FEDERAL RESERVE BANK *of* NEW YORK

# U.S. Economy in a Snapshot

## Research & Statistics Group

May 2020

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 May 15, 2020.

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# OVERVIEW

- Consumer spending plunged in March.
  - **Real spending on services and durable goods plummeted, while real expenditures on nondurable goods rose sharply.**
  - **Consumer confidence also plunged in April.**

- Real business equipment spending declined sharply in 2020Q1, its largest fall since 2009Q1.
  - **New orders and shipments of nondefense capital goods ex-aircraft held up relatively well in March, but other available indicators point to a severe decline in manufacturing production, including for capital equipment.**

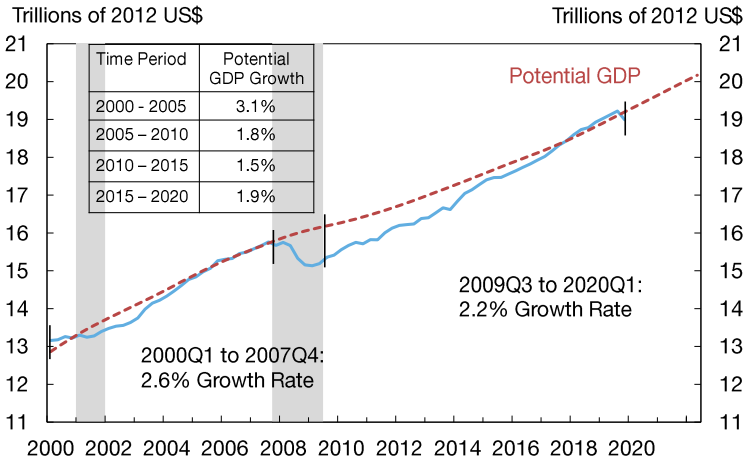
- Housing activity slowed considerably in March.
  - **Single-family housing starts as well as new and existing home sales dropped sharply, reflecting the adverse effect on the housing market from the COVID-19 pandemic and measures to address it.**

- Payroll employment fell massively in April. The unemployment rate rose sharply while the labor force participation rate fell and the employment-to-population ratio showed a substantial decline.
  - **Continuing claims for unemployment insurance reached their highest level in the history of the series (since 1967).**

- Core PCE inflation remained below the FOMC's longer-run objective.

- U.S. equity indices rebounded some from the lows recorded in March. Implied volatility declined but remained elevated. The nominal 10-year Treasury yield remained near all-time lows. The market-implied expected policy rate path over the next year remained near zero. The broad trade-weighted dollar index fell slightly. Oil prices remained low.

## GDP




| Time Period | Potential GDP Growth |
|---|---|
| 2000 - 2005 | 3.1% |
| 2005 – 2010 | 1.8% |
| 2010 – 2015 | 1.5% |
| 2015 – 2020 | 1.9% |

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

## Output falls below potential in 2020Q1

- The level of real GDP in 2019Q4 was about 1.1% below the estimate (from January) 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%.**
  - **Real GDP likely will fall further below real potential GDP in the second quarter because of the impact of COVID-19.**
  - **The 14.7% unemployment rate in April was well above estimates of its natural rate, including the CBO's estimate from January (4.43%), and is likely remain so over the near term.**

- Although estimates of potential are more uncertain amid the backdrop of COVID-19, there now appears to be considerable resource slack in the U.S. economy.
  - **Capacity utilization rates also have fallen to low levels.**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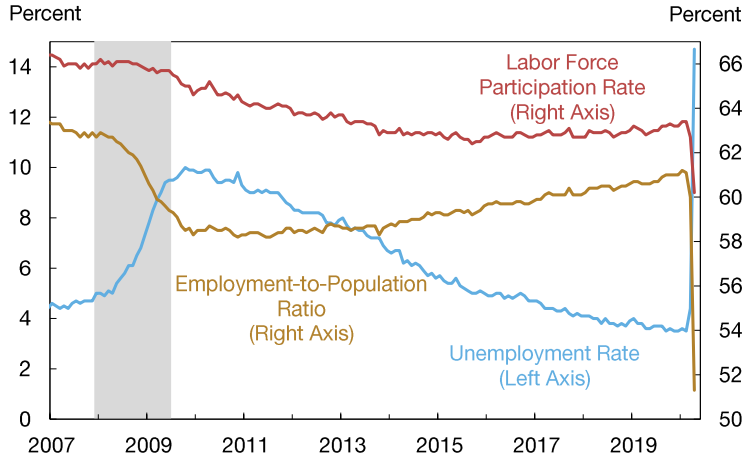
# OVERVIEW

## Labor Market Indicators



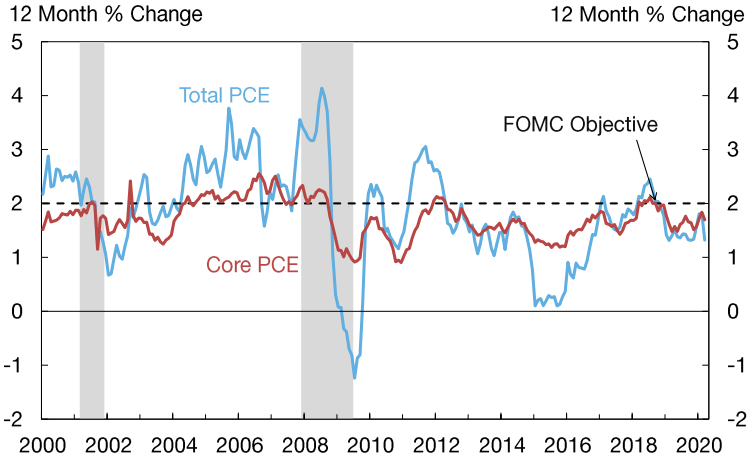

Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

## Labor market conditions deteriorate sharply in April

- The unemployment rate increased from 4.4% in March to 14.7% in April.
- Nonfarm payrolls fell by more than 20 million in April.
  - **Employment in goods-producing industries saw a decline of 2.4 million, driven by declines in manufacturing (-1.3 million) and construction (-975,000).**
  - **Employment in private service-providing industries fell by 17 million, with large declines in leisure and hospitality (-7.7 million), education and health services (-2.5 million), professional and business services (-2.1 million), and retail trade (-2.1 million).**
- The employment-to-population ratio dropped from 60.0% in March to 51.3% in April.

## 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 fell 0.3% in March, after rising 0.1% in February. The core PCE price index (which excludes food and energy prices) fell 0.1% in March, after rising 0.2% in February.
  - **Energy prices plunged 6.1% in March, and are down 6.7% relative to one year ago. Food prices rose 0.6% and are up 1.1% compared to one year ago.**
- The 12-month changes in the total and the core PCE price indices both fell to +1.3% and +1.7%, respectively.
  - **Core PCE inflation remains below the FOMC's 2 percent longer-run goal.**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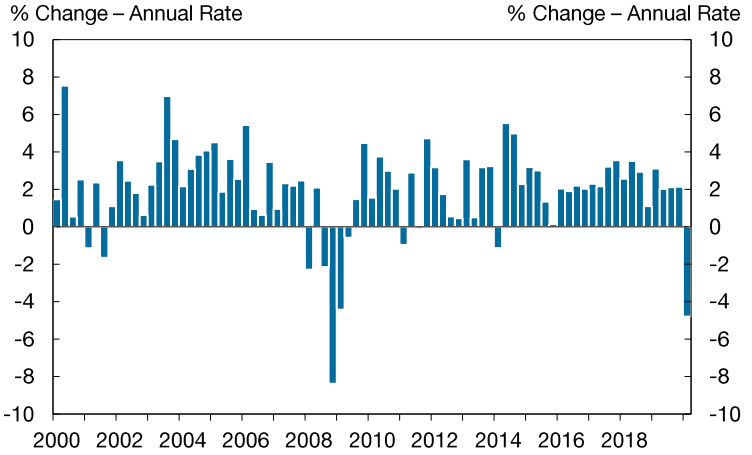
# ECONOMIC ACTIVITY

## GDP Growth

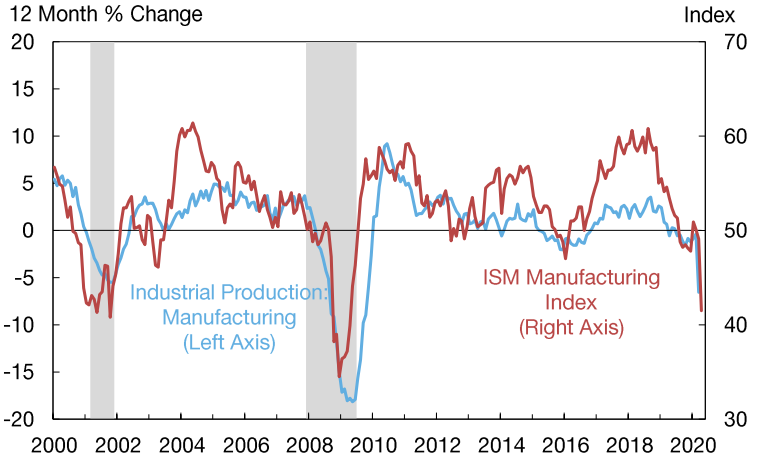



Source: Bureau of Economic Analysis via Haver Analytics

## Real GDP falls appreciably in 2020Q1

- The advance estimate of real GDP growth for 2020Q1 was -4.8% (annual rate), the most severe decline since 2008Q4. The 4-quarter change was +0.3%.
- Real personal consumption expenditures fell at a 7.6% annual rate in Q1, the largest fall since 1980Q2. Much of the fall occurred late in the quarter as lockdowns spread.
- Real nonresidential fixed investment fell 8.6% (annual rate) in Q1, its fourth consecutive decline.
- In contrast, real residential investment rose 21.0% (annual rate) in Q1, as housing strengthened early in the year.
- Government expenditures rose modestly in Q1.
- Amid a sharp fall in trade flows, net exports were a positive contributor to GDP growth in Q1. Inventory investment was a negative contributor.

## Manufacturing and ISM Manufacturing Index




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

Note: Shading shows NBER recessions.

## April manufacturing in the doldrums

- The ISM PMI fell 7.6 percentage points in April to 41.5.
  - **New Orders, Production and Employment indices posted double-digit declines, contributing to a faster rate of decline in the headline PMI.**
- Manufacturing production fell 6.3% in March, the largest monthly decrease since February 1946.
  - **The 12-month change in manufacturing production was -6.6%, the lowest since October 2009.**
- All five regional Fed surveys showed further deterioration in the manufacturing sector, with 4 of the 5 surveys reaching record lows in April.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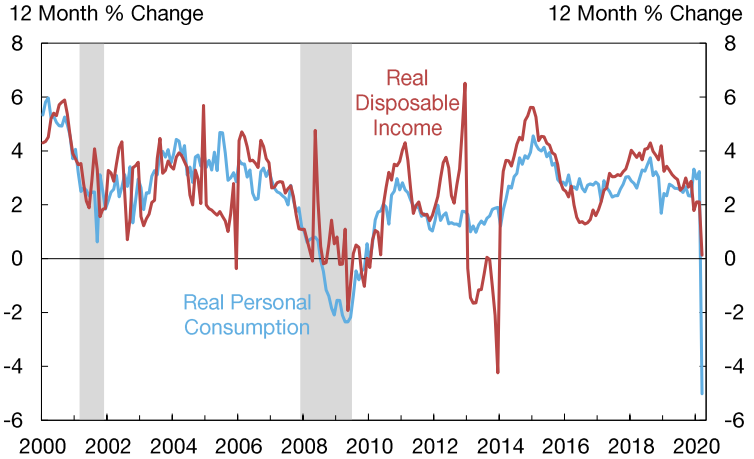
# HOUSEHOLD SECTOR

## Disposable Income and Consumption



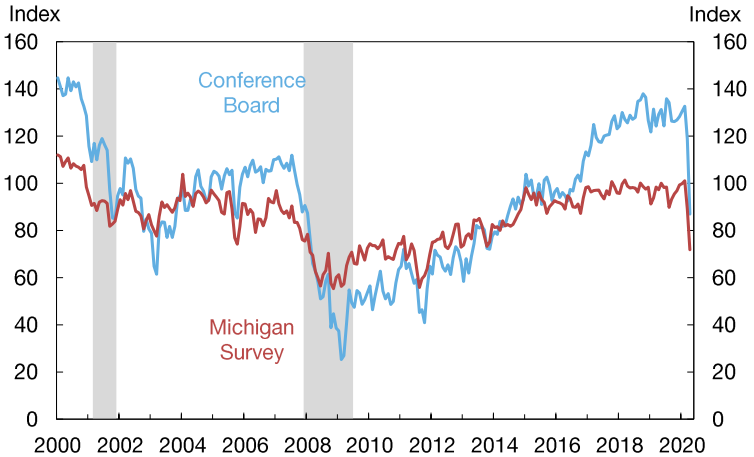

Source: Bureau of Economic Analysis, Federal Reserve Board via Haver Analytics

Note: Shading shows NBER recessions.

## Consumption plunges by $93 billion in March

- Nominal personal income fell 2% in March, or $382 billion at an annual rate. Wages and salaries declined 3.1% and proprietors' income plunged 8.2%.
- Nominal personal consumption expenditures (PCE) collapsed by 7.5% in March, or $1.13 trillion at an annual rate.
  - **Services consumption declined by $988 billion, or 9.5%. Durable goods consumption fell by $234 billion, or 15.1%, while nondurable goods consumption rose by $95 billion, or 3.1%.**
- Personal saving surged by $823 billion in March, reaching $2.17 trillion or 13.1% of disposable personal income.

## Consumer Confidence




Source: Conference Board, University of Michigan

Note: Shading shows NBER recessions.

## Consumer confidence plummets in April

- The Conference Board's Consumer Confidence Index fell to 86.9 in April from 118.8 in March.
  - **The drop was driven by a record drop in the Present Situation component from 166.7 in March to 76.4 in April.**
  - **The Expectations component actually increased in April.**
- The Michigan Consumer Sentiment Index fell to 71.8 in April from 89.1 in March.
  - **Similarly to the Conference Board's Consumer Confidence Index, the decline was driven by a collapse in the assessment of current economic conditions, with a smaller change in expectations about future economic conditions.**
- The abrupt drops in both indices are due to the economic effects of the COVID-19 pandemic.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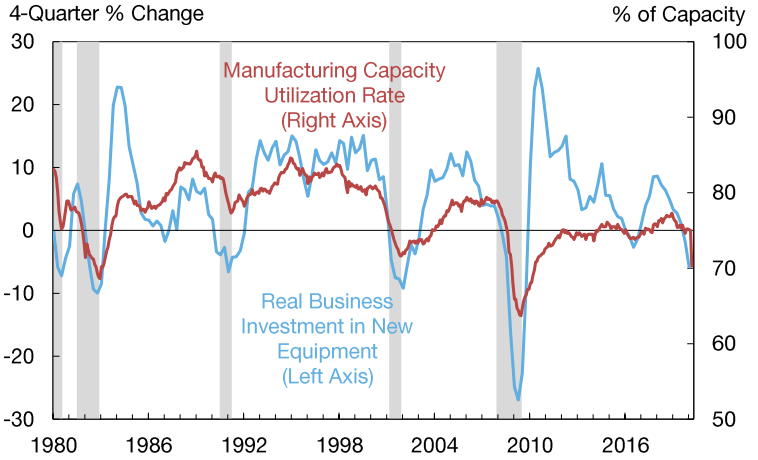
## Equipment Investment and Capacity Utilization



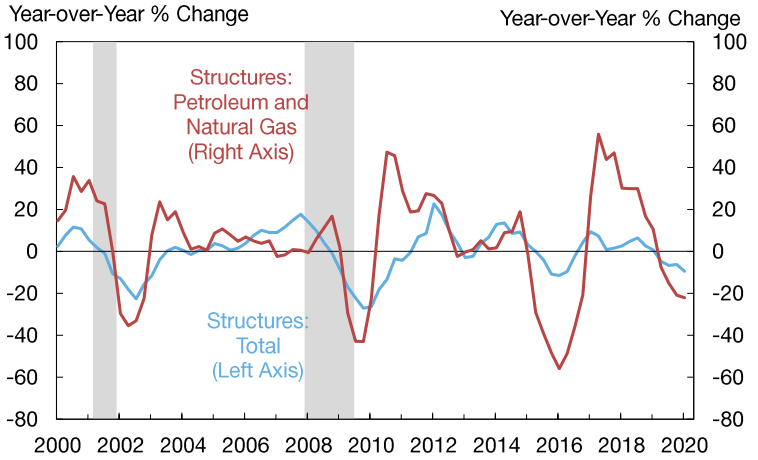

Source: Bureau of Economic Analysis, Federal Reserve Board via Haver Analytics

Note: Shading shows NBER recessions.

## Equipment spending falls sharply in 2020Q1

- Real business equipment investment declined 15.2% (annual rate) in 2020Q1, its largest fall since 2009Q1. The 4-quarter change was -5.8%.
  - **In 2020Q1, spending declined significantly for all major categories of equipment. The most severe fall occurred for transportation equipment.**
- Weak equipment investment over recent quarters has occurred against a backdrop of continued low levels of the manufacturing capacity utilization rate.
  - **This rate was 70.3% in March, the lowest since April 2010 and almost 8 percentage points below its long-run average.**
  - **Historically, utilization rates near the March level and below have been associated with weak equipment investment.**

## Investment in Nonresidential Structures




Source: Bureau of Economic Analysis via Haver Analytics

Note: Shading shows NBER recessions.

## Nonresidential structures spending falls in 2020Q1

- Real nonresidential structures investment declined 9.7% (annual rate) in 2020Q1, its 6th fall in the past 7 quarters. The 4-quarter change was -9.5%.
- In 2020Q1, spending declined for all major categories of structures except power and communication. The most severe fall occurred for manufacturing.
- Over the past several quarters, structures spending has been weak for petroleum and natural gas, reflecting the impact of the fall in energy prices. Falling rig counts point to further declines in the near term.
  - **Structures investment outside of energy also has been sluggish or falling in recent quarters.**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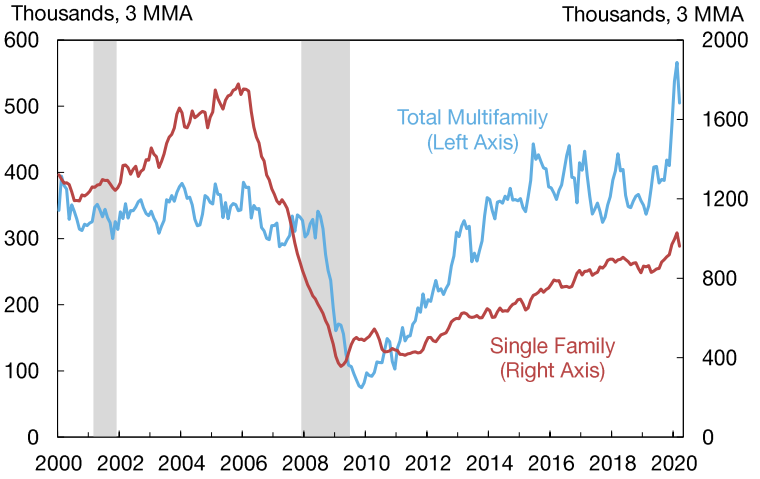
# HOUSING MARKET

## Housing Starts



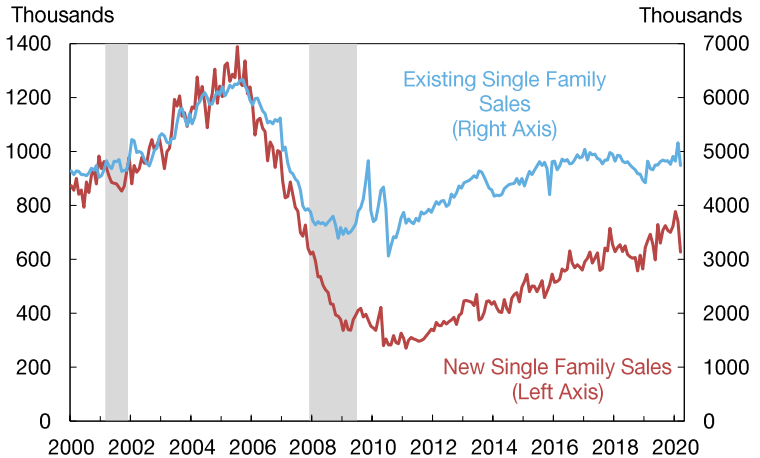

Source: Census Bureau via Haver Analytics

Note: Shading shows NBER recessions.

## Housing starts fall sharply in March

- Total housing starts fell by 22.3% in March to 1.216 million units. This drop was the largest one-month decline since March 1984.
- Single-family starts declined 17.5% in March. The 12-month change was still positive at +2.8%.
- Multi-family starts decreased 31.7% in March. The 12-month change was -1.6%.
  - **The small 12-month changes in single- and multi-family starts despite the sharp March falls reflect the strength in housing prior to the COVID-19 lockdowns.**
- Single-family permits decreased 12.2% in March, while multi-family permits increased 4.7%.
  - **Much like starts, the March fall in single-family permits was fairly modest compared to the rise over the previous year.**

## New and Existing Home Sales




Source: Census and National Association of Realtors via Haver Analytics

Note: Shading shows NBER recessions.

## Home sales show marked declines in March

- Single-family existing home sales decreased 8.5% in March to 5.3 million units (seasonally adjusted annual rate).
  - **Single-family existing home sales decreased 8.1% in March to 4.7 million units.**
- Single-family new home sales decreased 15.4% (SAAR) in March to 627,000.
  - **Relative to one year ago, new home sales are down 9.5%.**
- The substantive declines in home sales in March reflect the adverse effects of COVID-19 and the associated shutdowns. With labor market taking a big hit and continued limitations on construction activity, home sales are expected to deteriorate further in the near/medium term.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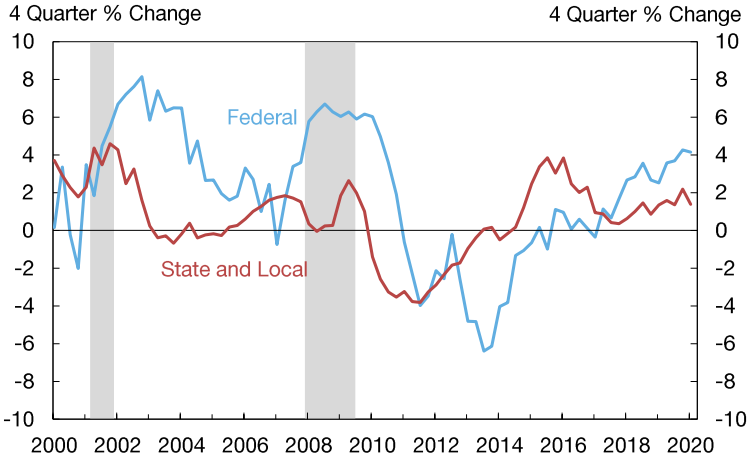
# GOVERNMENT SECTOR

## Real Government Consumption and Gross Investment



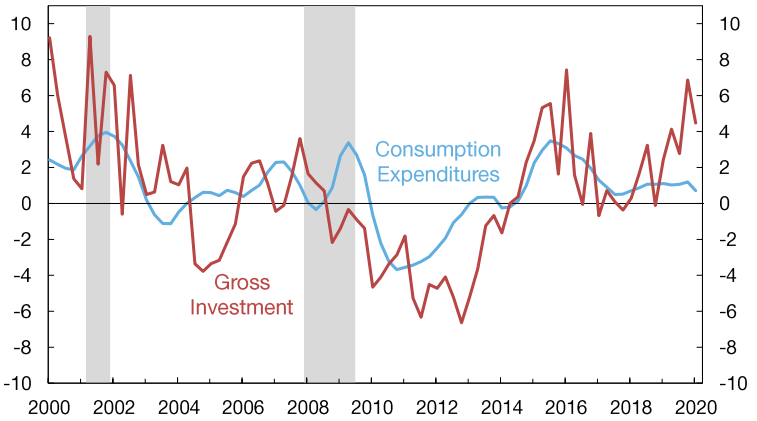

Source: Bureau of Economic Analysis
via Haver Analytics

Note: Shading shows NBER recessions.

## Growth of real government spending moderates

- Over the four quarters ending in 2020Q1, real government consumption and gross investment grew 2.4%, down from 3.0% in the prior quarter.
  - **Increased real government spending contributed 0.42 percentage point to growth over the four quarters ending in 2020Q1, down a tenth from the prior quarter.**
- Real Federal spending was up 4.1% in 2020Q1, down slightly from 2019Q4.
  - **Growth in nondefense spending rose to a multi-year high of 6.4%, while growth in defense spending slowed to 2.7%.**
- Real spending by state and local governments slowed to 1.4% for the four quarters ending in 2020Q1.

## Real State & Local Consumption & Gross Investment




Source: Bureau of Economic Analysis
via Haver Analytics

Note: Shading shows NBER recessions.

## State and local sector declines moderately

- Over the four quarters ending in 2020Q1, growth of real consumption at the state and local level slowed mildly to about 0.7% on a four-quarter change basis.
  - **Consumption expenditures consist largely of employee salaries and make up over 80% of the sector's total spending.**
- State and local gross investment spending growth declined moderately to about 4.5% over the four quarters ending in Q1.
  - **The categories of gross investment are, in order of importance, new equipment such as computers, intellectual property products such as software, and public works and infrastructure projects.**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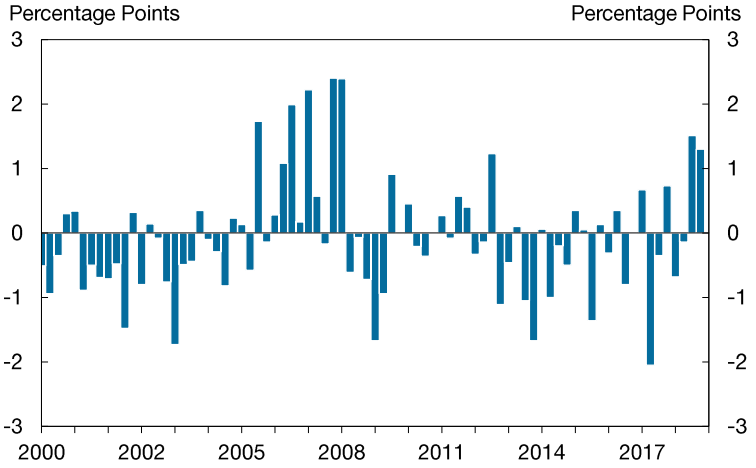
# INTERNATIONAL DEVELOPMENTS

## Net Exports: Contribution to GDP Growth



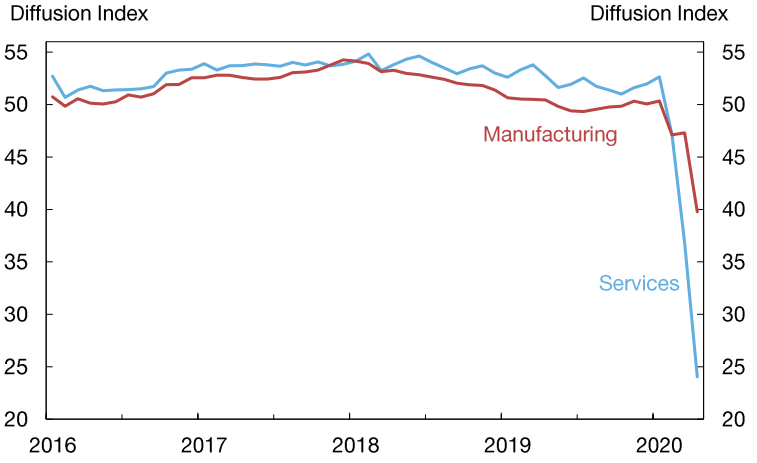

Source: Bureau of Economic Analysis via Haver Analytics

## Another net export boost to GDP

- Based on the advance release, net exports added 1.30 percentage points to GDP growth in 2020Q1.
  - **Real exports fell 8.7% (SAAR) and real imports contracted for a second consecutive quarter, this time by 15.3% (SAAR).**
  - **Both real exports and imports showed steep declines relative to the preceding quarter.**

- The trade deficit increased significantly in March to $44.4 billion from a $39.8 billion deficit in February.
  - **Real goods exports dropped 5.1% over the month, owing to large declines in autos and capital goods exports. Real oil goods exports fell.**
  - **Real goods imports decreased 0.6% in March. Real nonoil goods imports were down 0.4% due to lower imports of autos and consumption goods. Oil goods import volumes were down over the month.**

## Global Manufacturing and Services PMIs




Source: Markit Economics via Haver Analytics

## Global PMI surveys plummet on COVID-19 impact

- Global purchasing managers' surveys plummeted in April, signaling a sharp contraction in activity from the COVID-19 pandemic.
  - **The global manufacturing PMI fell 7.5 points to 39.8, while the global services PMI fell 12.8 points to 24.0.**
  - **The manufacturing outturn is the lowest since the global financial crisis. The services outturn is the lowest on record.**

- These global PMI result was buoyed by developments in China, where the COVID-19 outbreak has faded.
  - **China's manufacturing PMI fell 0.7 points to 49.4 in April, while its services PMI rose 1.4 points to 44.4.**
  - **Manufacturing and services PMIs outside China averaged about 3 points lower than the headline global readings.**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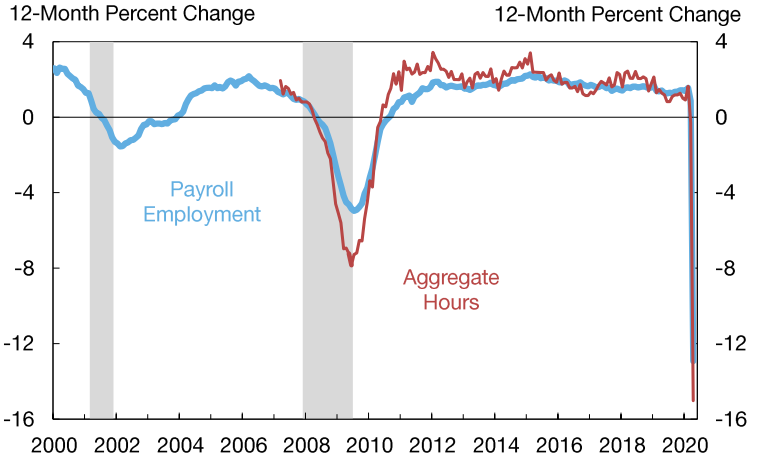
# LABOR MARKET

## Payroll Employment and Aggregate Hours



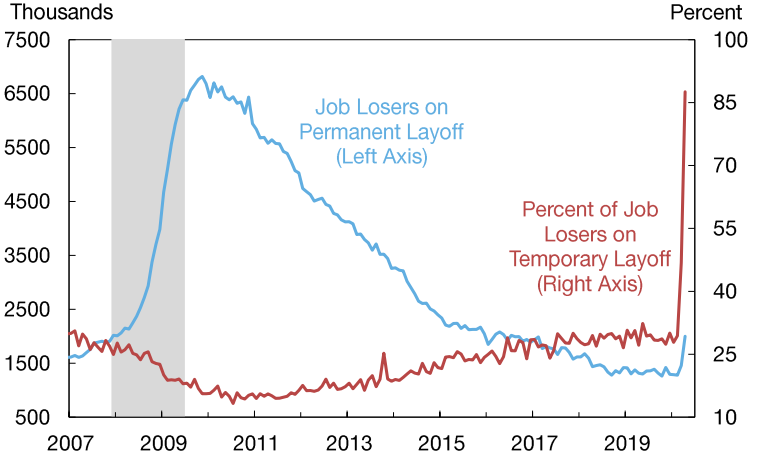

Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

## Payroll employment drops to 2011 levels

- Nonfarm payrolls decreased by more than 20 million for the month of April, the largest monthly decline in the history of the series.
  - **Readings were revised downward for February (from +275,000 to +230,000) and March (from -701,000 to -870,000).**
  - **Payroll employment is now at its lowest level since 2011.**
- Private payroll employment declined by 19.5 million while government employment decreased by 980,000.
- Aggregate weekly hours worked by all private employees were down 14.9% in April, reflecting the fall in employment.

## Permanent and Temporary Layoffs




Source: Bureau of Labor Statistics

Note: Shading shows NBER recessions.

## Unemployment rises sharply in April

- The unemployment rate jumped to 14.7%, up from 4.4% in March.
  - **This increase was caused by a sharp rise in the number of workers on temporary layoff (+877%, from 1,800,000 to 18,000,000).**
  - **The number of permanent job losers rose to a lesser extent (+37%, from 1,500,000 to 2,000,000).**
- An alternative measure of unemployment, U6, which includes marginally attached workers and workers who hold part-time jobs but prefer full-time jobs, was 22.8%, up from 8.7% in March.

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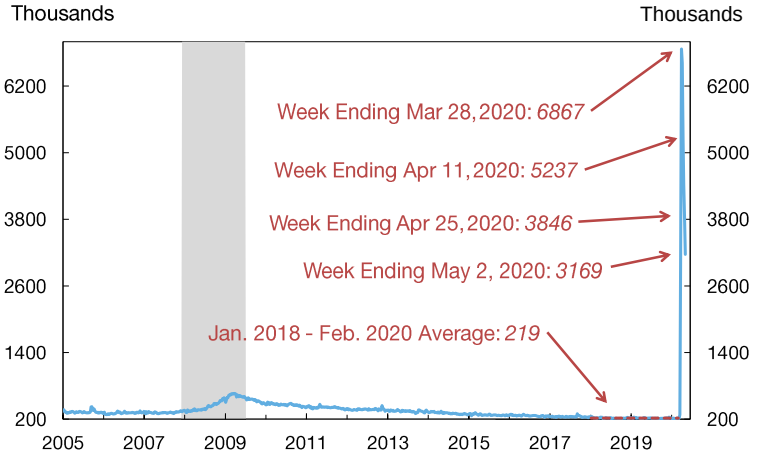
# LABOR MARKET

## Unemployment Insurance Initial Claims



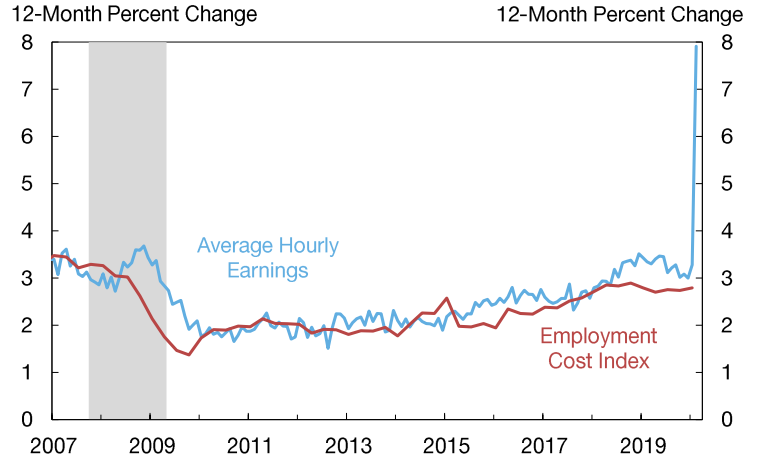

Source: Department of Labor

Note: Shading shows NBER recessions.

## Initial claims remain high despite weekly decline

- There were 3,169,000 initial claims for unemployment insurance for the week ending May 2.
  - **Weekly initial claims have gradually declined since their peak of 6,867,000 in the week ending March 28.**
  - **States that saw some of the largest decreases in the recent claims data include California (-203,017), Florida (-73,567), Connecticut (-69,767), New Jersey (-68.173), and Pennsylvania (-66,698).**
- Continuing claims rose to 22,647,000 for the week ending April 25, bringing the insured unemployment rate to 15.5%.
  - **This marks the highest level of seasonally adjusted insured unemployment in the history of the series.**

## Growth of Average Hourly Earnings and ECI




Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

## Average hourly earnings grow in April

- Average hourly earnings grew 4.7% from March to April and 7.9% on an annual basis.
  - **The increase in average hourly earnings likely reflects compositional shifts in the labor market as job losses were larger in low-wage industries.**
- The ECI for civilian workers increased 0.8% in the first quarter of 2020, above the Bloomberg median forecast and the change in the previous quarter (0.7%).
  - **The 12-month change in the ECI was 2.8%, slightly higher than in 2019Q4 (2.7%).**
  - **It is important to note that the reference date for the ECI was March 12, 2020 so it does not yet capture the severe disruption caused by the COVID-19 pandemic.**

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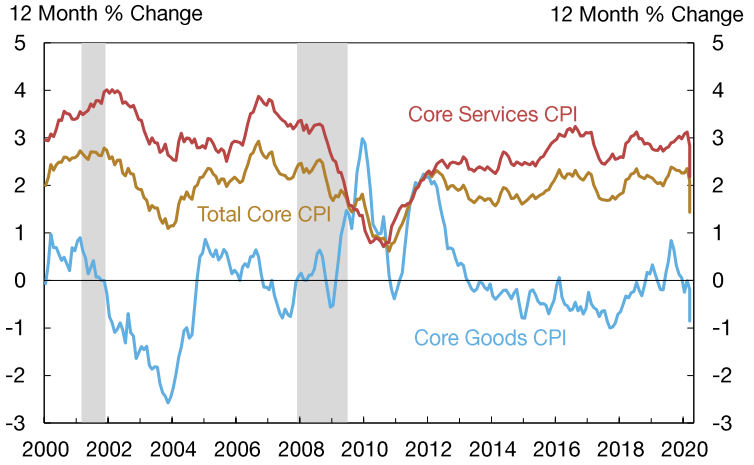
## CPI Inflation: Core Goods and Core Services



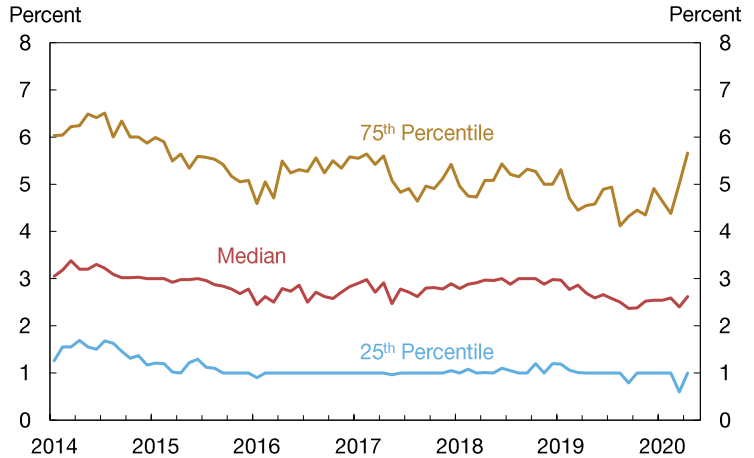

Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

## Record-breaking monthly core CPI decline in April

- The April inflation report was record-breaking in terms of the monthly decline in core CPI, and quite dramatic overall with 12-month core inflation one percent lower than it was only two months ago.
  - **Core CPI fell 0.4% in April, the largest monthly decline in the history of the series.**
  - **The 12-month increase in the core index was 1.4%, one percentage point below the 12-month change recorded in February.**
- Core services prices fell by 0.4% in April, their largest decline since 1982. Their 12-month change was 2.2%, compared to 3.1% in February.
- Core goods prices were down 0.9% over the past 12 months.

## 3-Year Ahead Inflation Expectations




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

## Inflation expectation and disagreement increase

- Medium-term inflation expectations increased slightly.
  - **Median inflation expectations increased in April by 0.2 percentage point at the three-year horizon to 2.6%.**
- Respondents, however, increasingly disagree about the future path of inflation.
  - **Our measure of disagreement (the difference between the 75th and 25th percentiles of the distribution of inflation expectations across survey respondents) increased for the second consecutive month, from 4.4% in March to 4.7% in April.**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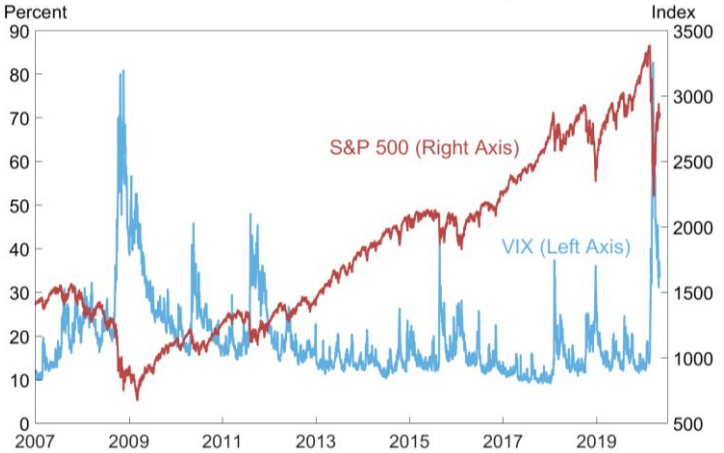
## U.S. Equity Market Index and Volatility



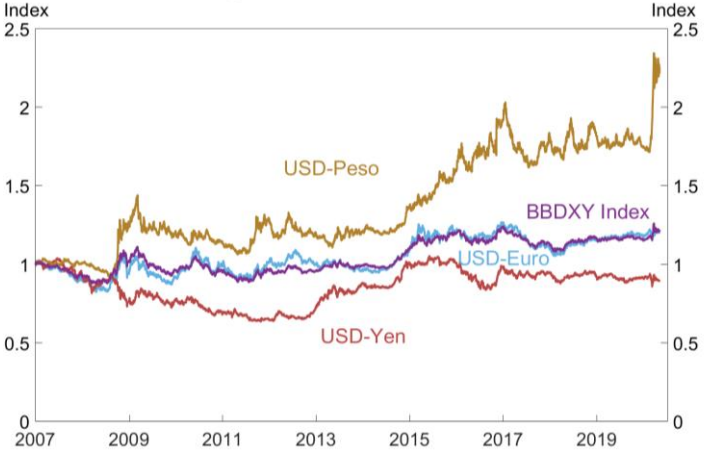

Source: Bloomberg Finance L.P.

## U.S. equity markets improve

- U.S. equity markets have stabilized during the past month and have risen above lows reached in March.
  - **The S&P 500 index rose 6.9% between April 6 and May 6 and rose 27.3% from its recent low on March 23. It remains 15.8% below its February 19, 2020 all-time high.**
  - **As of May 6, the index was down 11.8% year to date.**

- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), declined, but remains elevated.
  - **The VIX Index closed at 34.12 on May 6, well below its 82.69 record high on March 16, 2020, but well above its 2019 year-end value of 13.78.**

## USD Exchange Rates




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

## U.S. dollar value depreciates slightly

- The exchange value of the dollar against a basket of global currencies decreased 0.9% between April 6 and May 9.
  - **Over this same period the dollar depreciated 2.8% against the Japanese yen, and depreciated 1% against the Mexican peso. The dollar neither appreciated nor depreciated against the Euro.**

- Since the start of 2020, the dollar has appreciated 5.9% against a basket of global currencies.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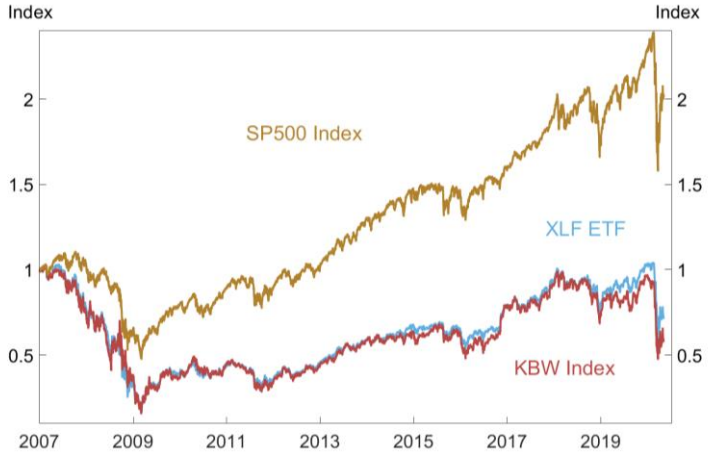
## US Bank Equities Performance

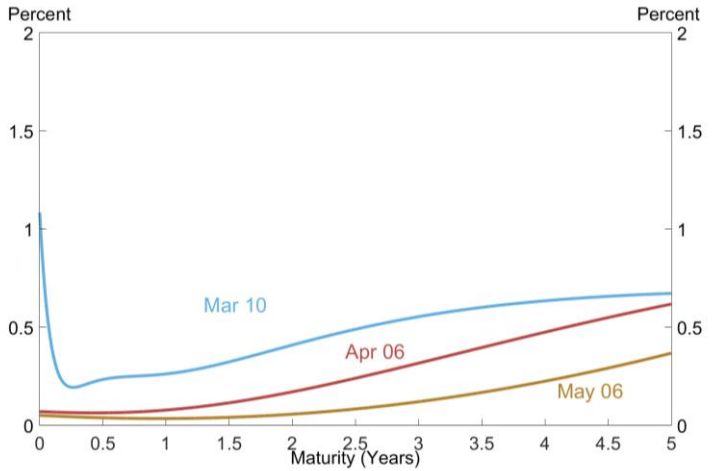



Source: Bloomberg Finance L.P. Note: Start date 01/03/2007 = 1.

## Slight improvement in bank stocks performance

- As measured by the KBW Nasdaq bank index, bank equities rose 3.2% between May 6 and April 6, and are 20.6% higher than their recent low on March 23.
  - **As of May 6, the index was down 40.2% year to date.**
- The XLF financial sector ETF also rose 1.2% between April 6 and May 6, and is up 20.7% from its low on March 23.
  - **As of May 6, the index was down 30.7% year to date.**
- However, bank stocks have lagged behind the broader stock market, which rose 6.9% between April 6 and May 6 and is down only 11.8% 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 declines further

- The expected path of the federal funds rate implied by rates on overnight indexed swaps (OIS) decreased by 5-10 basis points for shorter maturities and by 10-20 basis points for intermediate maturities between April 6 and May 6.
- The market-implied path remains well below the median path of the FOMC's Summary of Economic Projections from December 2019 and the NY Fed's Survey of Primary Dealers from January 2020.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## 10-Year Treasury and Term Premium

## Longer-term Treasury yields at all-time lows

- Longer-term Treasury yields remain below 1%, near all-time lows.
  - **The 10-year yield decreased 3 basis points between April 6 and May 6 as a 5-day moving average.**
  - **The 10-year yield is currently 125 basis points lower than its level at the end of 2019.**
- Estimates from the Adrian-Crump-Moench term structure model indicate the term premium increased slightly alongside the decline in yields.
  - **The 10-year term premium increased by 2 basis points between April 6 and May 6 as a 5-day moving average.**

## 5-10 Year Forward Decomposition

## Breakeven inflation increases

- Market-implied TIPS-based measures of long-term inflation expectations ("breakevens") have increased in recent weeks.
  - **The five-to-ten year breakeven inflation rate was 1.39% on May 6, increasing by around 10 basis points since April 6 as a five-day moving average.**
- According to the Abrahams-Adrian-Crump-Moench model, expected inflation declined slightly.
  - **The estimated five-to-ten year expected inflation rate declined by 1 basis point between April 6 and May 6 as a five-day moving average.**


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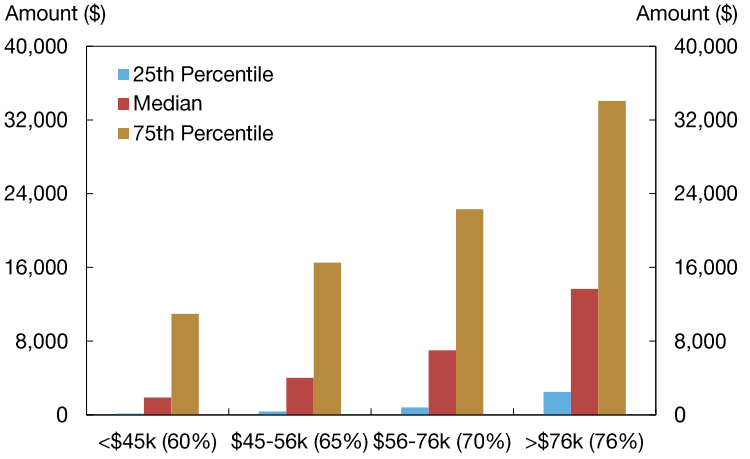
## Available Credit on Credit Card Accounts



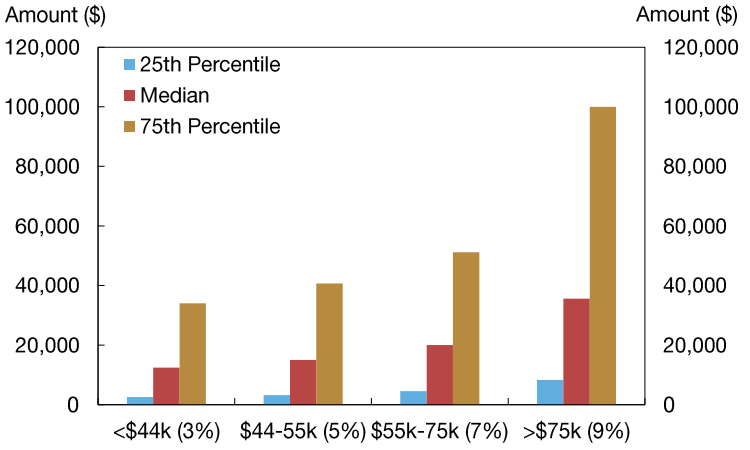

Source: New York Fed Consumer Credit Panel / Equifax; IRS Statistics of Income.

Note: X-axis indicates average adjusted gross Zipcode-Income and % with a credit card.

## Credit card capacity limited in lower income zipcodes

- Revolving credit may provide crucial cash to help consumers smooth spending during gaps in income.
- The New York Fed Consumer Credit Panel (CCP), based on Equifax data, provides information on credit availability.
  - **This is measured as the limit minus the outstanding balance on credit card accounts.**
- Credit cards are the most prevalent form of consumer credit.
  - **60% of individuals in lower income zipcodes have a credit card account, up to 76% in higher income zipcodes.**
- But, many have very low available credit:
  - **The 25th percentile among those in lower income zipcodes is $150.**
  - **The 25th percentile in the highest income zipcodes is $2500.**
- Note, income is not available in the CCP, but a proxy is created by grouping borrowers by the average income in their zipcode.

## Available Credit on Home Equity Lines of Credit




Source: New York Fed Consumer Credit Panel / Equifax; IRS SOI

Note: X-axis indicates average adjusted gross Zipcode-Income and % with a HELOC.

## Home equity lines uncommon, but more capacity

- Homeowners may have the option to borrow against the value of their home. Those with open home equity lines of credit (HELOC) are positioned to do so already.
- HELOCs are very uncommon in lower income areas (only 3% of borrowers); although the median available credit increases with income, it is still only about $12k. Available credit increases with income, and the median in the highest income areas is $36k.
- Some borrowers – although a smaller share in lower-income areas – may be able to use their existing credit accounts to smooth income gaps.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