



FEDERAL RESERVE BANK *of* NEW YORK

U.S. Economy in a Snapshot

Research & Statistics Group

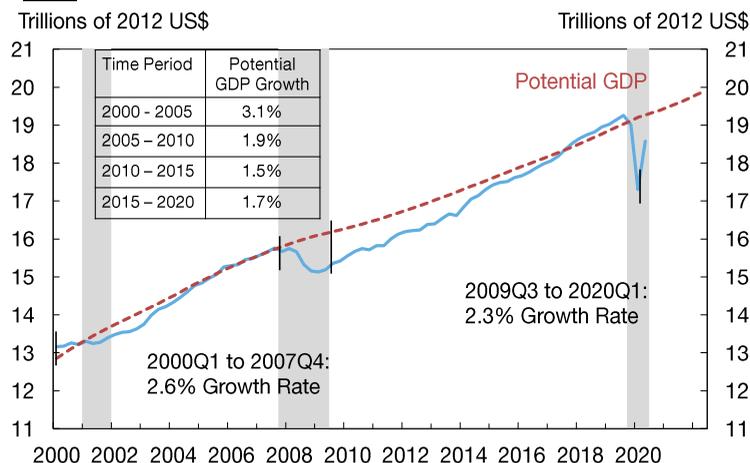
November 2020

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 November 16, 2020.

OVERVIEW

- Growth of consumer spending picked up in September.
 - **Real expenditures on nondurable goods and especially on durable goods increased robustly, while real spending on services rose moderately; services expenditures remained well below their February level.**
 - Consumer confidence measures were mixed in October.
- Real business equipment spending rebounded strongly in 2020Q3.
 - **Shipments of nondefense capital goods ex-aircraft continued to rise in September, and new orders were modestly above shipments, suggesting some further near-term momentum.**
- Housing activity continued to expand in September.
 - **Single-family starts and existing home sales rose with signs of further near-term momentum; however, new home sales fell, and uncertainty about the longer-term outlook remains high.**
- Payroll employment grew at a slower pace in October. The unemployment rate fell, mainly due to a further decline in temporary layoffs. The labor force participation rate and the employment-to-population ratio both posted sizable gains but remained well below their pre-pandemic levels.
 - **The number of long-term unemployed and the median duration of unemployment both continued to rise.**
- Core PCE inflation remained below the FOMC's longer-run objective.
- U.S. equity indices fluctuated near their all-time highs, amid significant volatility. The nominal 10-year Treasury yield increased modestly but remained low. The market-implied expected policy rate path rose moderately for all maturities. The broad dollar index declined and oil prices fell slightly.

GDP



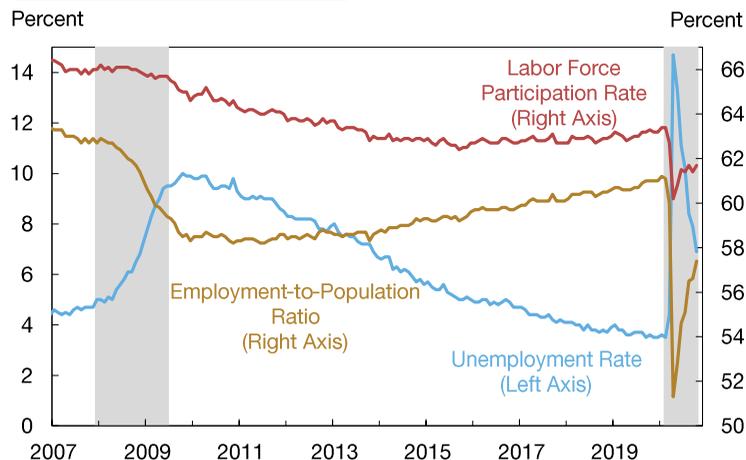
Source: Bureau of Economic Analysis, Congressional Budget Office via Haver Analytics Note: Shading shows NBER recessions.

Despite Q3 rebound, output still below potential

- The level of real GDP in 2020Q3 was about 3.5% below the estimate of real potential GDP from the Congressional Budget Office (CBO).
 - **The 2020Q3 output gap rebounded considerably from the -9.9% gap in 2020Q2, but it was still similar to those seen in 2012-14.**
 - **Even though it has fallen sharply since April, the 6.9% unemployment rate in October was above the CBO's estimate of its longer-run natural rate (4.37%).**
 - **The CBO projects that real potential GDP will grow at a relatively slow rate of about 1.4% over the next year.**
- Other measures also indicated that there is considerable resource slack in the U.S. economy.
 - **Despite rebounding since April, capacity utilization rates continued to be at low levels.**

OVERVIEW

Labor Market Indicators



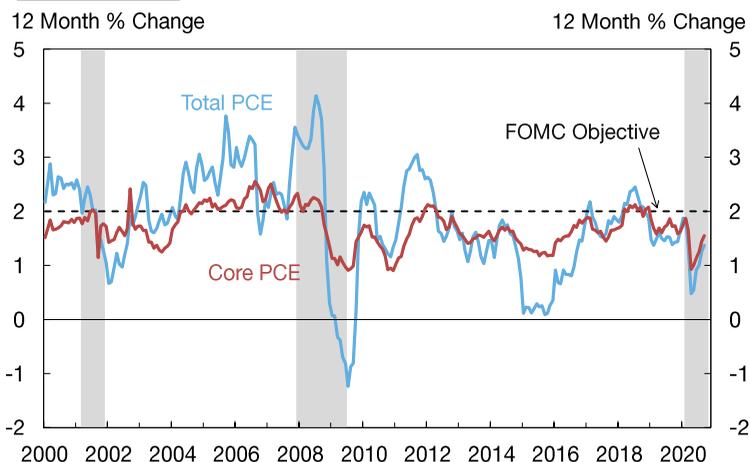
Source: Bureau of Labor Statistics
via Haver Analytics

Note: Shading shows NBER recessions.

Labor market recovery progresses slowly in October

- The unemployment rate decreased from 7.9% in September to 6.9% in October.
- Nonfarm payrolls rose by 638,000 in October, well below the average gain of 1.3 million in 2020Q3.
 - Employment in private service-providing industries increased by 783,000, with increases in leisure and hospitality (+271,000), professional and business services (+208,000), and retail trade (+103,700).
 - Employment in goods-producing industries rose by 123,000, driven by increases in manufacturing (+38,000) and construction (+84,000).
- The employment-to-population ratio increased from 56.6% in September to 57.4% in October.

PCE Deflator



Source: Bureau of Economic Analysis
via Haver Analytics

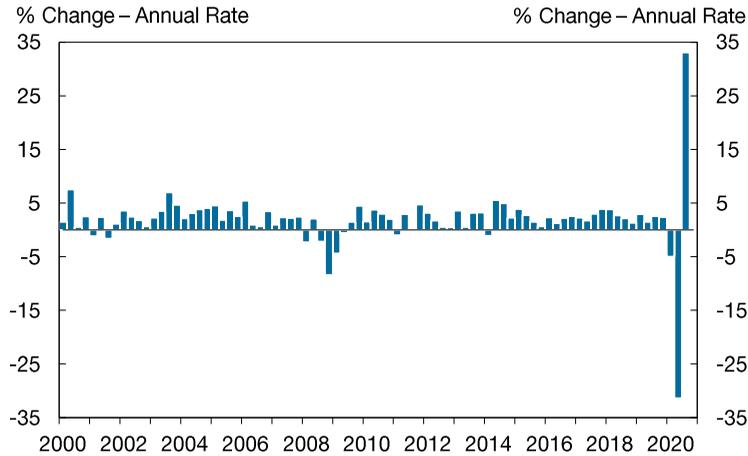
Note: Shading shows NBER recessions.

Inflation continues to run below 2 percent

- The total PCE price index rose 0.2% in September, after increasing 0.3% in August. The core PCE price index (which excludes food and energy prices) also rose 0.2% in September, after increasing 0.3% in August.
 - Energy prices rose 0.7% in September, and were down 8.1% relative to one year ago. Food prices decreased 0.3% in September and were up 3.9% compared to one year ago.
- The 12-month change in the total PCE price index rose to +1.4% in September from a downwardly revised +1.3% in August, and the 12-month change in the core PCE price index increased to +1.5% from a downwardly revised +1.4%.
 - Core PCE inflation remained below the FOMC's 2 percent longer-run goal.

ECONOMIC ACTIVITY

GDP Growth

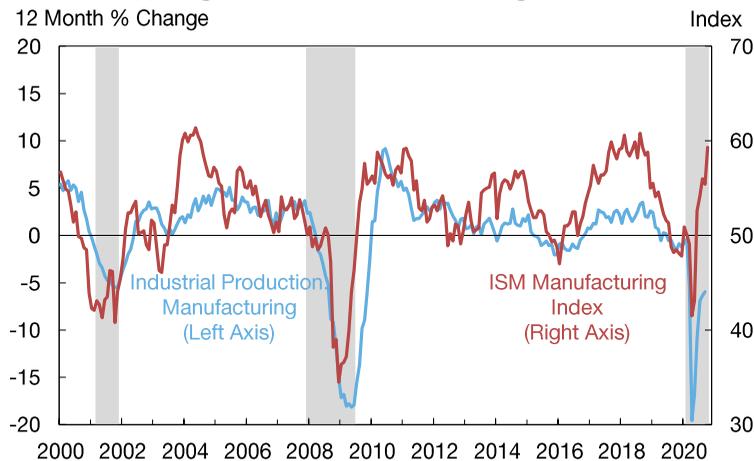


Source: Bureau of Economic Analysis via Haver Analytics

Record GDP growth in Q3 after a record fall in Q2

- In the BEA's first estimate, real GDP surged at a 33.1% annual rate (7.4% at a quarterly rate) in 2020Q3, after falling at a 31.4% annual rate (-9.0% quarterly rate) in 2020Q2. The 4-quarter change was -2.9%.
- Real personal consumption expenditures rose at a 40.7% annual rate in Q3, its largest increase. The rise was most pronounced for durable goods and for services affected by COVID-19 measures in the spring.
- There were also large increases in equipment investment and residential investment.
- Investment in nonresidential structures and government expenditures fell in the quarter.
- Personal income fell in Q3 because of lower COVID-19-related transfers. The personal saving rate fell to 15.8%.

Manufacturing and ISM Manufacturing Index



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

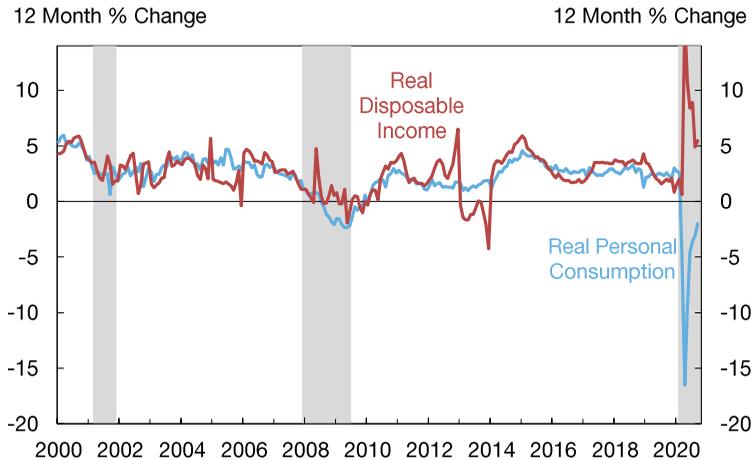
Note: Shading shows NBER recessions.

Production dips in September; ISM up in October

- After robust increases in the prior four months, manufacturing production fell 0.3% in September.
 - The September level of manufacturing production was 6.4% below the February level.
 - The 12-month change in manufacturing production was -6.0%.
- The ISM manufacturing index rose in October to a level typically consistent with solid growth in the sector.
 - The headline composite index increased 3.9 points to 59.3, led by a rise in the New Orders index of 7.7 points.
 - The Employment index increased by 3.6 points to 53.2, the first time it has been above the breakeven 50 level since July 2019.

HOUSEHOLDS

Disposable Income and Consumption



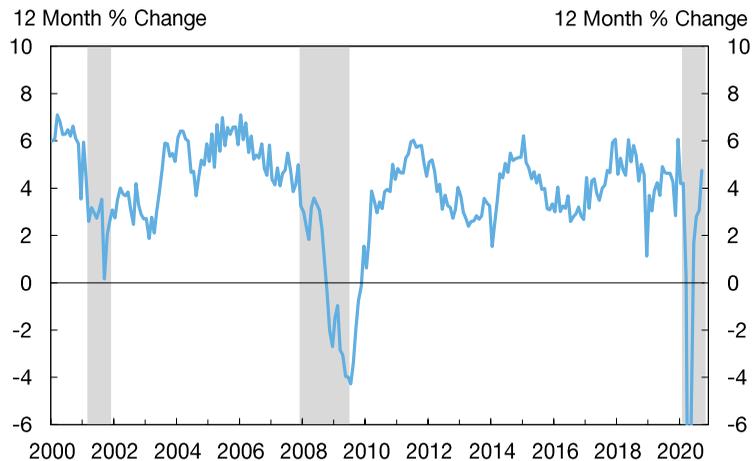
Source: Bureau of Economic Analysis,
Federal Reserve Board via Haver Analytics

Note: Shading shows NBER recessions.

Consumption continues to grow in September

- Nominal personal income rose a surprising 0.9% in September, the same as in July, after plunging 2.5% in August.
 - Personal current transfer receipts fell 0.1%, or \$5.7 billion, after plunging \$726 billion in August.
- Real Personal Consumption Expenditures (PCE) rose 1.2% in September, up from 0.7% in August.
- The personal saving rate was 14.3% in September, lower than the (upwardly revised) 14.8% in August.
 - **A key question going forward is how the savings accumulated by the household sector so far during the pandemic are distributed in the population.**

Retail Sales: PCE Control Excluding Gasoline



Source: Census Bureau via Haver Analytics

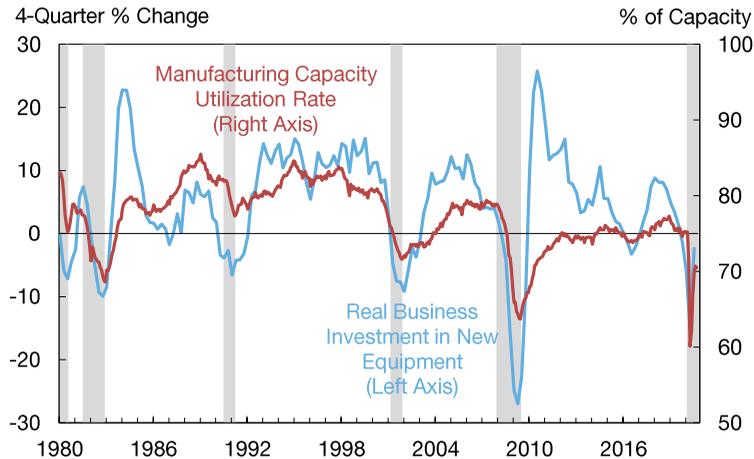
Note: Shading shows NBER recessions.

Retail sales grow more than expected in September

- Total retail sales rose 1.9% in September and were up 5.4% on a 12-month basis.
 - **Retail sales ex-autos were up 1.5% in September and 4% over the year. Growth was broad based across categories.**
- Sales of the PCE control ex-gasoline were up 1.5% in September and were up 4.7% on a 12-month basis.
- Spending on goods continued to be strong. Retail sales have increased for five months in a row and have more than recovered their pre-pandemic level.

BUSINESS SECTOR

Equipment Investment and Capacity Utilization



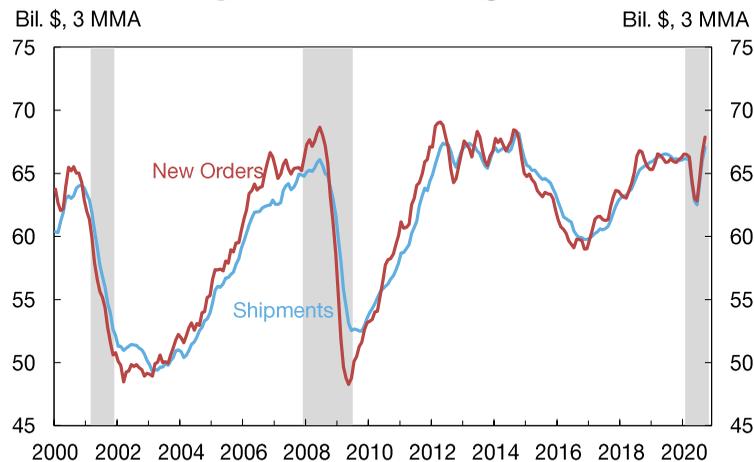
Source: Bureau of Economic Analysis, Federal Reserve Board via Haver Analytics

Note: Shading shows NBER recessions.

Equipment spending rebounds in 2020Q3

- Real business equipment investment shot up at a 70.1% annual rate in 2020Q3, after dropping at a 35.9% annual rate in 2020Q2 and falling in each of the 4 quarters prior to that. The 4-quarter change was -2.4%.
 - In 2020Q3, spending rose strongly for all four major categories of equipment. The rise was particularly acute for transportation equipment, although that category was still more than 20% below its level from a year prior.
- The rebound in equipment investment has occurred alongside higher levels of the manufacturing capacity utilization rate in 2020Q3.
 - Even so, this rate was only 70.5% in September, a low level on a historical basis.
 - Low utilization rates typically have been associated with weak equipment investment.

Nondefense Capital Goods Excluding Aircraft



Source: Census Bureau via Haver Analytics

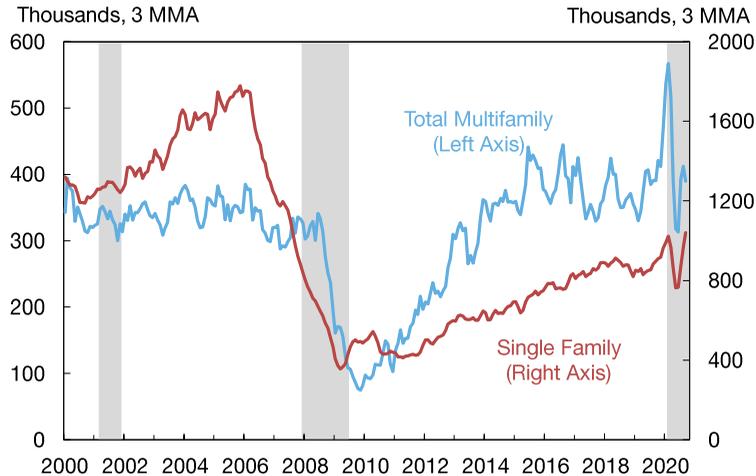
Note: Shading shows NBER recessions.

Capital goods shipments increase in September

- Shipments of nondefense capital goods excluding aircraft rose 0.5% in September, the fifth consecutive increase following a plunge in April. The September level of shipments was 2.2% above the February level.
 - This measure is a proxy for equipment spending that is available at a monthly frequency.
- New orders of nondefense capital goods excluding aircraft rose 1.0% in September, also the fifth consecutive increase following a plunge in April. Orders in September were 3.6% above their February level.
- New orders for these goods were slightly above shipments in September.

HOUSING SECTOR

Housing Starts



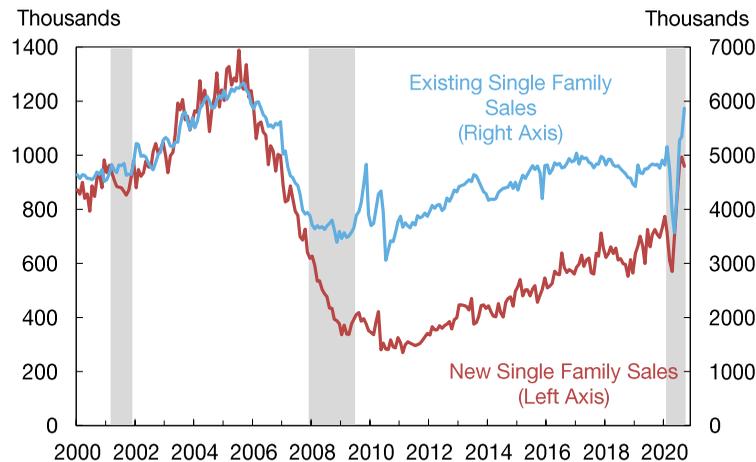
Source: Census Bureau via Haver Analytics

Note: Shading shows NBER recessions.

Single-family housing starts continue to rise

- Total housing starts rose 1.9% in September. Starts were up 11.1% in the 12 months ending in September.
 - Total building permits increased 5.2% in September.
- Single-family starts rose 8.5% in September to a level of 1,108,000 units (annual rate), 22.3% above the September 2019 level.
 - The three-month average of single-family starts surpassed its recent highs and was at its highest since August 2007.
- Multi-family starts, which are notoriously volatile from month to month, fell to 307,000 units (annual rate) in September, 16.3% below August, and 16.6% below the September 2019 level.

New and Existing Home Sales



Source: Census and National Association of Realtors via Haver Analytics

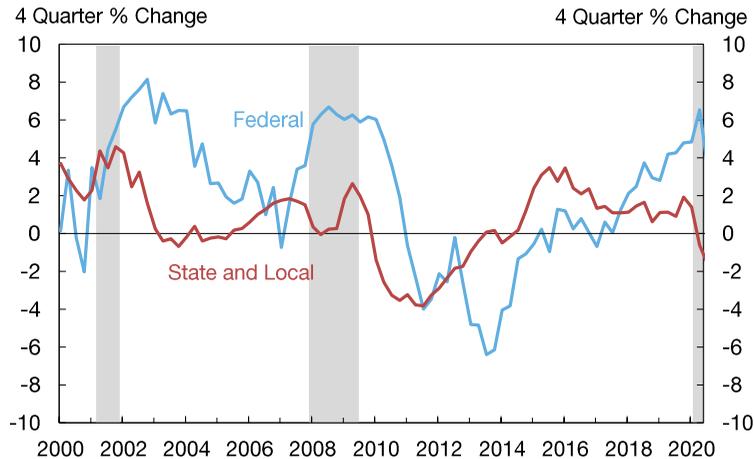
Note: Shading shows NBER recessions.

Housing market continues to display strength

- Single-family existing home sales increased 9.7% in September to 5.87 million units (seasonally adjusted annual rate).
 - Single-family existing home sales were 21.8% above a year ago.
- Single-family new home sales decreased 3.5% (SAAR) in September to 0.96 million units (SAAR).
 - Relative to one year ago, new home sales were up 32.1%.
- Overall, home sales continued to display significant strength in the housing market. This reflects historically low mortgage rates, continued recovery in jobs and increased demand due to widespread incidence of remote work. Nevertheless the ongoing pandemic casts some uncertainty on the future of the housing market.

GOVERNMENT SECTOR

Real Government Consumption and Gross Investment



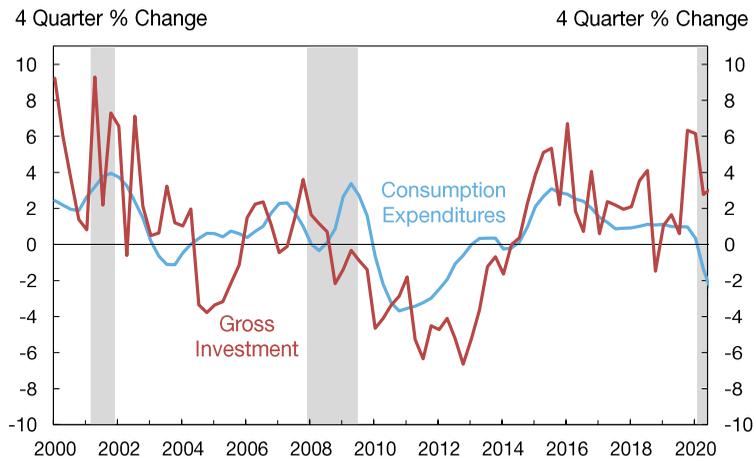
Source: Bureau of Economic Analysis via Haver Analytics

Note: Shading shows NBER recessions.

Growth of real government spending slows sharply

- Real government spending and gross investment rose 0.4% during the four quarters ending in 2020Q3, down from 2.1% in 2020Q2.
- Both federal and state and local spending slowed.
 - The four-quarter change in real federal spending was +3.6% in 2020Q3, down from +6.5% the prior quarter.
 - The four-quarter change in real state and local spending was -1.6%, down from -0.6% the prior quarter.
- The slowdown in real federal spending primarily reflects a decline in payments to banks for processing and administration of Paycheck Protection Program loan applications.

Real State & Local Consumption & Gross Investment



Source: Bureau of Economic Analysis via Haver Analytics

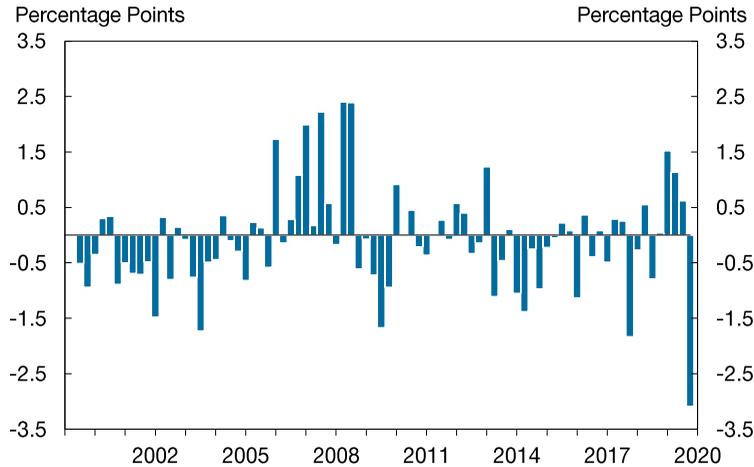
Note: Shading shows NBER recessions.

State and local sector continues decline

- Over the four quarters ending in 2020Q3, growth of real consumption at the state and local level deteriorated further to -2.64%, marking two consecutive quarters of negative consumption growth.
 - Consumption expenditures consist largely of employee salaries and make up over 80% of the sector's total spending.
- State and local gross investment growth over the four quarters ending in Q3 ticked up to 3.1%, remaining roughly equivalent to Q2, but markedly lower than its pre-pandemic level.
 - 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.

INTERNATIONAL DEVELOPMENTS

Net Exports: Contribution to GDP Growth



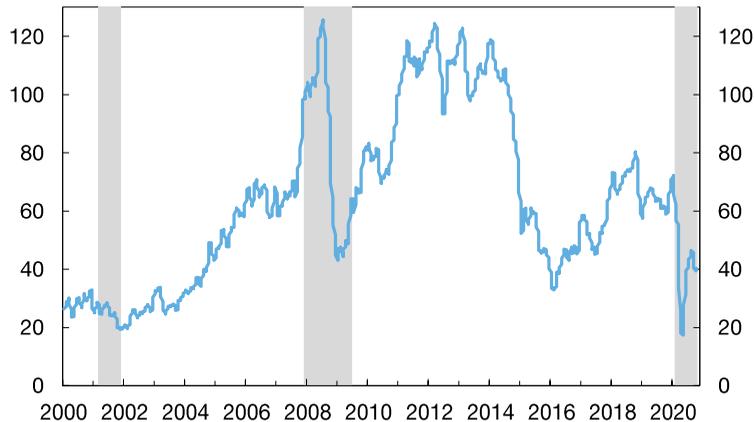
Source: Bureau of Economic Analysis via Haver Analytics

Net exports fall in 2020Q3 as economies rebound

- Based on the October release, net exports subtracted 3.1 percentage points from GDP growth in 2020Q3.
 - Both real exports and imports rebounded from their COVID-19 pandemic-induced steep declines in the previous quarter.
 - Real exports increased by 59.7% (annual rate), and real imports increased by 91.1% (annual rate).
- The trade deficit was \$63.9 billion in September, down \$3.1 billion from \$67.0 billion in August.
 - Real exports of goods rose by 2.5% over the month, driven primarily by an increase in food, feed and beverage products and capital goods excluding autos.
 - Real imports of goods were almost flat in September, falling by 0.6%. This reflected categories offsetting each other, such as industrial supplies excl, petroleum in the negative territory, and auto exports experiencing positive growth.

Crude Oil Prices

Dollars per Barrel, 4-Week Moving Average



Source: Energy Information Administration via Haver Analytics

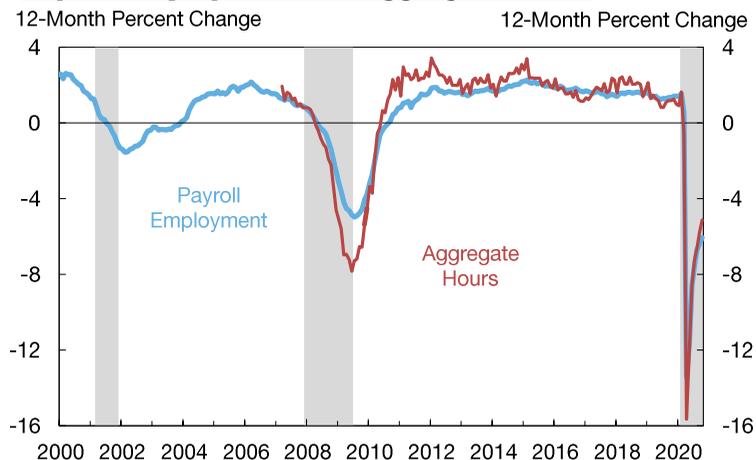
Note: Shading shows NBER recessions.

Oil prices continue to stay near \$40/barrel since June

- Oil production has fallen enough to stabilize prices during the pandemic.
 - Downside risks to prices include the recent jump in production in Libya and the possible easing of sanctions on Iran next year.
- Global oil demand was projected to fall 9% in 2020.
 - A recovery to 2019 levels was not expected until at least 2022.
- U.S. extraction was down 13% over the year in Q2.
 - The large drop in construction spending in the oil industry suggests that supply will be restrained over the near term.
 - The Dallas Fed Energy survey suggests oil prices would need to get above \$50/barrel for production to recover.

LABOR MARKET

Payroll Employment and Aggregate Hours



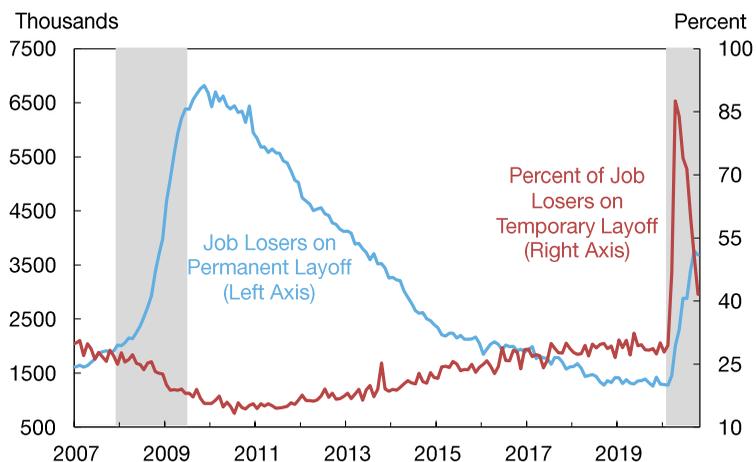
Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

Payroll employment continues expansion

- Nonfarm payroll employment rose by 638,000 in October.
 - This figure was slightly above the Bloomberg median forecast of 580,000.
 - With the October reading, nonfarm payroll employment remained about 10.1 million below its February level.
- Private payroll employment rose by 906,000, largely driven by an increase of 783,000 in service-providing industries.
 - Government employment declined by 268,000 in October, primarily due to a loss in temporary census workers and losses in state and local education.
- Combined with the increase in payroll employment, aggregate weekly hours worked by all private employees expanded by 0.76% in October.

Permanent and Temporary Layoffs



Source: Bureau of Labor Statistics

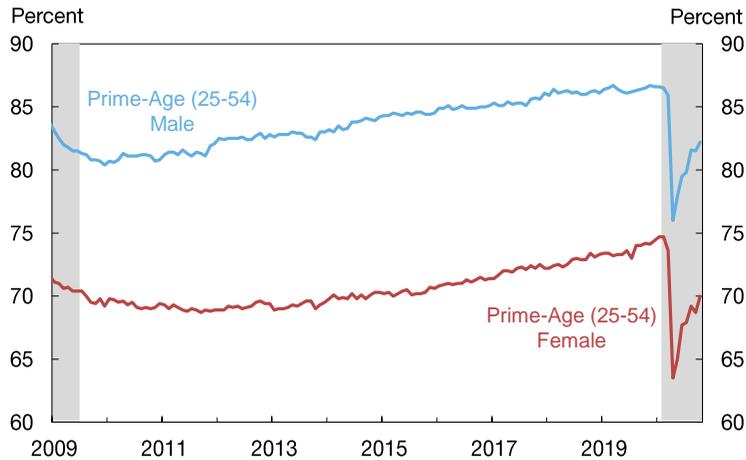
Note: Shading shows NBER recessions.

Workers on temporary layoff continue to decline

- The number of workers on temporary layoff fell by 1.4 million to 3.2 million.
 - The percent of job losers on temporary layoff out of the total number of job losers fell to 42% in October, down from a high of nearly 88% in April.
- The number of permanent job losers was essentially unchanged at 3.7 million.
- The number of those unemployed for less than 5 weeks stood at 2.5 million, while the number of those jobless for 27 weeks or more increased from 2.41 million to 3.56 million.

LABOR MARKET

Employment-to-Population Ratio – Prime Age (25-54)



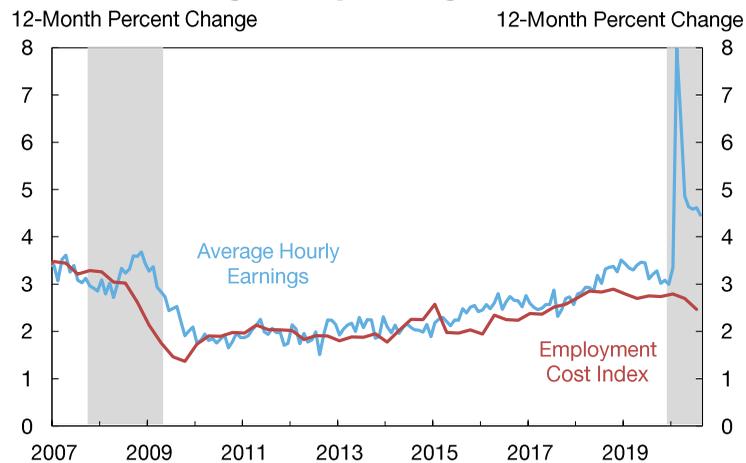
Source: Bureau of Labor Statistics

Note: Shading shows NBER recessions.

The employment-to-population ratio rises in October

- The employment-to-population ratio, which measures the number of people employed against the total working-age population, rose from 56.6% to 57.4% in October.
- The employment-to-population ratio for prime-age workers increased from 75% to 76% in October.
 - This increase was larger for female prime-age workers, where it increased from 68.7% to 70.0%.
 - In contrast, the employment-to-population ratio for male prime-age workers rose from 81.5% to 82.2% in October.

Growth of Average Hourly Earnings and ECI



Source: Bureau of Labor Statistics
via Haver Analytics

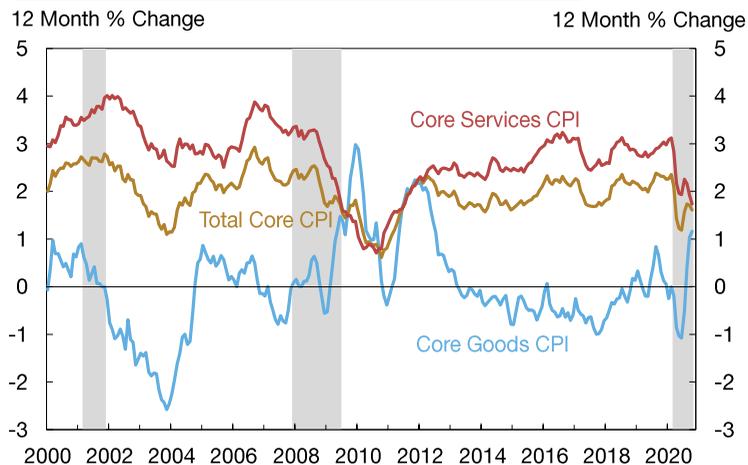
Note: Shading shows NBER recessions.

Average hourly earnings rise in October

- Average hourly earnings ticked up from \$29.46 in September to \$29.50 in October, an increase of 0.14%.
 - On a 12-month basis, average hourly earnings rose by 4.46%.
- The ECI for civilian workers rose 0.5% in 2020Q3, similar to the previous quarter and in line with the median forecast in the Bloomberg survey.
 - Monthly growth in the ECI, which attempts to control for compositional shifts, remained significantly weaker than in the previous three years.
 - The 12-month change in the ECI was 2.46%, below the previous quarter (2.70%).

INFLATION

CPI Inflation: Core Goods and Core Services



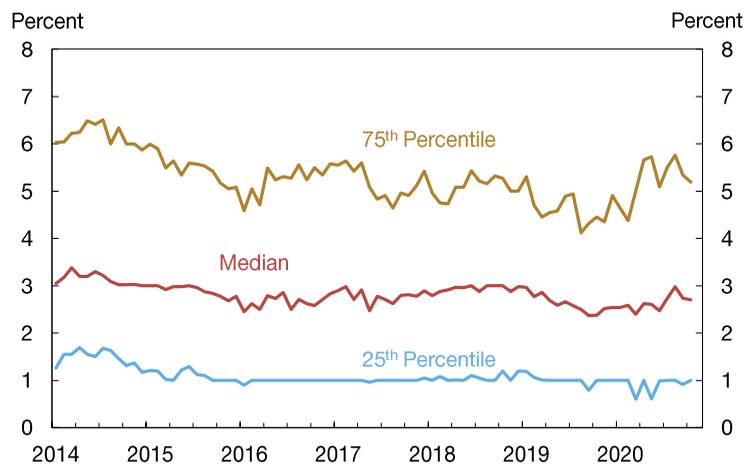
Source: Bureau of Labor Statistics
via Haver Analytics

Note: Shading shows NBER recessions.

Core CPI weak in October

- Core CPI was unchanged in October after increasing 0.2% in September. The 12-month change in the core index was 1.6%, down from 1.7% in September.
- The strength in core goods prices over the previous few months turned out to be transitory...
 - Core goods prices fell 0.2% after increasing strongly for the previous three months. The 12-months change in this index was 1.2% .
- ... while the weakness in core services persisted.
 - Core services prices rose 0.1% in October. The 12-month change in this index was 1.7%, down from a 1.9% increase in September and a 3.1% in February, before COVID-19.

3-Year Ahead Inflation Expectations



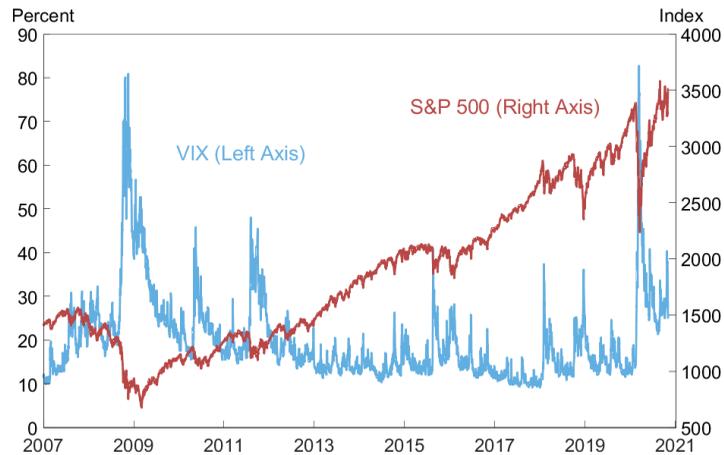
Source: Survey of Consumer Expectations.
Federal Reserve Bank of New York

Medium-term inflation expectations remain stable

- Median inflation expectations in October:
 - decreased from 3.0% to 2.8% at the one-year horizon
 - remained unchanged at 2.7% at the three-year horizon
- Median inflation uncertainty decreased.
 - The uncertainty expressed regarding future inflation outcomes decreased at both horizons but remained elevated relative to pre-pandemic readings.
- Disagreement about three-year ahead inflation declined.
 - The difference between the 75th and 25th percentile of the distribution of respondents was unchanged at the one-year horizon but declined at the three-year horizon. Both remain substantially above their pre-pandemic levels.

FINANCIAL MARKETS

U.S. Equity Market Index and Volatility

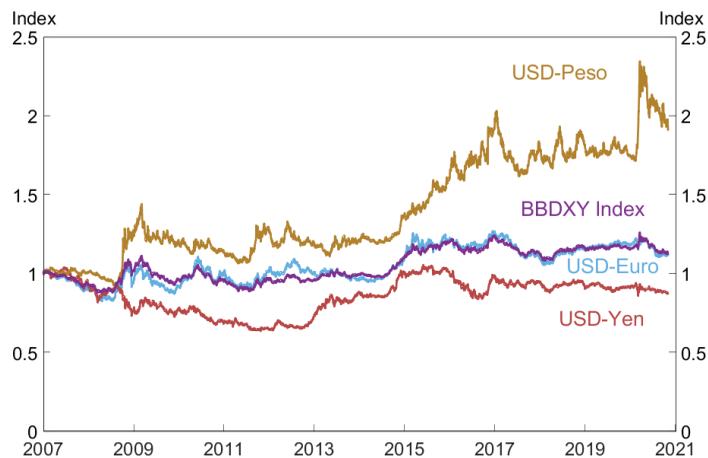


Source: Bloomberg Finance L.P.

U.S. equity markets near all-time highs

- U.S. equity markets remained close to their all-time highs.
 - The S&P 500 index increased 3.8% between October 7 and November 9. It was up 58.7% from its recent low on March 23, but down 0.8% from its recent all-time high on September 2.
 - As of November 9, the index was up 9.9% year to date.
- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), remained elevated and increased rapidly in late October, before subsiding in November.
 - The VIX Index peaked at 40.3 on October 28, nearly 15 points higher than it began the month.
 - The VIX Index closed at 25.8 on November 9, well below its 82.7 record high on March 16, 2020, but still well above its 2019 year-end value of 13.8.

USD Exchange Rates



Source: Bloomberg Finance L.P.

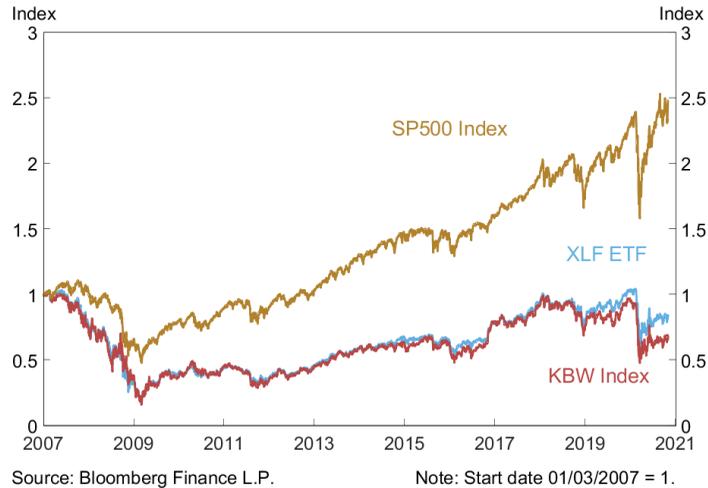
Note: Start date 01/03/2007 = 1.

U.S. dollar value depreciates

- The exchange value of the dollar against a basket of global currencies decreased 1.6% between October 7 and November 9.
 - Over this same period the dollar depreciated by 0.4% against the euro, 0.5% against the Japanese yen, and 5.6% against the Mexican peso.
- Since the start of 2020, the dollar has depreciated 2.6% against a basket of global currencies.

FINANCIAL MARKETS

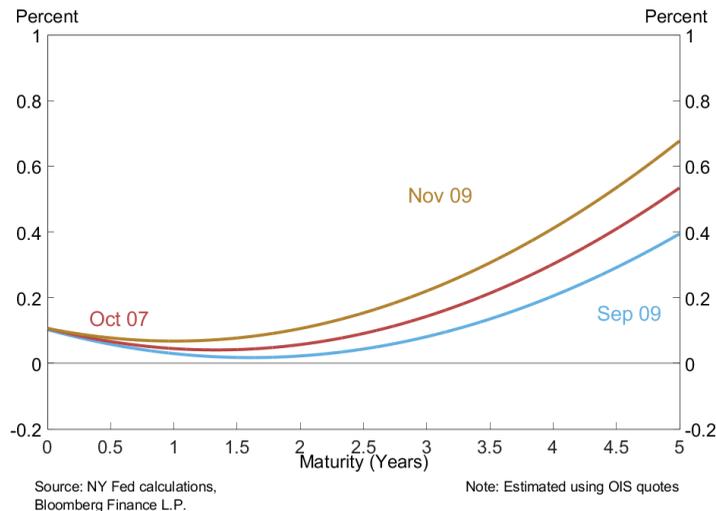
US Bank Equities Performance



Bank stocks performance improves drastically

- As measured by the KBW Nasdaq bank index, bank equities increased 13.4% between October 7 and November 9, and 58.6% since their recent low on March 23.
 - As of November 9, the index was down 21.4% year to date.
- The XLF financial sector ETF increased 8.6% between October 7 and November 9. It was now up 52.9% from its low on March 23.
 - As of November 9, the index was down 12.2% year to date.

Expected Federal Funds Rate



Implied path for federal funds increases

- The expected path of the federal funds rate implied by rates on overnight indexed swaps (OIS) increased for all maturities between October 7 and November 9.
- The market-implied path was slightly above the median path of the FOMC's Summary of Economic Projections from September 2020 and the NY Fed's Survey of Primary Dealers from September 2020.

FINANCIAL MARKETS

10-Year Treasury and Term Premium



Longer-term Treasury yields increase

- Longer-term Treasury yields have increased modestly over the past month.
 - The 10-year yield increased by about 10 basis points between October 7 and November 9 as a five-day moving average.
 - The 10-year yield was about 110 basis points lower than its level at the end of 2019 as a five-day moving average.
- Estimates from the Adrian-Crump-Moench term structure indicate that the term premium also increased.
 - The 10-year term premium increased by 13 basis points between October 7 and November 9 as a five-day moving average.

5-10 Year Forward Decomposition

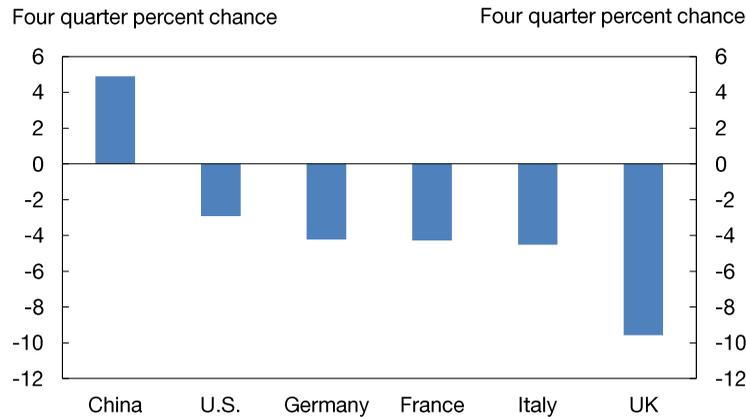


Breakeven inflation increases

- Market-implied TIPS-based measures of long-term inflation expectations (“breakevens”) increased in recent weeks.
 - The five-to-ten year breakeven inflation rate was 1.77% on November 9, an increase of about 5 basis points over the past month as a five-day moving average.
- According to the Abrahams-Adrian-Crump-Moench model, the inflation risk premium increased as well.
 - The estimated five-to-ten year inflation risk premium has increased by 5 basis points as a five-day moving average.

DEVELOPMENT IN CHINA

GDP Growth as of Q3 2020

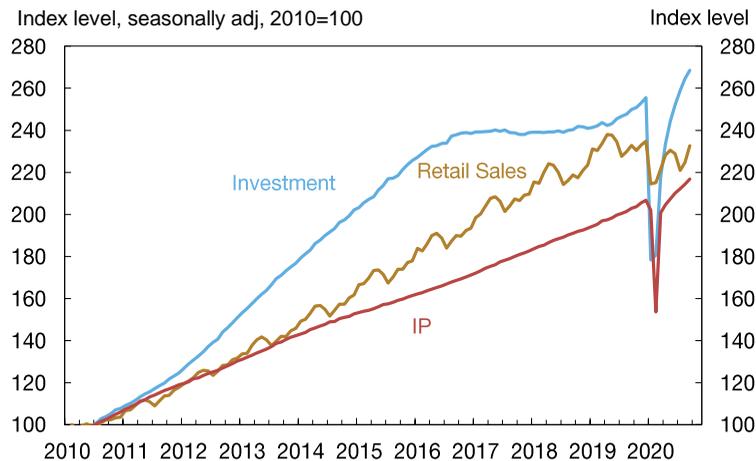


Source: national authorities via CEIC

Strong economic recovery in China

- China was “first in, first out” of its COVID-19 economic lockdown and has shown by far the strongest economic recovery to date.
 - China’s economic lockdown was centered in 2020Q1. The authorities allowed economic activity to resume from as early as the third week of February.
 - COVID-19 cases have been very low since May; there have been no new confirmed deaths since April.
- China’s four-quarter growth rate plunged to -6.8% in Q1 but rebounded to 3.2% and 4.9% in Q2 and Q3, respectively.
 - China was among the few countries in the world to experience positive year-over-year growth, and the only major economy to do so. China’s performance [appears](#) to be accurately reflected in the data.

Investment, Retail Sales, and Industrial Production



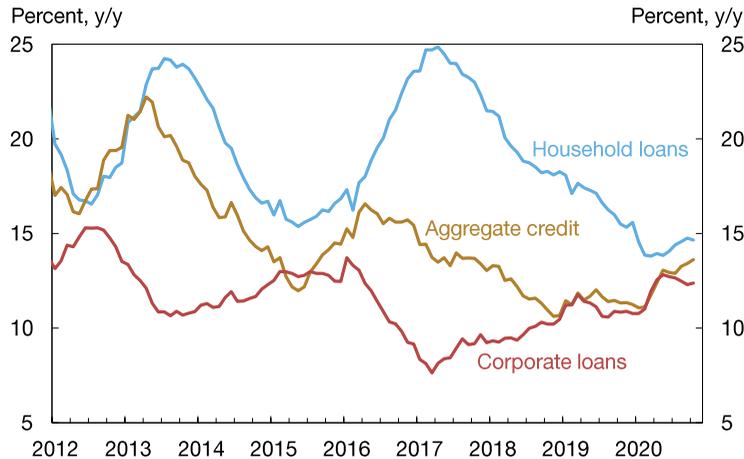
Source: National Bureau of Statistics via CEIC and author’s calculations

Recovery initially uneven, broadened subsequently

- China’s recovery initially was oriented around manufacturing production and investment, while consumption lagged.
 - Industrial production and investment initially plunged, but quickly overtook pre-crisis levels, while retail sales recovered more slowly.
 - This recovery pattern reflected the prioritization of government fiscal and credit policies, which provided limited income support to households.
- Retail sales growth has picked up more strongly in recent months, and total consumption expenditures exceeded year ago levels in Q3.
- China’s recovery also has been boosted by [very strong exports](#) of school- and work-from-home goods and medical supplies.

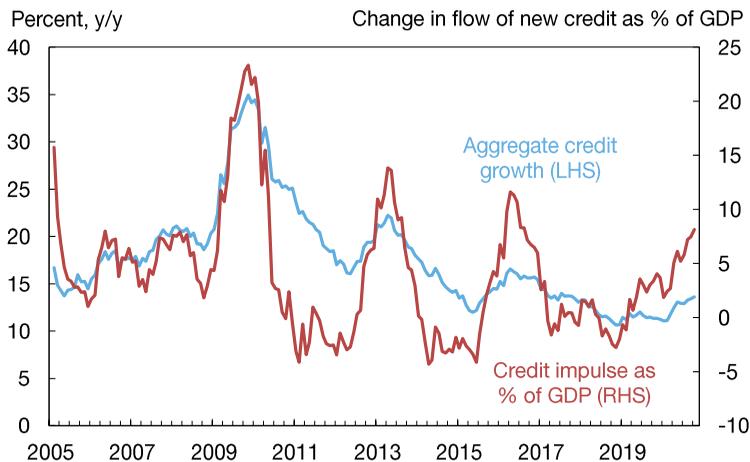
DEVELOPMENT IN CHINA

China: Household and Corporate Lending



Source: PBOC, CEIC

China: Credit Growth and Credit Impulse



Source: PBOC, CEIC, FRBNY staff estimates.

China's credit growth continues to accelerate

- Aggregate credit growth increased to 13.6% year-over-year in October from 11.3% year-over-year at end-2019.
- Corporate loans have been the primary driver of the pick-up in aggregate credit growth over the past 9 months.
 - **Corporate lending has accounted for over 60% of new aggregate credit over this period.**
 - **Over three-quarters of new corporate lending have come from medium- to long-term corporate loans, a key support for new infrastructure lending.**
- Growth in consumer credit has also accelerated notably.
 - **A buoyant property market has supported a strong pick-up in mortgage lending, while non-mortgage consumer lending has been mixed.**

Focus on China's policy response

- Expectations were for policy – and credit growth – to be reined in only modestly as China continued its economic recovery.
 - **Chinese authorities continued to balance the need for credit support with long-standing financial stability concerns related to credit misallocation.**
- Policy support measures were focused on targeted lending programs for SMEs, local and corporate bond issuance and some easing of shadow credit restrictions.
- The credit impulse (i.e., the change in the flow of new credit as a percentage of GDP) has surged to 8.1% of GDP from 1.9% in January.
 - **The credit impulse correlates well with alternative growth indicators for China.**