low of 7.5% in February.

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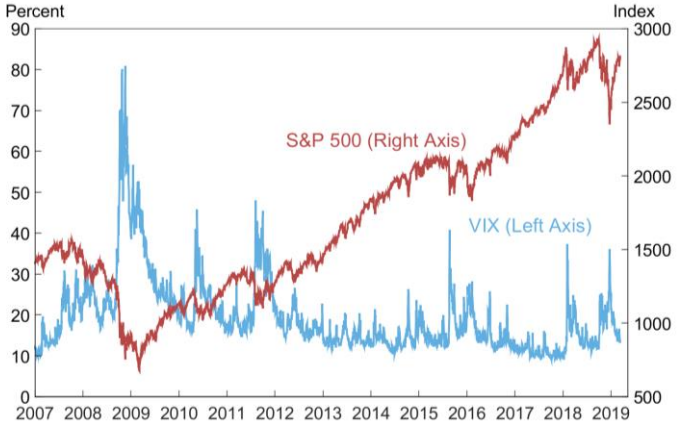
U.S. Equity Market Index and Volatility

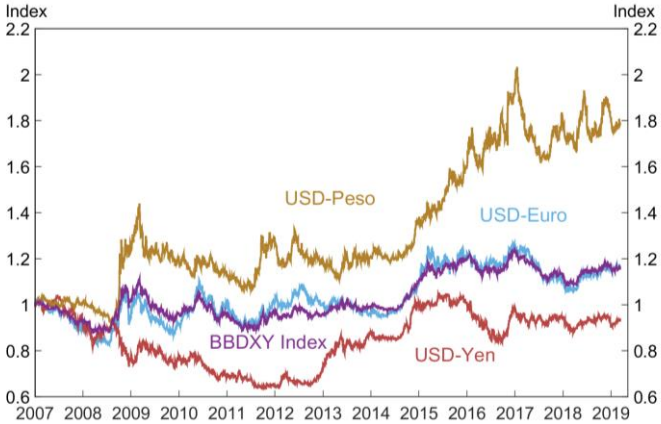


Source: Bloomberg Finance L.P.

U.S. equity markets little changed

- U.S. equity markets rebounded modestly during the last month.
  - **The S&P 500 index gained 2.7% between February 5, 2019 and March 13, 2019.**
- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), declined.
  - **The VIX Index closed at 13.41 on March 13, 2019, close to its historical median level.**

USD Exchange Rates



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

U.S. dollar appreciates modestly

- The exchange value of the dollar against a basket of global currencies increased 0.5% between February 5 and March 13.
  - **Over this same period the dollar appreciated by 0.7% against the euro, 1.1% against the Japanese yen, and 1.3% against the Mexican peso.**
- Since the start of 2019, the dollar has depreciated 0.66% against a basket of global currencies.

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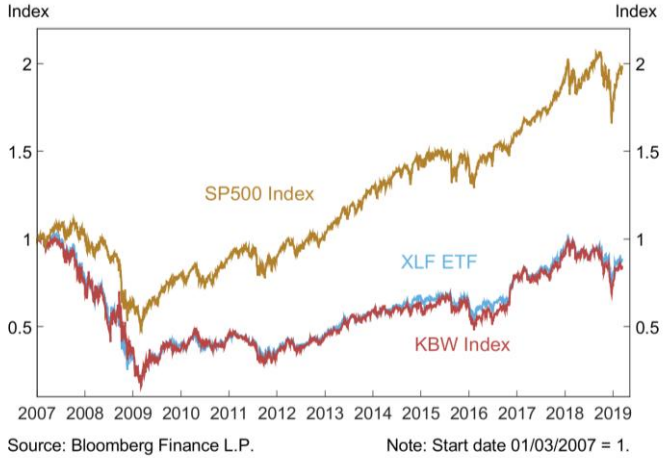
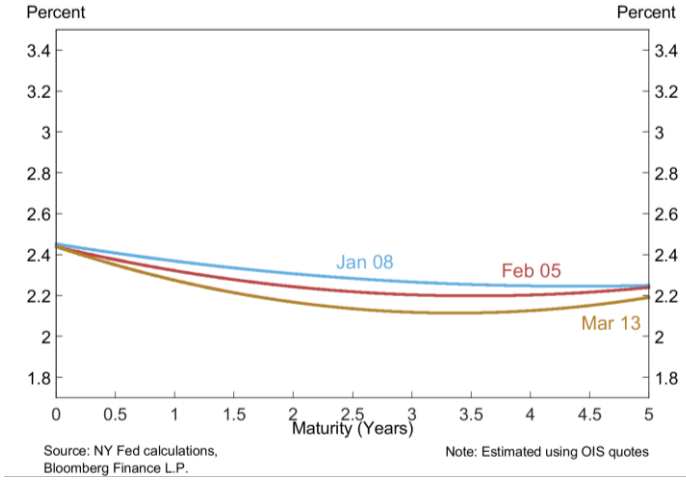
U.S. Bank Equities Performance



Bank stocks gain in value

- As measured by the KBW Nasdaq bank index, bank equities increased 1.5% between February 5, 2019 and March 13, 2019.
  - **The index increased by 1.2 percentage points less than the S&P 500.**
- The XLF financial sector ETF increased 2.3% between February 5, 2019 and March 13, 2019.
  - **Since the start of the year, the XLF ETF has gained 13.5% in value.**

Expected Federal Funds Rate



Implied path for federal funds rate little changed

- The expected path of the federal funds rate implied by rates on overnight index swaps (OIS) moved down modestly for intermediated maturities over the period from February 5, 2019 to March 13, 2019.
  - **The shift for intermediate maturities was around 6 basis points.**
  - **For shorter maturities, the expected path of the federal funds rate declined by around 1 basis point.**
- The market-implied path remains well below the median path of the FOMC's December 2018 Summary of Economic Projections and somewhat below the January 2019 NY Fed Survey of Primary Dealers at longer horizons.

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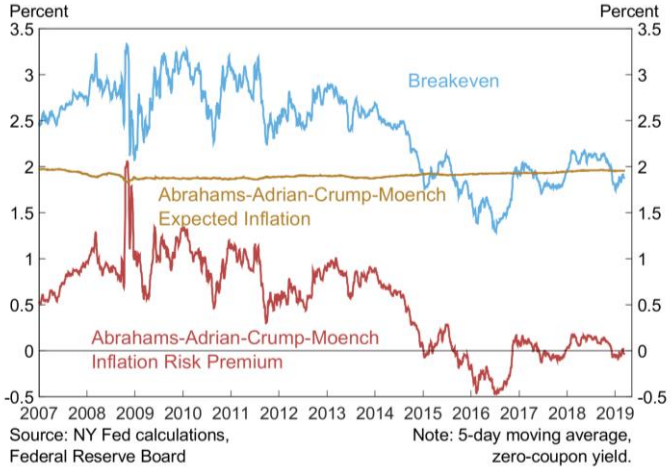
10-Year Treasury and Term Premium

Longer-term Treasury yields remain steady

- Longer-term Treasury yields decreased slightly since beginning of February.
  - **The 10-year yield decreased about 6 basis points between February 5 and March 13.**
- Estimates from the Adrian-Crump-Moench term structure model attribute the decrease 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 4.1 basis points between February 5 and March 13.**

5-10 Year Forward Decomposition



Breakeven inflation little changed

- Market-implied TIPS-based measures of long-term inflation expectations ("breakevens") little changed in recent weeks.
  - **The five-to-ten year breakeven inflation rate decreased by 1.2 basis points between February 5, 2019 and March 13, 2019.**
- 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 1.5 basis points between February 5, 2019 and March 13, 2019.**

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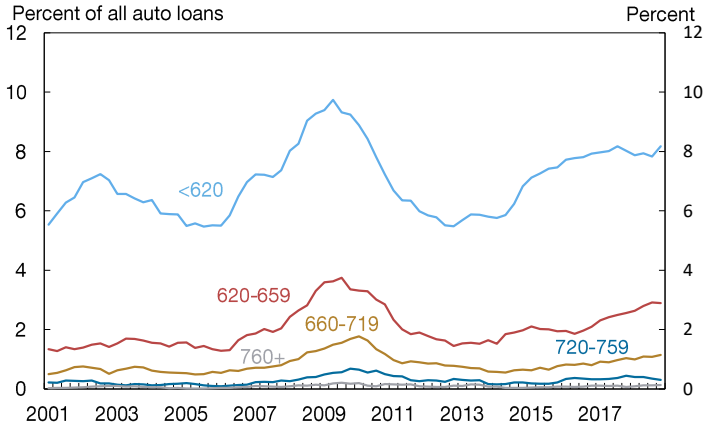
SPECIAL TOPIC: CCP AUTO DEBT

Flow into Serious Delinquency by Credit Score



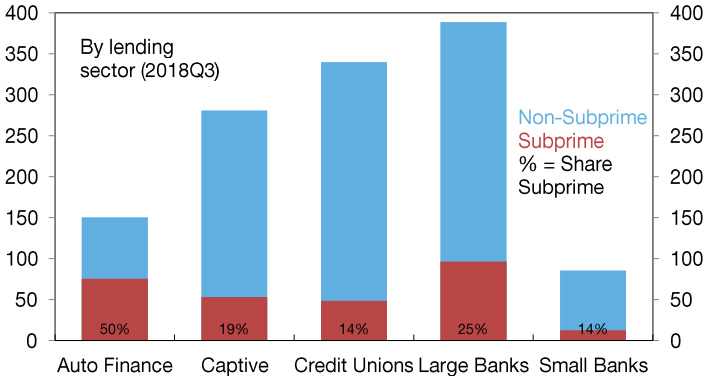
Source: New York Fed Consumer Credit Panel / Equifax

Note: Credit score is Equifax Riskscore 3.0 at time of loan origination

Prime delinquency rates stable; subprime on the rise

- In aggregate, auto loan transition rate to 90+ days past due has been rising only very slowly.
- Prime loans have had very low delinquency rates since recovering after the Great Recession.
- Meanwhile, transitions into 90 or more days past due have been rising somewhat steadily since 2014 for loans held by borrowers with scores under 660.
  - **This rise has been masked by the low delinquency rates of the prime loans, which have held a steady share of the aggregate outstanding balance of auto loans.**

Outstanding Balance and Subprime Share



Source: New York Fed Consumer Credit Panel / Equifax [Philadelphia Fed Auto Detail]

Note: subprime reflects loans with borrowers' 2018Q3 credit score less than 620

Subprime share varies by industry

- In more detailed loan-level data, we are able to disaggregate by type of lender: About half of the outstanding balances held by auto finance companies are subprime.
- About 25% of the balances held by (or originated by) large banks are subprime, but their overall market share is the largest, with $389 billion outstanding.
- Credit unions comprise the second largest share of the overall market ($340 bil), but only 14% of outstanding balances from credit unions are associated with subprime borrowers.
- Captives, or dealer-based loans that are associated with car manufacturers (e.g. Ford or Honda), are predominantly prime.

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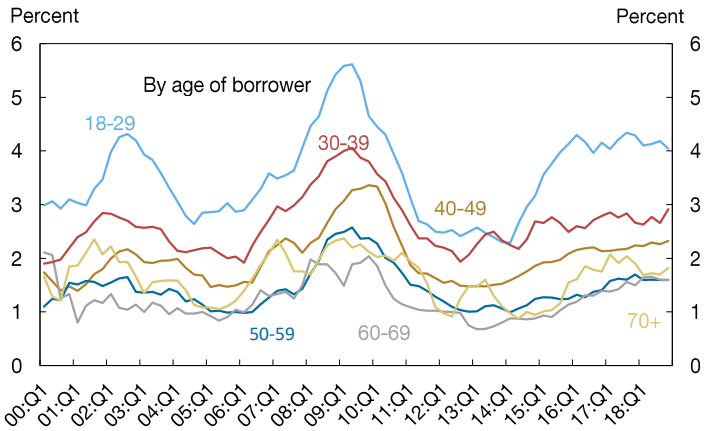
Transition into Serious Delinquency for Auto Loans



Source: New York Fed Consumer Credit Panel / Equifax Note: Four-quarter moving sum

Delinquency rates highest for youngest borrowers

- Age-based flows into serious delinquency for auto loans depict a sharp worsening in the performance of the loans held by borrowers under 30 years old between 2014 and 2016.
  - **Delinquencies on auto loans held by borrowers over 30 have crept up slowly over time.**
- Overall, the level of loan originations has been commensurate with auto sales, with a steady 50-60% financing share of combined new and used vehicle purchases.
  - **This percentage has remained surprisingly stable in our sample period, which suggests that car loans have been tracking the growth seen in motor vehicle sales.**
- Although the market has been stable overall, rising delinquency rates among certain segments remains a concern.

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