



FEDERAL RESERVE BANK *of* NEW YORK

U.S. Economy in a Snapshot

Research & Statistics Group

April 2019

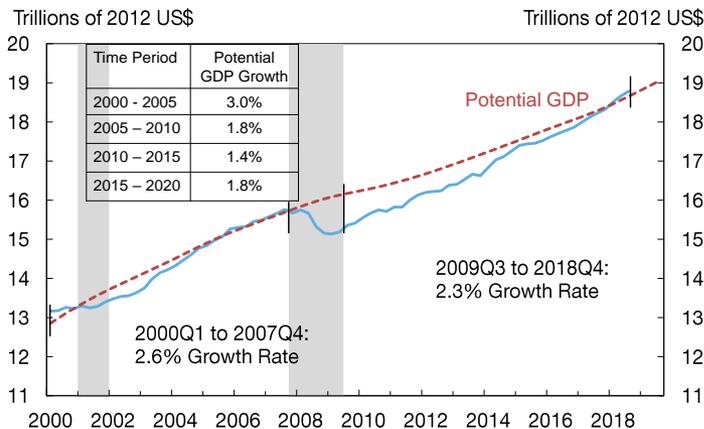
The *U.S. Economy in a Snapshot* compiles observations of staff members of the Federal Reserve Bank of New York's Research and Statistics Group. The views, model results, and analysis presented are solely those of the individual contributors and do not necessarily reflect the position of the Federal Reserve Bank of New York or the Federal Reserve System. The analysis presented herein is based on data released through April 10, 2019.

OVERVIEW

- Real consumer spending remained soft in January.
 - Real durable goods expenditures declined for the second straight month while real services expenditures rose.
 - Retail sales were weak in February; consumer confidence measures remain high but seem to have lost momentum.
- Growth in business equipment spending firmed in 2018Q4 but its overall pace in 2018 slowed relative to 2017.
 - New orders of capital goods (excluding aircraft) slowed in February and remained below shipments, suggesting that the near-term momentum remains rather soft.
- Housing activity indicators suggest more stable conditions.
 - Home sales rebounded in February, likely fueled by a substantial decline in mortgage rates in recent months. A strong labor market continues to have the potential to provide support to the housing sector.

- Payroll growth was solid in March. The unemployment rate remained unchanged, while the employment-to-population ratio and the labor force participation rate both edged down.
 - Various measures of labor compensation continue to indicate a gradual firming of wage growth.
- Core CPI inflation was somewhat soft in March but remains roughly consistent with the FOMC's longer-run objective.
- U.S. equity indices rose over the past month, while implied volatility generally remained low. The nominal 10-year Treasury yield decreased. There were declines in other longer-term sovereign yields. The broad trade-weighted dollar index was little changed. Oil prices increased further over the month.

GDP



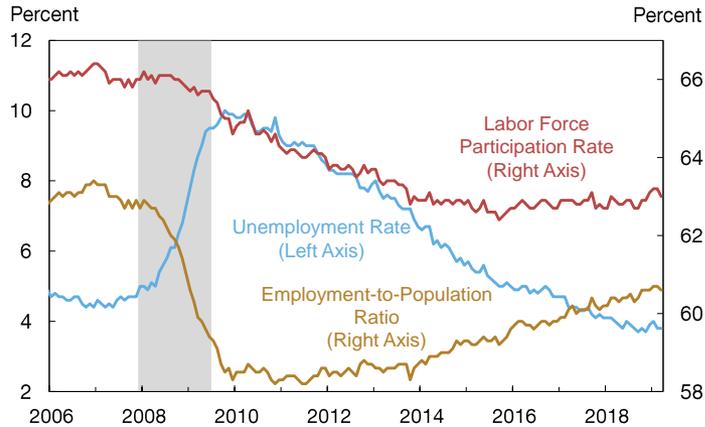
Source: Bureau of Economic Analysis, Congressional Budget Office via Haver Analytics. Note: Shading shows NBER recessions.

Output moderately above potential GDP estimate

- The level of real GDP in 2018Q4 was about 0.6% 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 March 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.

OVERVIEW

Labor Market Indicators



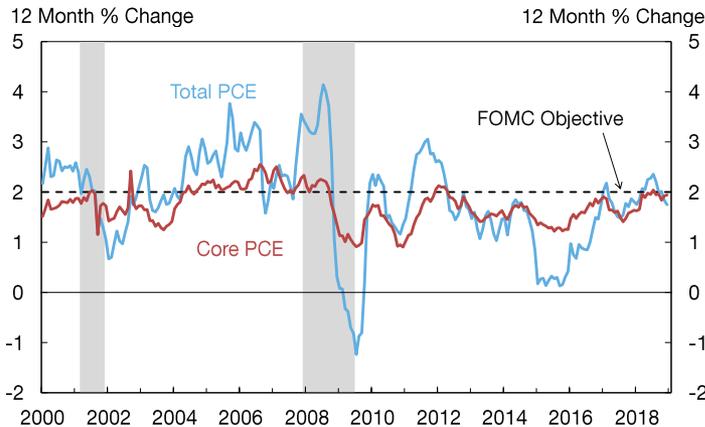
Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

Labor market indicators stable in March

- The labor force participation rate was 63.0% in March, down from 63.2% in February.
 - The labor force participation rate has been between 62.7% and 63.2% since December 2015.
- The employment-to-population ratio printed at 60.6% in March, down slightly from 60.7% in February.
 - The change in the employment-to-population ratio reflected declines in the employment rate among 25-54 year-olds (from 79.9% to 79.8%) and among those 55+ (from 39.3% to 39.0%), which were partially offset by an uptick among 16-24 year-olds (from 50.4% to 50.8%).
- The unemployment rate remained at 3.8% in March.

PCE Deflator



Source: Bureau of Economic Analysis via Haver Analytics

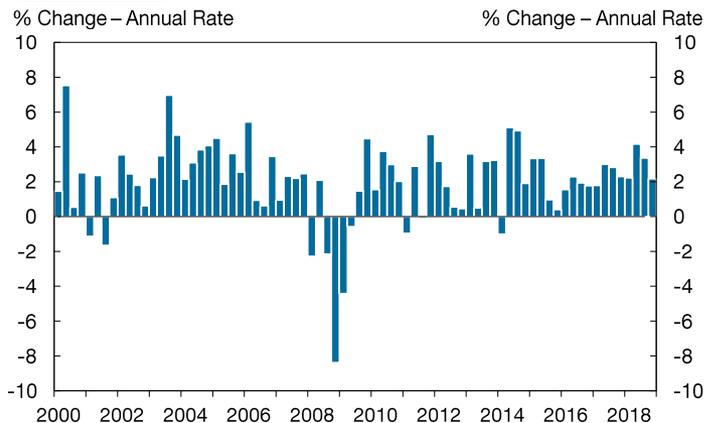
Note: Shading shows NBER recessions.

Inflation remains near FOMC's longer-run objective

- The total PCE price index declined 0.1% in January after rising 0.1% in December. The core PCE price index (which excludes food and energy prices) increased 0.1% in January, a step down from December.
 - Energy prices declined 3.2% in January, and are down 6.4% relative to one year ago. Food prices rose 0.2% and are up 0.7% compared to one year ago.
- The 12-month changes in the total PCE and core PCE price indices were +1.4% and +1.8%, respectively.
 - Total PCE inflation has softened over the last few months.
 - Headline and core PCE inflation appear to remain at levels near the FOMC's 2 percent longer run goal.

ECONOMIC ACTIVITY

GDP Growth



Source: Bureau of Economic Analysis via Haver Analytics

Real GDP growth slows in 2018Q4

- Based on the “third” estimate, real GDP increased 2.2 percent (annual rate) in 2018Q4, a downward revision from the initial estimate (+2.6 percent). This represents a marked slowing from the 3.8% average pace of growth over 2018Q2 and Q3.
- The downward revision to real GDP growth in 2018Q4 came from three main sources: personal consumption expenditures, investment in intellectual property products, and state and local government expenditures. These downward revisions were partially offset by an upward revision to the net exports growth contribution.
- Overall, this set of revisions to fourth quarter GDP indicated that the economy had somewhat less momentum entering 2019 than previously thought.

Manufacturing and ISM Manufacturing Index



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

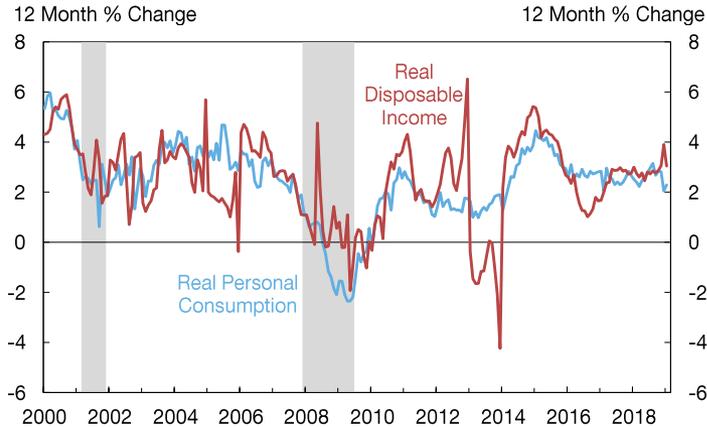
Note: Shading shows NBER recessions.

Manufacturing conditions improve in March

- Manufacturing production decreased by 0.4% in February following a 0.4% decrease in January.
 - Manufacturing production rose by 1.3% in February on a 12-month change basis.
- The ISM PMI increased 1.1 percentage points to 55.3 in March.
 - The index retraced some of the decline in February, and remains below its 2018 average of 58.8.
 - The Prices index bounced back to 54.3 in March, indicating accelerating prices. It had been below the 50 mark in the previous two months.
- Regional Fed manufacturing surveys are positive in March.

HOUSEHOLDS

Disposable Income and Consumption



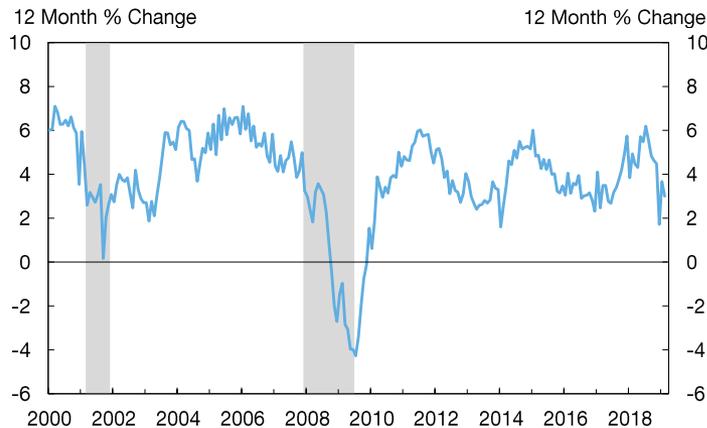
Source: Bureau of Economic Analysis,
Federal Reserve Board via Haver Analytics

Note: Shading shows NBER recessions.

Weak consumption growth in January

- Real personal consumption increased 0.1% in January, a modest recovery from the decline in December.
 - Real goods expenditures declined 0.2% with a 1.6% decline in durables offsetting nondurables increase of 0.5%.
 - Real expenditures on services increased 0.25%.
- Real personal disposable income declined 0.2% in January, after rising 1.0% in December.
 - Nominal disposable income increased 0.2% in February, following a decline of 0.2% in January.
 - Employee compensation increased 0.3% in February, after similar growth in January.
- The personal saving rate was 7.5% in January, a tad below the upwardly revised 7.7% in December.

Retail Sales: PCE Control Excluding Gasoline



Source: Census Bureau via Haver Analytics

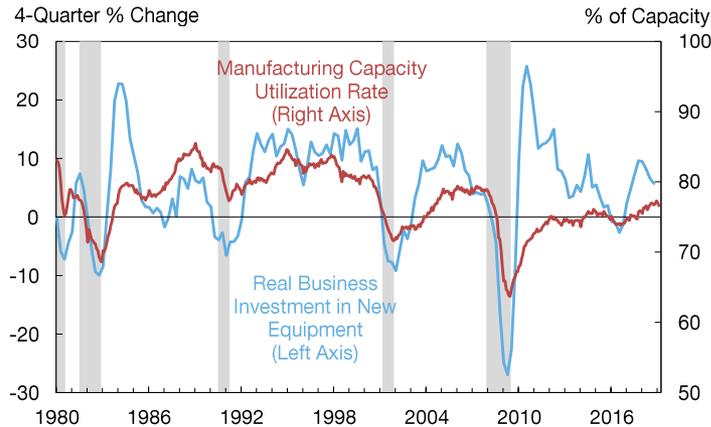
Note: Shading shows NBER recessions.

Retail sales subdued in first two months of 2019

- After declining sharply in December, total retail sales rose 0.7% in January, but fell 0.2% in February.
 - Retail sales excluding motor vehicles and parts displayed a similar pattern, rising 1.4% in January and falling 0.4% in February.
 - For February, the 12-month changes in these two categories were +2.2% and +2.2%, respectively, well below the changes that prevailed through most of 2018.
- Sales of the PCE control excluding gasoline, which includes categories used to estimate consumption in the GDP accounts, increased 1.4% in January and fell 0.2% in February.
 - The 12-month change in the PCE control ex-gasoline was +3.0% in February, below the changes seen in most of 2018.
 - The average of these sales over January and February was only about ¼ percent above the 2018Q4 average.

BUSINESS SECTOR

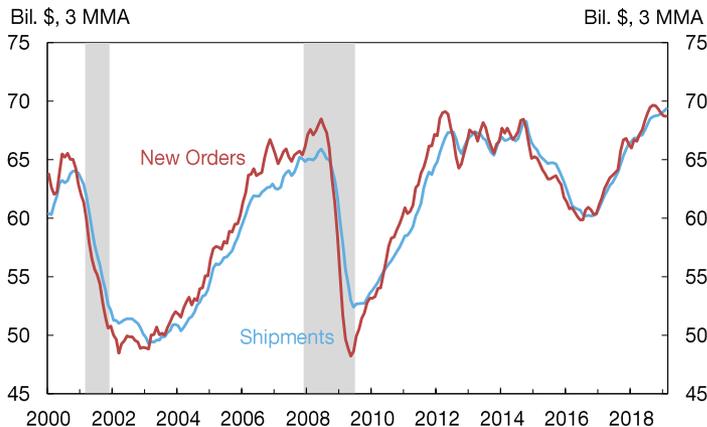
Equipment Investment and Capacity Utilization



Slower equipment spending growth in 2018

- Real business equipment investment grew at a 6.6% 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 low levels of the manufacturing capacity utilization rate.
 - This rate was 76.6% in February, about 1.75 percentage points below its long-run average.
 - Historically, utilization rates near the February level are associated with modest growth of equipment investment.

Nondefense Capital Goods Excluding Aircraft

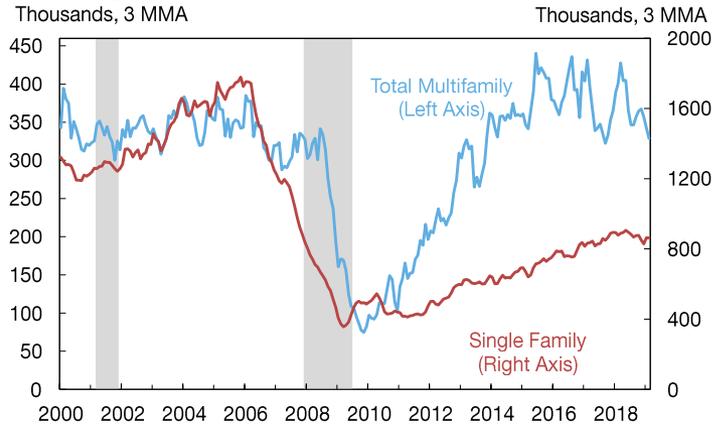


Capital goods orders remain subdued in February

- Shipments of nondefense capital goods excluding aircraft fell 0.1% in February.
 - This measure is a proxy for equipment spending that is available at a monthly frequency.
- New orders of nondefense capital goods excluding aircraft decreased 0.1% in February.
 - These orders have been on a gradual downward trend since July 2018.
- New orders of nondefense capital goods excluding aircraft were below shipments in each of the three months through February, suggesting weak near-term momentum in equipment spending.

HOUSING SECTOR

Housing Starts



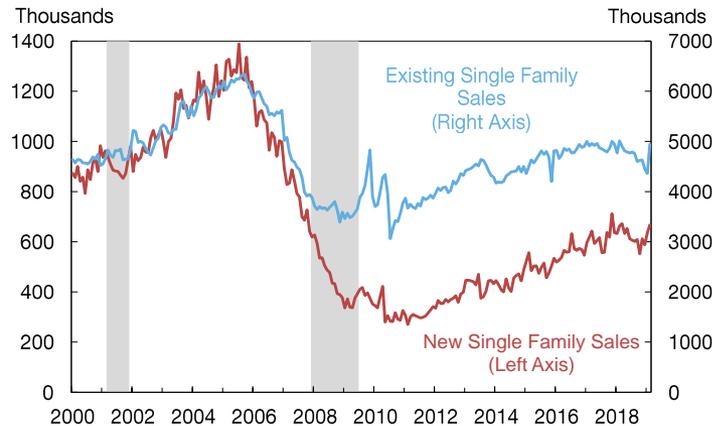
Source: Census Bureau via Haver Analytics

Note: Shading shows NBER recessions.

Housing starts fall in February

- Total housing starts in February fell 8.7% below the revised January estimate of 1.27 million, 3.9% below the consensus expectation of 1.21 million units. Single-family starts fell 17.0% while multi-family starts rose a strong 17.8%.
- Single-family starts have generally been steady in recent months, in spite of the February fall, but permits have been declining. This pattern suggests that the single-family housing market remains quite soft in spite of the decline in mortgage rates over recent months. On the contrary, multi-family starts have been declining since 2017, but permits have been rising since last summer, suggesting a bit more momentum in that sector.

New and Existing Home Sales



Source: Census and National Association of Realtors via Haver Analytics

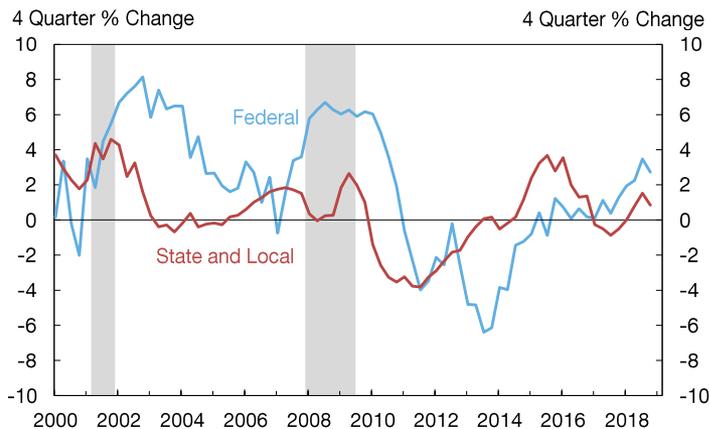
Note: Shading shows NBER recessions.

Home sales increase in February

- Single-family existing home sales increased 13.3% in February to 4.94 million units (seasonally adjusted annual rate).
 - Single-family existing home sales are 1.4% below a year ago, but have surpassed levels that prevailed in the early 2000s.
- Single-family new home sales rose 4.9% (SAAR) in February to 667,000 units.
 - Relative to a year ago, sales are down in all regions except the South.
 - Single family new home sales have now surpassed the immediate pre-recession level.
- Favorable labor market conditions and a substantial decline in the mortgage interest rate in recent months were important factors in the increase of existing home sales.

GOVERNMENT SECTOR

Real Government Consumption and Gross Investment



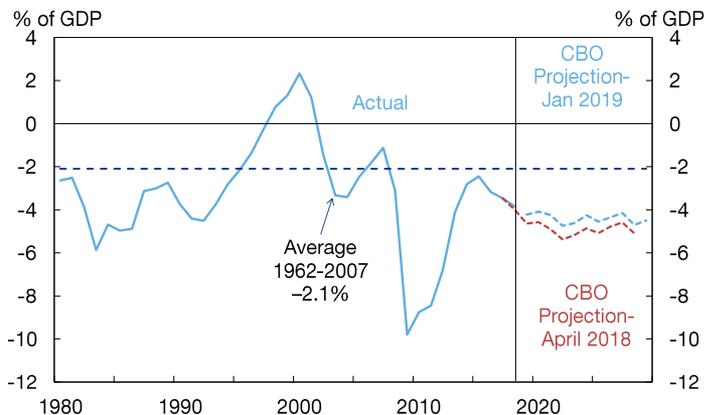
Source: Bureau of Economic Analysis via Haver Analytics

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.
- After increasing at a progressively faster pace over the previous year, the four-quarter percentage change of real federal spending slowed to 2.7% in 2018Q4 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 0.8% in Q4 from 1.5% in Q3. All of the slowing occurred in investment in structures, likely due to the fact that state and local infrastructure investment is often paid for in part by grants from the federal government.

Federal Deficit



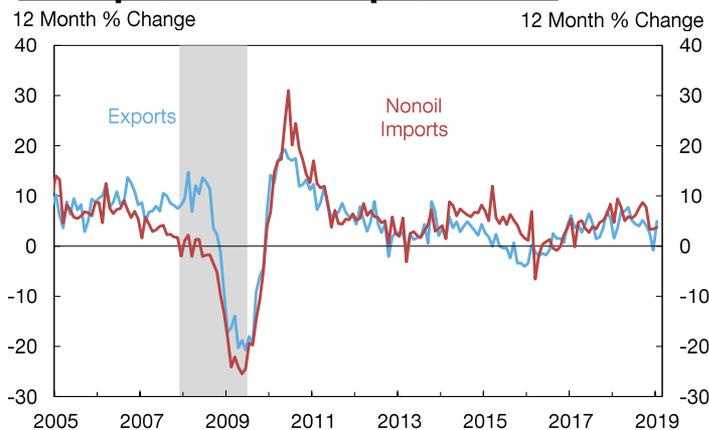
Source: Congressional Budget Office

Medium term fiscal outlook somewhat improved

- The Congressional Budget Office (CBO) has released its updated “current law” baseline for the economy and the federal budget for the period from FY 2019 through FY 2029.
- The federal budget deficit (expressed as a percent of GDP) over that period, while still much larger than the post WWII average of 2%, is about 0.5 percentage point smaller than in the CBO projection of April of 2018.
- This improvement is due entirely to lower projected outlays. Projected revenues are slightly lower as a share of GDP over the projection horizon.
- The lower projected outlays are broad-based, reflecting lower assumed non-defense discretionary outlays and somewhat lower entitlement outlays. In addition, net interest is reduced an average of 0.2 percentage point of GDP due largely to a lower assumed path for interest rates.

INTERNATIONAL DEVELOPMENTS

Real Exports and Nonoil Imports of Goods



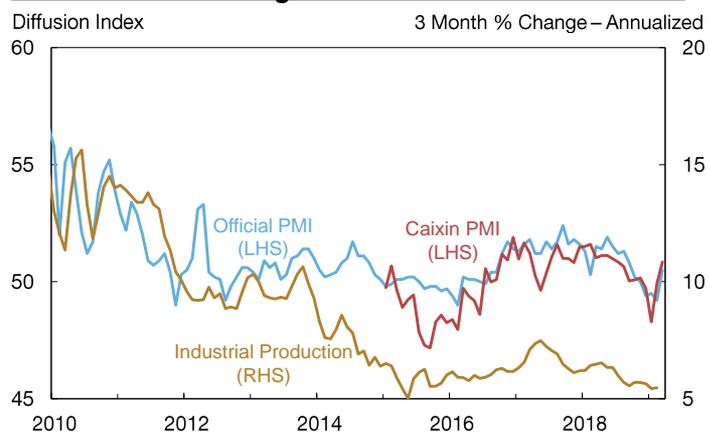
Source: Census Bureau via Haver Analytics

Note: Shading shows NBER recessions.

The trade deficit decreases in January

- The trade deficit decreased to \$51.1 billion in January from \$59.9 billion in December. In real terms, exports increased and imports declined over the month.
 - Real goods exports grew 2.1% over the month in January. This increase was mainly due to a rebound in export volumes of food, feeds and beverages related goods and higher autos exports. Oil goods export volumes were down modestly.
 - Real nonoil goods imports fell 2.2% in January, as import volumes of capital goods (excluding autos) showed a large decline. Oil goods import volumes were up over the month.
- Net exports lowered GDP growth by 0.08 percentage point according to the second (and final) estimate of 2018 Q4 GDP, a 14 basis points lower drag than in the first estimate.

China: Manufacturing PMI and Industrial Production



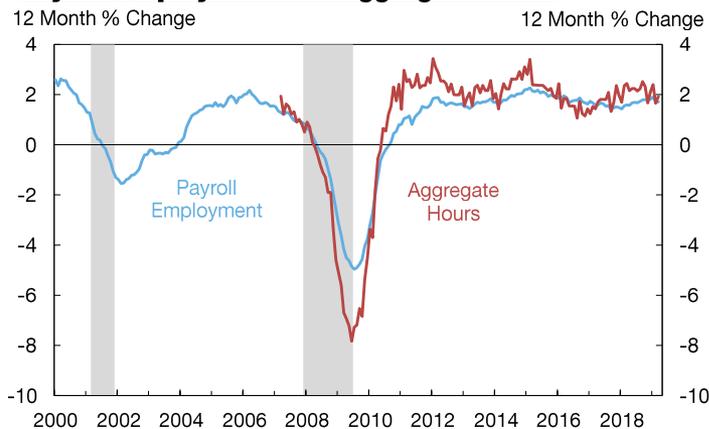
Source: Haver Analytics and CEIC

China's manufacturing activity rebounds in March

- After slumping in January and February, China's manufacturing purchasing managers' indexes (PMI) rebounded in March. The official PMI published by the National Bureau of Statistics increased from 49.2 to 50.5, while the privately collected Caixin PMI increased from 49.9 to 50.9. These were the first readings above 50 since November.
 - Despite seasonal adjustments, the series' downward and upward moves in Q1 2018 appear to have been partially driven by residual seasonal effects.
- The increase in the headline official PMI was driven by robust gains in production and new orders. New export orders increased from 45.2 to 47.1, but remained well below 50.
- The 12-month growth rate of industrial production in the first two months of 2019 slowed from 5.7 to 5.3%, though the annualized rolling quarterly growth rate held steady at 5.5%.

LABOR MARKET

Payroll Employment and Aggregate Hours



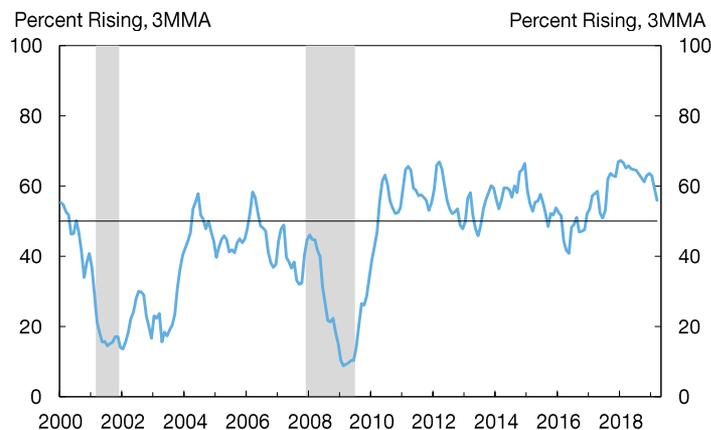
Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

Strong employment growth in March

- Nonfarm payrolls increased by 196,000, above the Bloomberg median forecast of +177,000.
 - Payroll employment was revised upward for February (from +20,000 to +33,000) and for January (from +311,000 to +312,000), resulting in a net upward revision of 14,000.
 - Private payroll employment rose by 182,000, and government payrolls went up by 14,000.
- Employment in goods-producing industries rose by 12,000, while employment in service-producing industries increased by 170,000.
 - The decline in manufacturing employment (-6,000) was more than offset by employment gains in construction (+16,000) and in mining and logging (+2,000).

1-Month Diffusion Index: Manufacturing



Source: Bureau of Labor Statistics

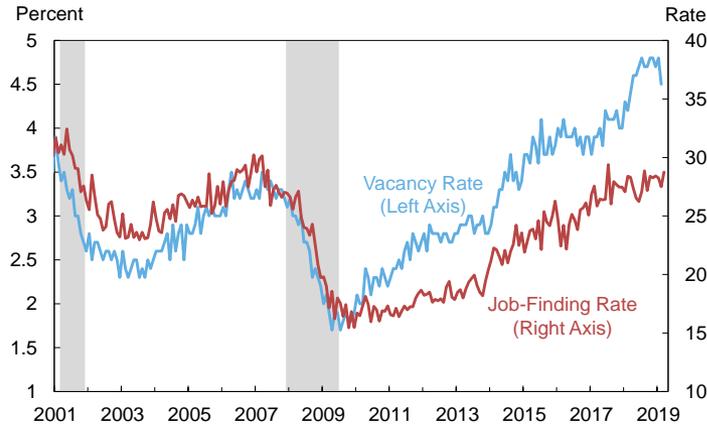
Note: Shading shows NBER recessions. 3MMA denotes three-month moving average.

Muted growth in manufacturing sector

- The one-month diffusion index for manufacturing – reflecting the balance of industries increasing and decreasing employment over the month in the manufacturing sector – was 54.6 in March.
 - This index has been on a downward trajectory in 2019, falling from 65.1 in December to the new level.
- While monthly payroll gains in manufacturing were 22,000 on average in 2018, monthly payroll gains have been more muted in the first quarter of 2019, with average gains of 4,000.

LABOR MARKET

Vacancy and Job-Finding Rates



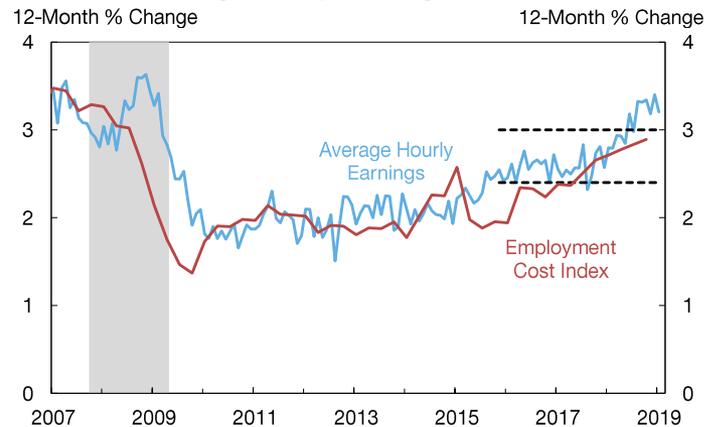
Source: Bureau of Labor Statistics

Note: Shading shows NBER recessions.

Sustained vacancy and job-finding rates in 2019

- The vacancy rate, denoting the number of job openings as a percent of total employment plus job openings, fell from 4.8% to 4.5% in February.
 - The job openings rate has been consistently at or above 4.5% since April 2018, above pre-recession highs.
- The hires rate, denoting the number of total hires during the month as a percent of total employment, fell slightly from 3.9% to 3.8% in February.
 - The hires rate has been stable between 3.8% and 3.9% since February 2018, somewhat below pre-recession highs.
- The job-finding rate, denoting the number of individuals moving from unemployment to employment as a percentage of the number of unemployed, increased from 27.5% to 28.7% in March.

Growth of Average Hourly Earnings and ECI



Source: Bureau of Labor Statistics via Haver Analytics

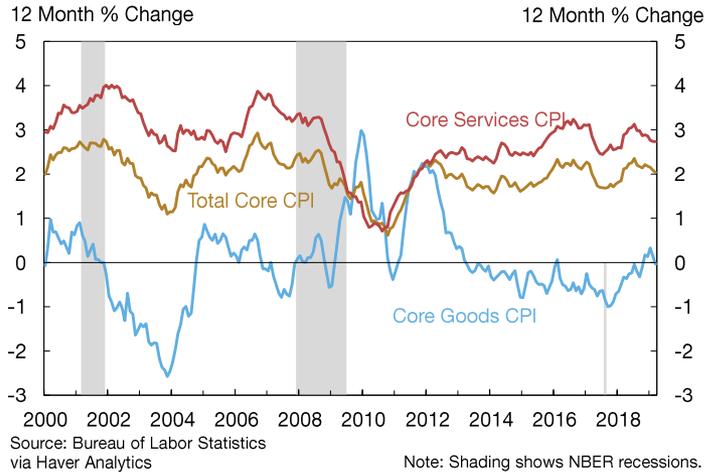
Note: Shading shows NBER recessions.

Earnings growth remains elevated

- Average hourly earnings rose 0.14% in March, below the average monthly change over 2018Q4 of 0.28%. On an annual basis, average hourly earnings were up 3.2%.
 - 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 2018.
- Average weekly earnings increased by 3.2% over a 12-month period.

INFLATION

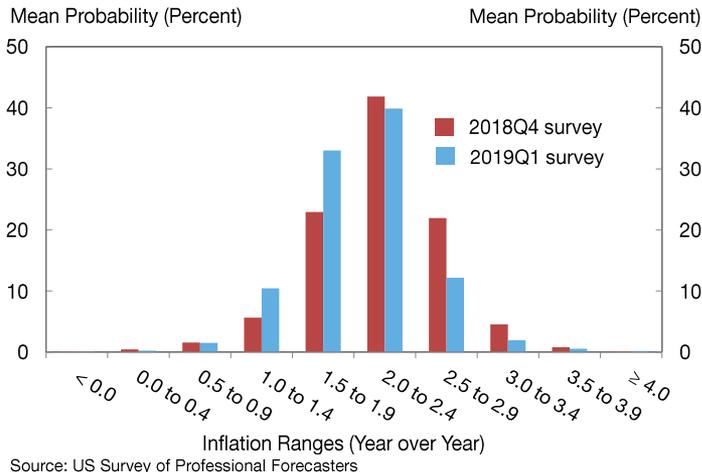
CPI Inflation: Core Goods and Core Services



Core inflation remains subdued in March

- Core CPI was up 0.1% in March, below expectations. The 12-month change in the core index was 2.0%, down from a 2.1% change in February.
- On the negative side, core goods prices fell for the second consecutive month, bringing their 12-month change back to negative territory.
- On the positive side, core services inflation was stronger than in recent months, driven by a solid increase in rent of primary residence.
 - Core services (services ex-energy) prices rose 0.3% in March, up from a 0.2% increase in January and February.

Mean Probabilities for Core PCE Inflation in 2018

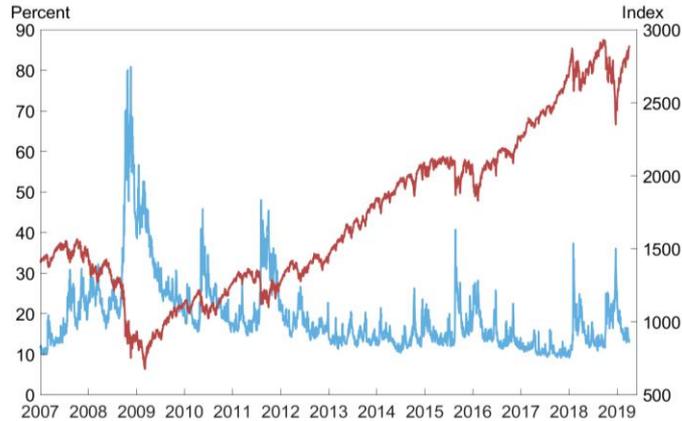


Inflation forecast distributions shift downward in Q1

- The U.S. Survey of Professional Forecasters requests density (histogram) forecasts that show the probability of inflation falling into 10 separate ranges.
 - The 2019Q1 survey was fielded from the end of February through mid-March, with results released on March 22.
- Compared to last quarter, the forecast distribution for core PCE inflation in 2019 (Q4/Q4) shifted to the left, giving more probability to the 1.0 – 1.9 percent range and less probability to the 2.5 – 2.9 range.
 - Forecasters reported a 55% chance of core PCE inflation being 2% or higher, 15 percentage points less than in the 2018Q4 survey.
 - The forecast distribution for 2020 core PCE inflation (not shown) is similar to the one for 2019: The probability of core inflation being 2% or higher is 58%.

FINANCIAL MARKETS

U.S. Equity Market Index and Volatility

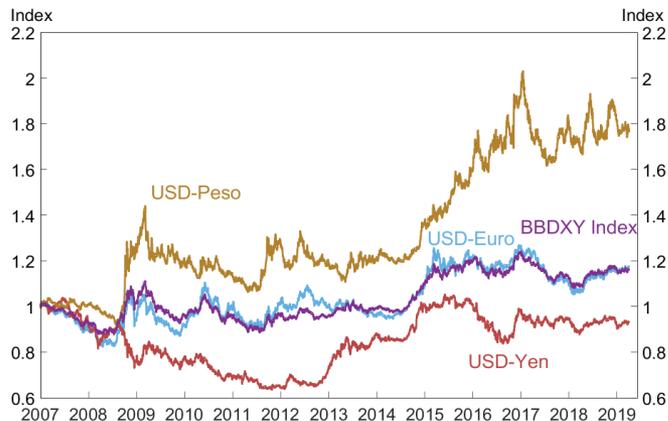


Source: Bloomberg Finance L.P.

U.S. equity markets little changed

- U.S. equity markets rebounded modestly during the last month.
 - The S&P 500 index gained 2.9% between March 13, 2019 and April 5, 2019.
- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), declined.
 - The VIX Index closed at 12.82 on April 5, 2019, 0.59 points below its close on March 13, 2019.

USD Exchange Rates



Source: Bloomberg Finance L.P.

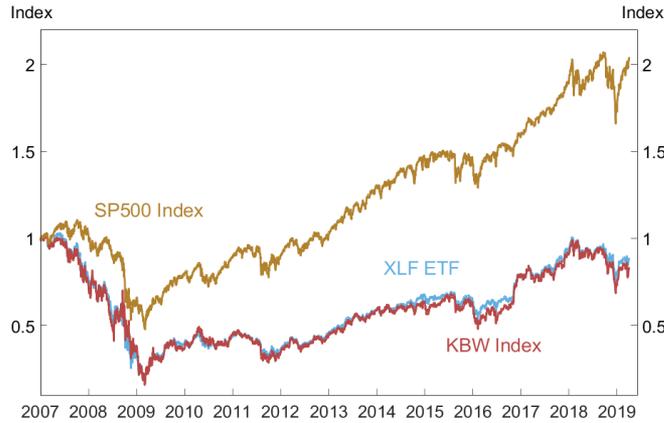
Note: Start date 01/03/2007 = 1.

U.S. dollar appreciates modestly

- The exchange value of the dollar against a basket of global currencies increased 0.54% between March 13 and April 5, 2019.
 - Over this same period the dollar appreciated by 0.98% against the euro, 0.5% against the Japanese yen, and depreciated 1.1% against the Mexican peso.
- Since the start of 2019, the dollar has depreciated 0.12% against a basket of global currencies.

FINANCIAL MARKETS

U.S. Bank Equities Performance



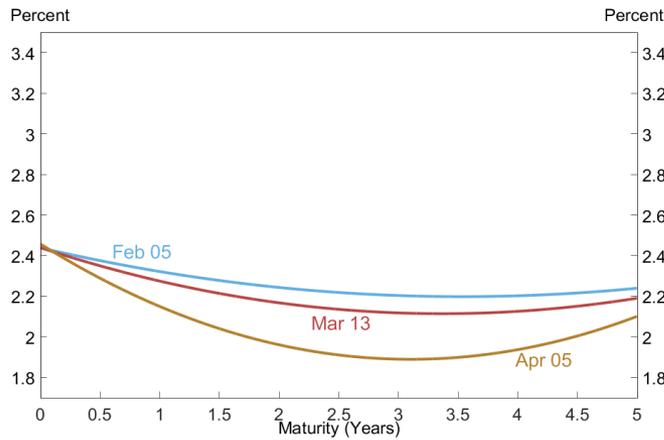
Source: Bloomberg Finance L.P.

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

Bank stocks lose in value

- As measured by the KBW Nasdaq bank index, bank equities decreased 1.6% between March 13, 2019 and April 5, 2019.
 - Since the start of the year, the KBW index has gained 11.8% in value.
- The XLF financial sector ETF increased 0.45% between March 13, 2019 and April 5, 2019.
 - Since the start of the year, the XLF ETF has gained 10.7% in value.

Expected Federal Funds Rate



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

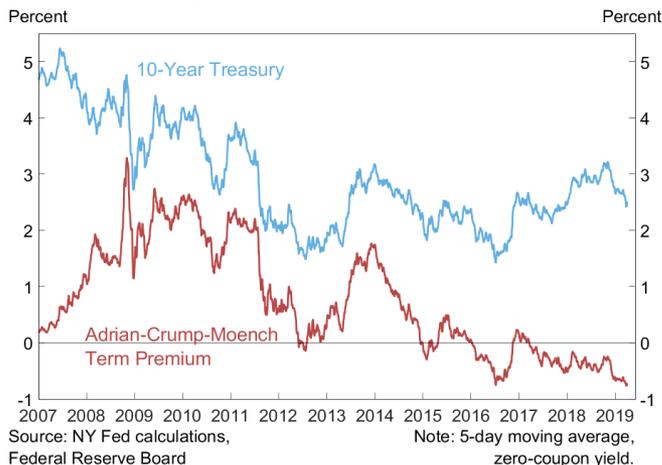
Note: Estimated using OIS quotes

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 modestly for intermediated maturities over the period from March 13, 2019 to April 5, 2019.
 - The shift for intermediate maturities was around 22 basis points.
 - For shorter maturities, the expected path of the federal funds rate shifted up by around 1 basis point.
- The market-implied path remains well below the median path of the FOMC's March 2019 Summary of Economic Projections and the January 2019 NY Fed Survey of Primary Dealers at longer horizons.

FINANCIAL MARKETS

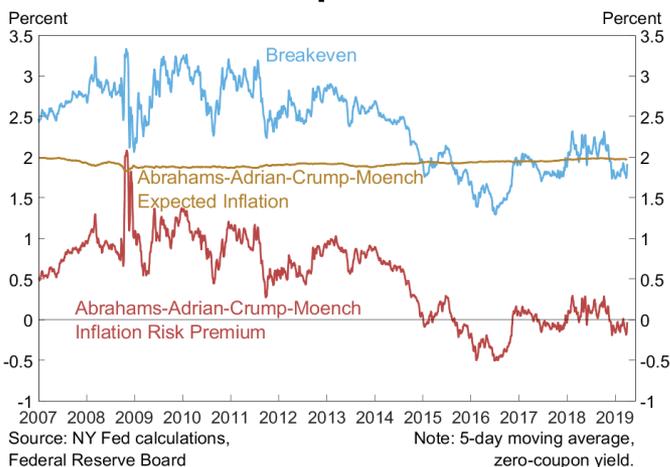
10-Year Treasury and Term Premium



Longer-term Treasury yields decline slightly

- Longer-term Treasury yields decreased slightly since March.
 - The 10-year yield decreased about 11 basis points between March 13 and April 5.
- 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 3 basis points between February 5 and March 13.

5-10 Year Forward Decomposition

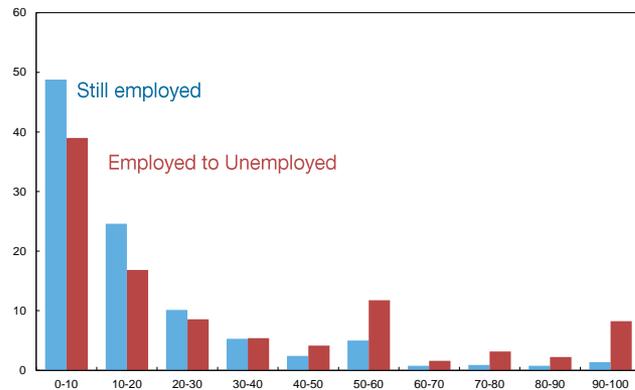


Breakeven inflation little changed

- Market-implied TIPS-based measures of long-term inflation expectations (“breakevens”) were little changed in recent weeks.
 - The five-to-ten year breakeven inflation rate increased by 5.6 basis points between March 13, 2019 and April 5, 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 increased by 5 basis points between March 13, 2019 and April 5, 2019.

SCE: (UN)EXPECTED JOB LOSSES AND HOUSEHOLD SPENDING

Distribution of Subjective Job Loss Probabilities



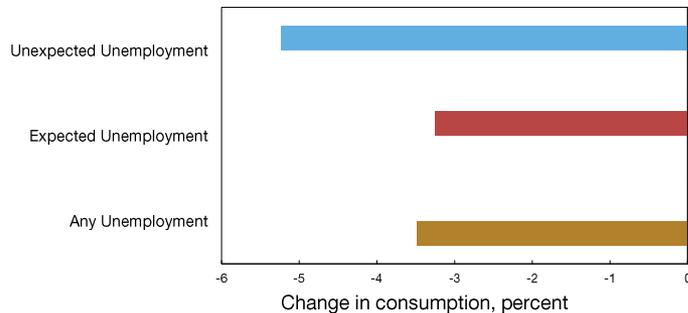
Source: New York Fed Survey of Consumer Expectations

Note: Job loss probability refers to probability of job loss over next 12 months

Workers recognize job stability, anticipate job loss

- Nearly half of SCE respondents who kept their job over the following year initially reported a subjective job loss probability of less than 10%.
- Only 38% of those who became unemployed reported an initial job loss probability of less than 10%.
- One in ten workers who lost their jobs in the subsequent twelve months were fairly certain of their coming separation (over 80% subjective job loss probability), compared to only 2% of those that remained employed.

12-Month Consumption Effects of Unemployment



Source: New York Fed Survey of Consumer Expectations

Note: Measured using 12-month employment-to-unemployment transition and subjective probability measures. Unexpected unemployment is judged as reporting a higher than median subjective probability EU measure for one's demographic group.

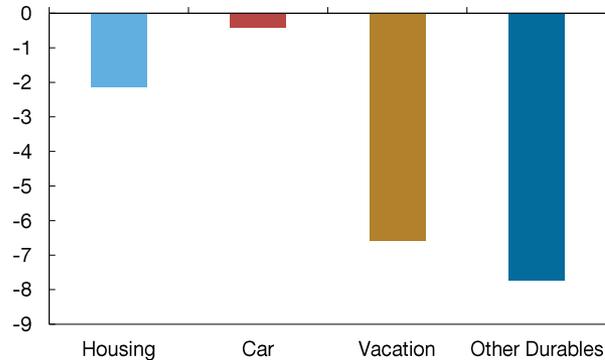
Anticipated job loss differentially impacts spending

- We classify an anticipated job loss if someone reports a subjective job loss probability that is one standard deviation above their group-specific (i.e. age, gender, race, education) unemployment risk and ultimately becomes unemployed.
- During a year in which job loss occurs – anticipated or unanticipated – overall household spending declines 3.5% on average.
 - The decline in spending is much larger, around 5%, for households that were taken by surprise. This compares to 3% for unemployed households that anticipated job loss.
- This could point to liquidity constraints that are preventing households from completely smoothing consumption, although having some idea of the actual job loss risk helps.

SCE: (UN)EXPECTED JOB LOSSES AND HOUSEHOLD SPENDING

Effect of Job Loss on Likelihood of Spending by Type

Change in likelihood of purchase, percent



Source: New York Fed Survey of Consumer Expectations

Note: Other durables include electronics, household appliances, and furniture.

Job losers prioritize housing, car-related spending

- To investigate what types of spending households cut when the household head becomes unemployed, we examine large purchases by category at the start of an unemployment spell.
 - **Categories include housing-related, car-related, other durables, and vacation-related spending.**
- We estimate the likelihood of how spending on various categories changes when the head of household becomes unemployed.
- Likelihood of spending on vacations and “other durables” declines by 7 and 8 percentage points, respectively.
 - **Transitions into unemployment affect consumers’ decisions with respect to buying a house, making home improvements, or purchasing a car to a lesser extent.**