



FEDERAL RESERVE BANK *of* NEW YORK

U.S. Economy in a Snapshot

Research & Statistics Group

November 2019

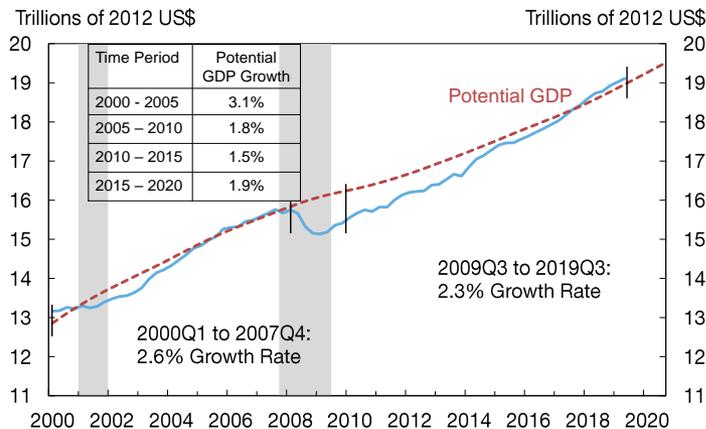
The *U.S. Economy in a Snapshot* compiles observations of staff members of the Federal Reserve Bank of New York's Research and Statistics Group. The views, model results, and analysis presented are solely those of the individual contributors and do not necessarily reflect the position of the Federal Reserve Bank of New York or the Federal Reserve System. The analysis presented herein is based on data released through November 14, 2019.

OVERVIEW

- Consumer spending growth remained moderate in September.
 - Growth of real expenditures on durable and nondurable goods was moderate, while real spending on services grew only slightly.
- Real business equipment spending declined in 2019Q3, and its growth year-to-date was well below its pace in 2018.
 - New orders of nondefense capital goods excluding aircraft fell moderately in September. They remained below shipments, indicating continued weak near-term momentum.
- On balance, housing activity indicators displayed further gradual improvement in September.
 - Single-family housing starts and permits have been on an upward trend over the past four months. New and existing home sales declined in September, but remain solid. A still-strong labor market and low mortgage rates have provided some support to the housing sector.

- Payroll growth was moderate in October, but remained solid year-to-date. The unemployment rate edged up, the labor force participation rate rose, and the employment-to-population ratio remained at the highest level during this expansion.
 - Various measures of labor compensation growth firmed slightly.
- Core PCE inflation softened and remained below the FOMC's longer-run objective.
- U.S. equity indices rose broadly over the past month, while implied volatility declined and remains low. The nominal 10-year Treasury yield rose. The market-implied expected policy rate path flattened, largely because of a modest rise at longer horizons. The broad trade-weighted dollar index fell.

GDP



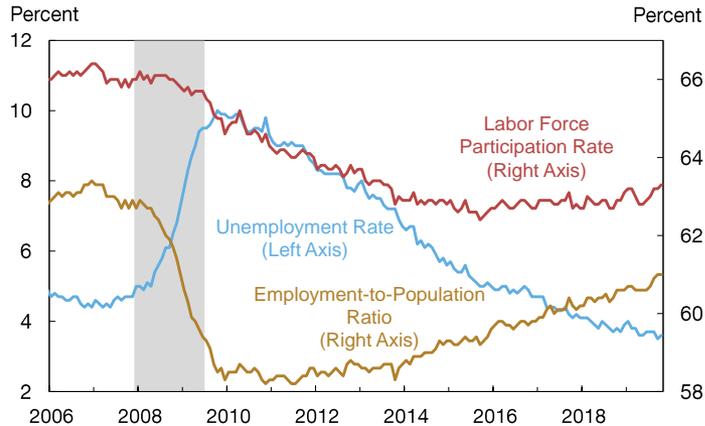
Source: Bureau of Economic Analysis, Congressional Budget Office via Haver Analytics. Note: Shading shows NBER recessions.

Output moderately above potential GDP estimate

- The level of real GDP in 2019Q3 was about 0.8% above the estimate of real potential GDP from the Congressional Budget Office (CBO).
 - For comparison, the historical (1949 – 2019) average of this measure of the output gap is -0.6%.
 - Over this expansion, real GDP has grown at a 2.3% annual rate, compared to the 1.6% growth rate of real potential GDP.
 - The 3.6% unemployment rate in October was below most estimates of its natural rate, including that of the CBO (4.56%).
- 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



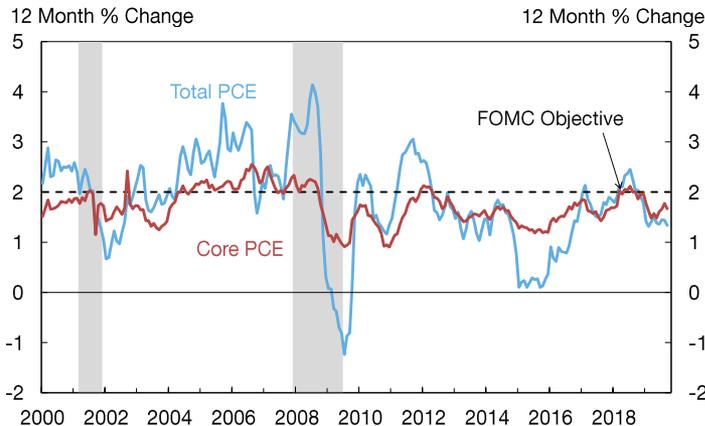
Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

Unemployment rate remains low

- The unemployment rate edged up to 3.6% in October, just above its 50-year low recorded in the previous month.
- The employment-to-population ratio held steady at 61.0% in October, remaining at its expansion high.
 - The prime-age employment-to-population ratio rose to 80.3% in October from 80.1% the previous month.
- The labor force participation rate rose to 63.3% in October.
 - For prime-age workers, this rate rose 0.2 percentage points over the month to 82.8%, the highest clip since August 2009.

PCE Deflator



Source: Bureau of Economic Analysis via Haver Analytics

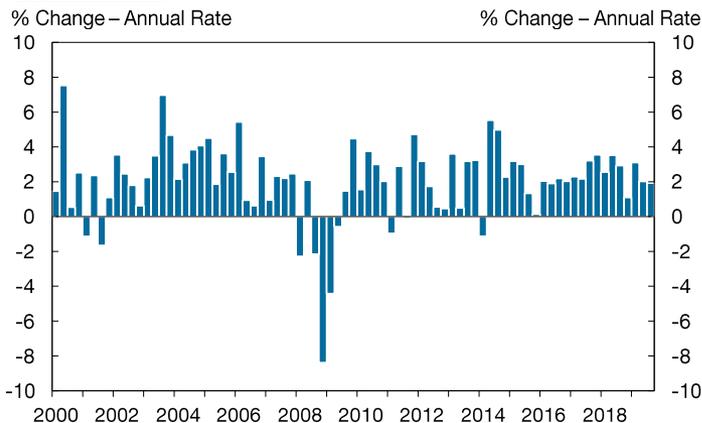
Note: Shading shows NBER recessions.

Inflation continues to run below 2 percent

- The total PCE price index was flat in September, after also being flat in August. The core PCE price index (which excludes food and energy prices) was also essentially flat in September, after rising 0.1% in August.
 - Energy prices fell 1.3% in September, and are down 4.8% relative to one year ago. Food prices were unchanged and are up 0.8% compared to one year ago.
- The 12-month changes in the total and core PCE indices both edged down by 0.1 percentage point to +1.3% and +1.7%, respectively.
 - Both total and core PCE inflation remained softer than they were over most of 2018.
 - Core PCE inflation remains below the FOMC's 2 percent longer-run goal.

ECONOMIC ACTIVITY

GDP Growth



Source: Bureau of Economic Analysis via Haver Analytics

Real GDP growth is moderate in 2019Q3

- Based on the advance estimate, real GDP growth was 1.9% (annual rate) in 2019Q3, slightly below that in Q2 (2.0%). Real GDP growth over the first three quarters of 2019 was 2.3% (annual rate), compared to 2.5% (Q4/Q4) for all of 2018.
- Real personal consumption expenditure rose at a 2.9% annual rate in Q3, below that of Q2 (4.6%), but still a solid pace. Real PCE growth for the first three quarters of 2019 was 2.8% (annual rate), modestly above the 2.6% growth of 2018.
- In contrast, real nonresidential fixed investment fell in the third quarter, its second straight decline.
- Real residential investment increased in the third quarter after 6 consecutive quarterly declines, as the housing market improved amid lower mortgage rates.
- Both inventory investment and net exports were minor drags on real GDP growth.

Manufacturing and ISM Manufacturing Index



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

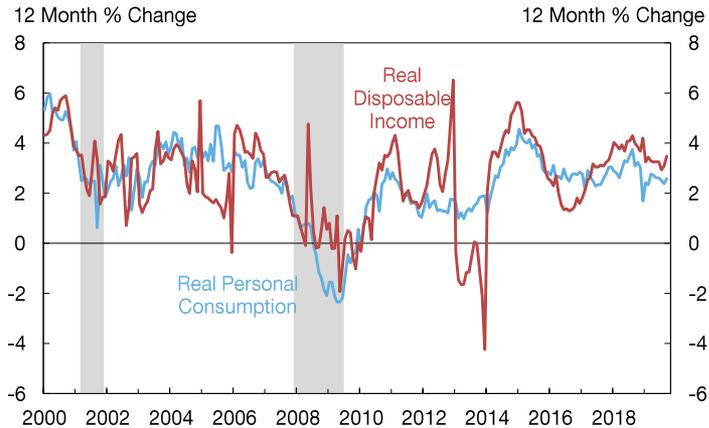
Note: Shading shows NBER recessions.

Sluggishness in manufacturing continues

- Manufacturing production decreased 0.5% in September after increasing 0.6% in August.
 - The 12-month change in manufacturing production was **-0.9%**, the lowest this change has been since August 2016.
- The ISM manufacturing headline index increased in October to 48.3 from 47.8 in September.
 - All five component indices of the composite index were below the breakeven level of 50, suggesting that activity was contracting along each of those aspects of manufacturing activity.
- The regional Fed surveys generally pointed to sluggish growth in manufacturing in October.

HOUSEHOLDS

Disposable Income and Consumption



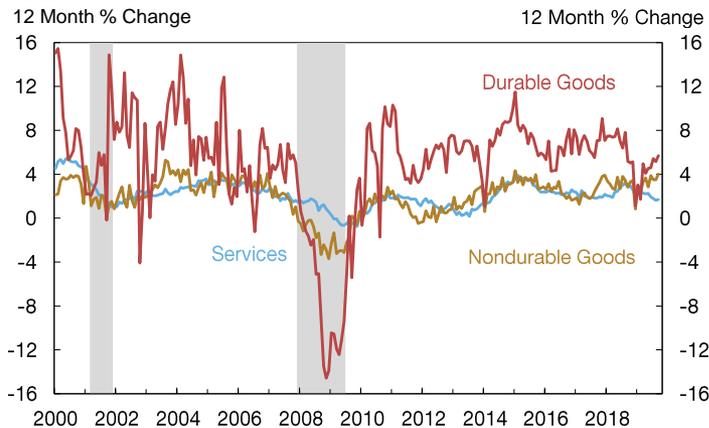
Source: Bureau of Economic Analysis, Federal Reserve Board via Haver Analytics

Note: Shading shows NBER recessions.

Income and consumption growth near trend

- The household sector continues to be one of the bright spots in the U.S. economy, with both income and consumption growing steadily around trend and the saving rate stable near the highest levels seen in the last two decades.
- Real disposable personal income rose 0.3% in September.
- Real Personal Consumption Expenditures (PCE) rose 0.2% in September.
 - **Consumption growth has slowed somewhat over recent months, but it remains near trend.**
- With growth in income outstripping that of consumption in September, the personal saving rate rose from 8% to 8.3%.

Services, Durables, and Nondurable Goods



Source: Bureau of Economic Analysis via Haver Analytics

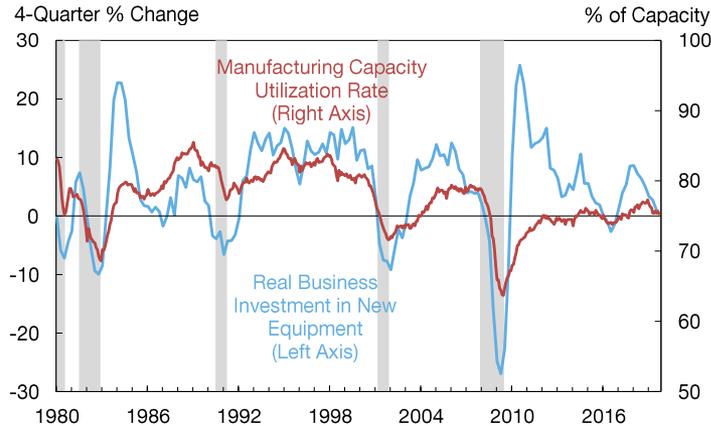
Note: Shading shows NBER recessions.

Services consumption slow, goods remain strong

- Over the course of 2019, goods consumption has accelerated while services consumption has slid gently closer to values consistent with trend growth, after its notable strength in the first half of 2018.
- Durable and nondurable goods consumption rose 0.6% and 0.3% in September, respectively.
- Services consumption growth was a more moderate 0.1%, the same as in the previous three months.

BUSINESS SECTOR

Equipment Investment and Capacity Utilization



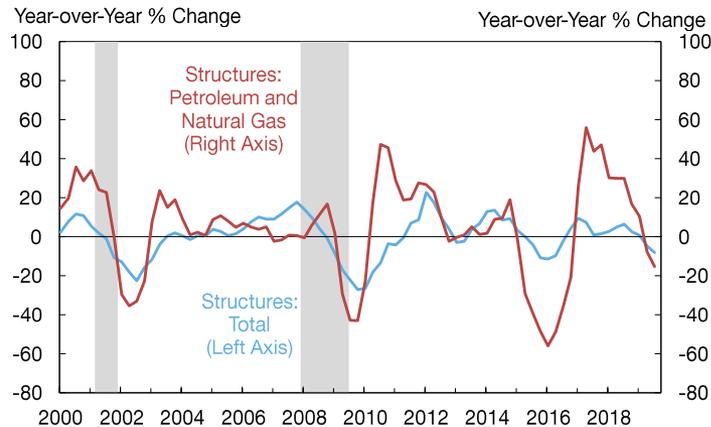
Source: Bureau of Economic Analysis, Federal Reserve Board via Haver Analytics

Note: Shading shows NBER recessions.

Equipment spending falls in 2019Q3

- Real business equipment investment declined 3.8% (annual rate) in 2019Q3, after rising slightly in Q2. Over the first 3 quarters of 2019, equipment spending fell at a 1.1% annual rate, compared to the 5.0% increase over 2018 (Q4/Q4).
 - In 2019Q3, spending declined for information equipment, transportation equipment, and other equipment, and rose for industrial equipment.
- Recent weak equipment investment has occurred against a backdrop of continued low levels of the manufacturing capacity utilization rate.
 - This rate was 75.3% in September, 3.0 percentage points below its long-run average.
 - Historically, utilization rates near the September level are associated with modest growth of equipment investment.

Investment in Nonresidential Structures



Source: Bureau of Economic Analysis via Haver Analytics

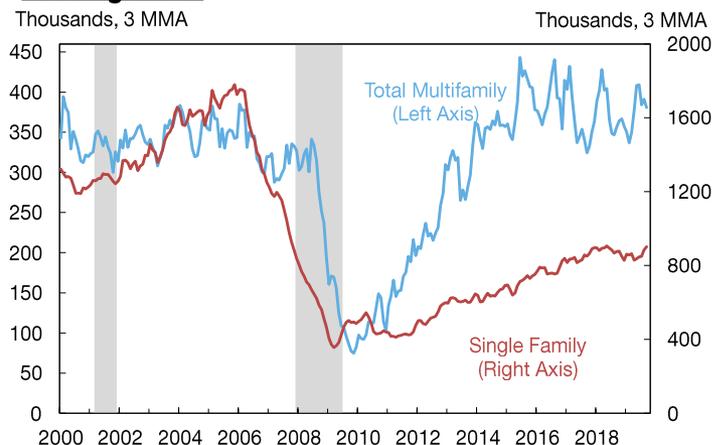
Note: Shading shows NBER recessions.

Investment in nonres. structures declines sharply

- As of 2019Q3, real investment in nonresidential structures was down 8.2% from the same quarter in 2018.
- As was the case back in 2016, declines in oil prices have led to steep declines in investment in the oil and gas sector. As of 2019Q3, that sector contributed 3.1 percentage points or nearly 40% of the total 8.2% year-over-year-decline.
- While the oil and gas sector provided the largest negative growth contribution, all major categories of investment in nonresidential structures saw decline over the past year.
 - There were relatively large negative growth contributions from the multi-merchandise shopping and power sectors.
 - There were somewhat smaller but still notable negative growth contributions from the education, warehouse, and amusement and recreation sectors.

HOUSING SECTOR

Housing Starts



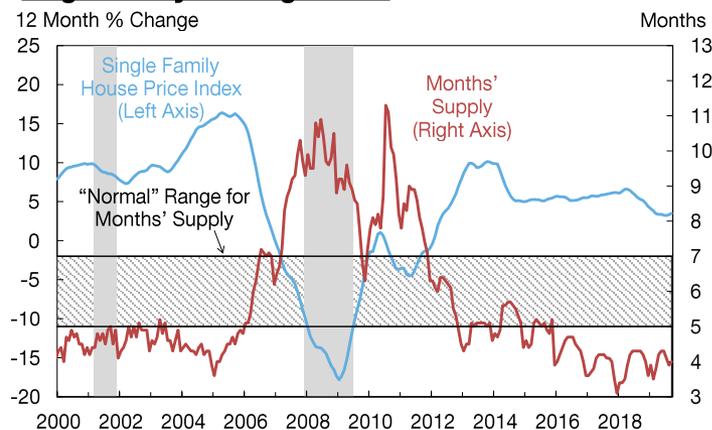
Source: Census Bureau via Haver Analytics

Note: Shading shows NBER recessions.

Single-family starts continue to improve

- Total housing starts declined by 9.4% in September following a sharp 15.1% increase in August.
- Single-family starts rose modestly in September, the fourth consecutive monthly increase and are now up 4.3% on a year-over-year basis. The roughly 100 basis point decline of mortgage interest rates over the past year is now boosting the single-family construction sector. Home builder sentiment, as measured by the National Association of Home Builders' Housing Market Index, has nearly recovered to the high of this cycle reached in December of 2017.
- Multi-family housing starts, which are notoriously volatile from month to month, plunged 28.2% in September following a 41.4% increase in August. Multi-family building permits have moved substantially higher in recent months.

Single Family Housing Market



Source: CoreLogic, National Association of Realtors via Haver Analytics

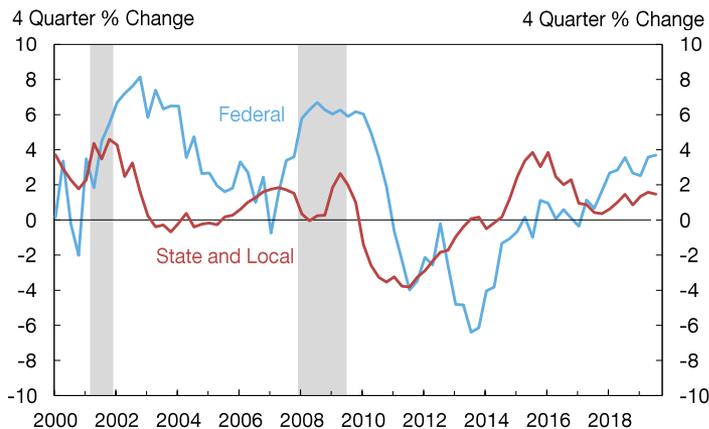
Note: Shading shows NBER recessions.

Supply of existing homes for sale remains tight

- The CoreLogic single family national home price index rose 3.5% in September on a year-over-year (YoY) basis.
 - Home price growth YoY markedly slowed after April 2018, reached a seven-year low in June 2019, but reversed trend after June 2019.
 - All states except Connecticut experienced YoY increases in the home price index in September. Idaho experienced the highest YOY increase followed by Utah and Maine.
- The inventory of single family homes was 1.61 million units in September, equivalent to a 4.0 months' supply at the current sales pace and up from 3.9 months in August.
 - Following a steady decline since June 2019, months supply reversed trend in September 2019.
 - Yet, since late 2015, the inventory of single family homes for sales has remained below the normal range of 5-7 months.

GOVERNMENT SECTOR

Real Government Consumption and Gross Investment



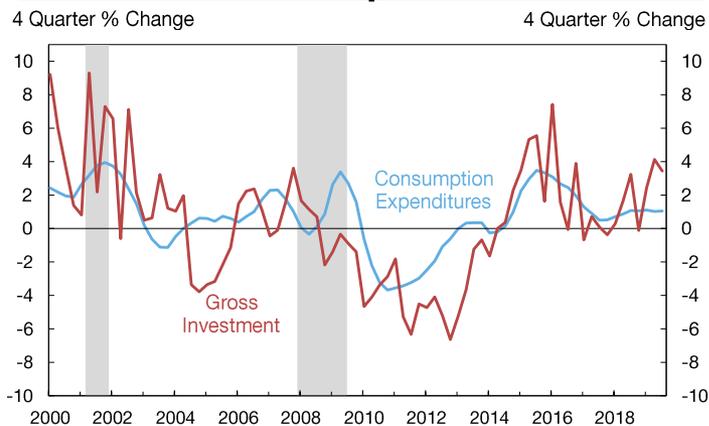
Source: Bureau of Economic Analysis via Haver Analytics

Note: Shading shows NBER recessions.

Growth of real government spending remains strong

- Over the four quarters ending in 2019Q3, real government consumption and gross investment was up 2.3%, contributing about 0.4 percentage point to the overall growth rate.
- Real federal spending is up 3.7% over the four quarters ending in 2019Q3, the strongest since the third quarter of 2010. National defense spending is up 4.6% while nondefense spending is up 2.5%. The increase in federal spending has contributed about 0.15 percentage point to total GDP growth over the past year.
- Real spending by state and local governments has increased 1.5% over the four quarters ending in 2019Q3, contributing about 0.24 percentage point to the overall growth rate.

Real State & Local Consumption & Gross Investment



Source: Bureau of Economic Analysis via Haver Analytics

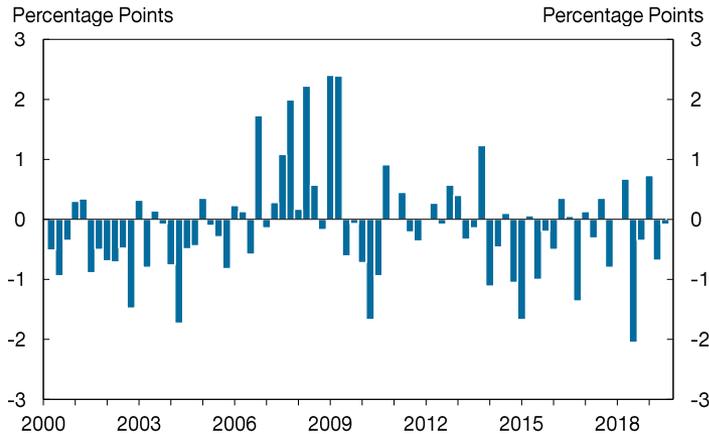
Note: Shading shows NBER recessions.

State and local government spending growth levels off

- State and local government consumption and gross investment, which represents nearly two-thirds of total government spending, increased 1.5% over the four quarters ending in 2019Q3, about the same as in 2019Q2.
- Growth of real consumption at the state and local level has held steady at about 1.0% 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 slowed slightly in Q3, rising 3.4% over the four quarters ending in Q3 versus 4.1% in Q2.
 - 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

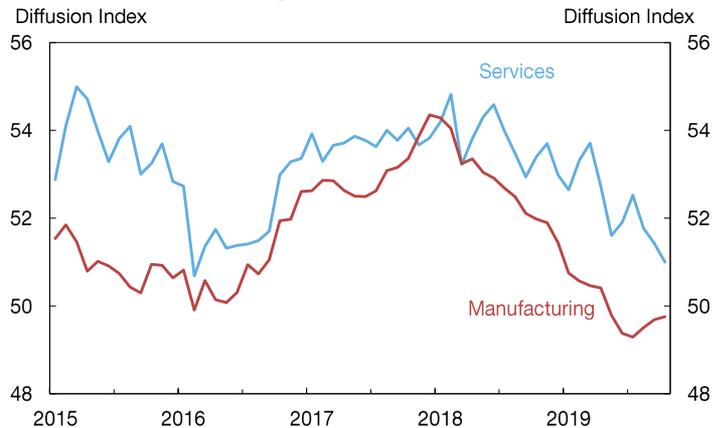


Source: Bureau of Economic Analysis via Haver Analytics

Net exports minimally impact GDP growth

- Based on the advance release, net exports subtracted 0.08 percentage point of GDP growth in 2019Q3.
 - Real exports grew 0.7% (SAAR) and real imports were up 1.2% (SAAR).
 - Compared to the preceding quarter, both export and import growth rebounded somewhat.
- The trade deficit declined to \$52.5 billion in September from a \$55 billion deficit in August.
 - Real goods exports fell 1% over the month in September, owing to lower exports of agricultural goods and autos. Real oil goods exports were in essence flat over this period.
 - Real goods imports declined 2% between August and September. Nonoil goods import volumes fell 1.8% due to lower imports of autos as well as capital and consumer goods.

Global Manufacturing and Services PMIs



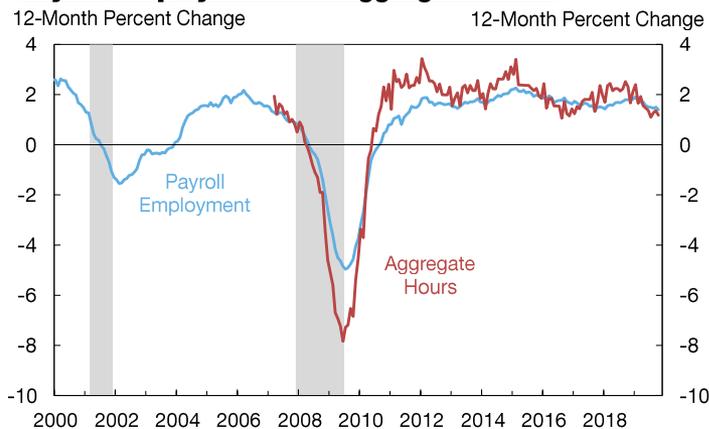
Source: Markit Economics

Global surveys point to continued sluggish growth

- Purchasing managers' indices for manufacturing and services moved in opposite directions in October, but remain at levels consistent with a sluggish global economy.
 - The global manufacturing PMI rose a tenth to 49.8 in October, the third consecutive increase but still below the break-even line of 50.
 - The global services PMI fell 0.4 points to 51.0, the lowest reading since February 2016.
- These results are consistent with global growth of 2.1%, about 0.8 percentage point below most estimates of global potential.
- Survey results for recent months provide tentative evidence that the long slump in global manufacturing has begun to ease. But they also suggest that weakness in manufacturing is increasingly spreading into services.

LABOR MARKET

Payroll Employment and Aggregate Hours



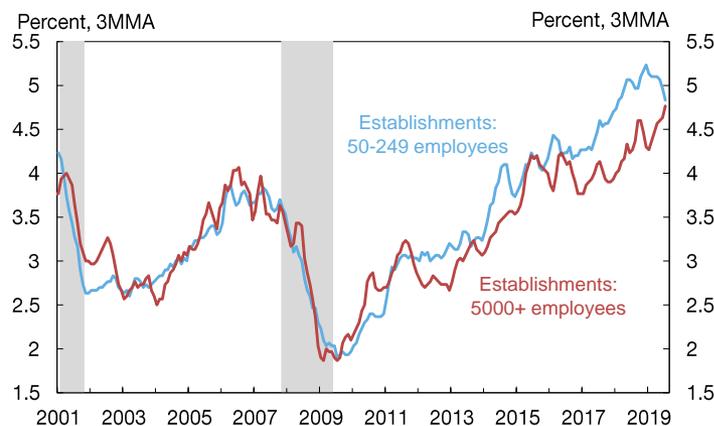
Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

Payroll growth signals continued solid conditions

- Nonfarm payrolls increased by 128,000 in October.
 - Payroll growth was well above the median Bloomberg forecast of 85,000.
 - Payroll employment was revised up for both August and September, resulting in a net upward revision of 95,000.
- Private payrolls grew by 131,000 while government payrolls declined by 3,000 over the month.
 - Federal employment declined by 17,000, driven by 20,000 temporary workers for the 2020 Census who finished their work during the month.
- Average weekly hours worked by all private employees remained at 34.4 for the third consecutive month.

JOLTS – Job Openings Rate by Establishment Size



Source: Bureau of Labor Statistics via Haver Analytics

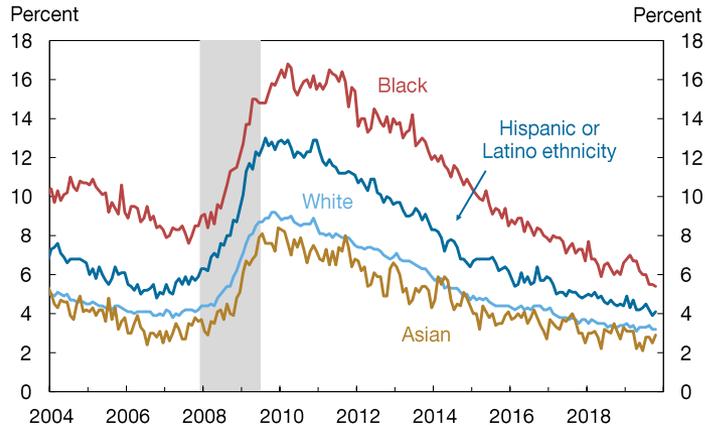
Note: Shading shows NBER recessions.

Openings at large establishments continue surging

- In 2017 and 2018, the job openings rates – which expresses the number of vacancies at a firm as a fraction of its employment level – of mid-size firms (50-249 employees) outstripped the rate for large firms (5,000+ employees).
 - The pre-recession peaks for the three-month moving average of job openings rate for mid-size and large firms, respectively, were 3.9% and 4.1%.
- In the beginning of 2019, the job openings rate for mid-size firms began to fall from its record-high levels while the rate for the largest firms continued to surge.
 - The job openings rate for establishments with 5,000 or more employees stood at 4.9% in August.
 - The openings rate fell to 4.6% for mid-size establishments in August.

LABOR MARKET

Unemployment Rate by Race



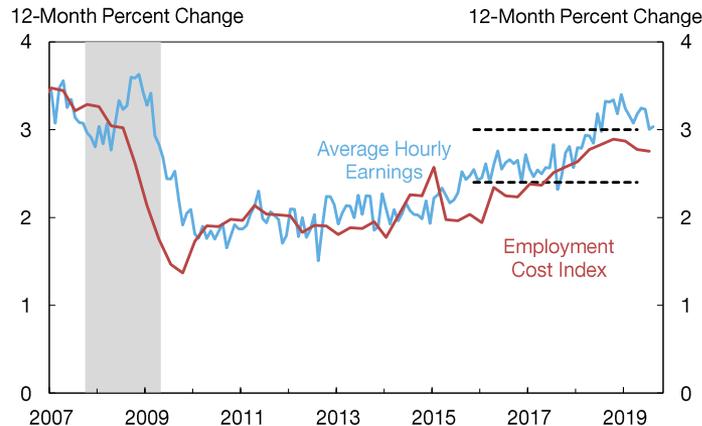
Source: Bureau of Labor Statistics via Haver Analytics

Note: Shading shows NBER recessions.

Unemployment falling for all racial groups

- The rate of joblessness for workers of all races has fallen to very low levels in the current expansion.
- In October, and throughout the rest of the business cycle, the unemployment rates for whites and Asians were lower than for Hispanic and black individuals.
 - In October, the unemployment rates for white and Asian workers were 3.2% and 2.9%, respectively.
 - Hispanic unemployment stood at 4.1% and black unemployment at 5.4% in October.
- Recessions exacerbate the black-white unemployment rate gap, which stands at 2.2 percentage points today.
 - The gap peaked after the Great Recession at 8.5 percentage points in August 2011.

Growth of Average Hourly Earnings and ECI



Source: Bureau of Labor Statistics via Haver Analytics

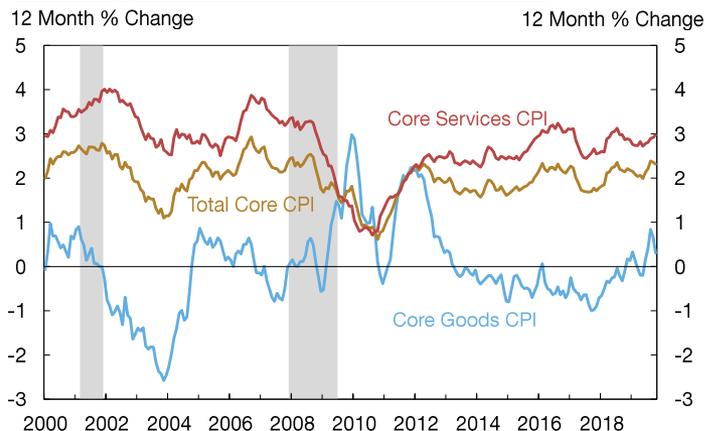
Note: Shading shows NBER recessions.

Earnings growth still below late 2018 levels

- Average hourly earnings ticked upwards from \$28.12 in September to \$28.18 in October.
 - Average hourly earnings rose by 3.03% over a 12 month period, a whisper higher than the 3.00% mark from September but still somewhat lower than the readings from the end of 2018 and beginning of 2019.
- Average weekly earnings rose by 0.21% over the month, from \$967.33 in September to \$969.39 in October.
 - Average weekly earnings increased by 2.74% over the year, below the 2018 average yearly change of 3.3%.
- The 12-month change in the ECI was 2.8% in the third quarter of 2019, higher than in the second quarter but at the same level as one year ago.

INFLATION

CPI Inflation: Core Goods and Core Services



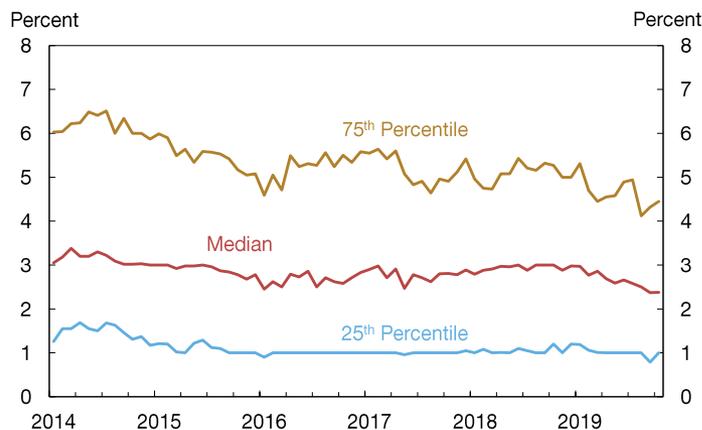
Source: Bureau of Labor Statistics
via Haver Analytics

Note: Shading shows NBER recessions.

CPI stable below, but close to, FOMC's longer-run goal

- The core CPI rose 0.2% in October.
- Core services prices rose 0.2% in October, after three consecutive 0.3% prints.
 - Shelter inflation was below average in October, mostly due to some surprising weakness in rents.
- Core goods prices fell 0.1%.
 - Core goods prices might be losing some of the momentum that they had gathered earlier in the year.
- CPI inflation remains stable below, but close to, the FOMC's longer-run goal. Getting over the hurdle on a sustained basis will require core services inflation to continue inching higher, as it has since mid-year, and core goods inflation to stay positive.

3-Year Ahead Inflation Expectations



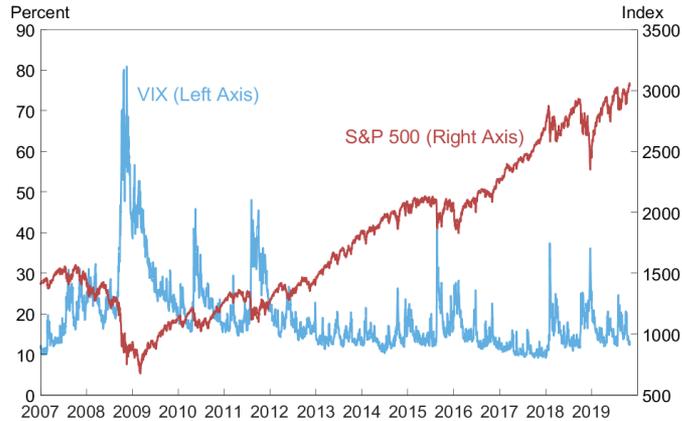
Source: Survey of Consumer Expectations.
Federal Reserve Bank of New York

Consumer inflation expectations are at series low

- Median three-year ahead inflation expectations remained unchanged at 2.4%, a series low.
 - Median one-year ahead inflation expectations decreased by 0.2 percentage point to 2.3%, reaching a new series low. Median inflation uncertainty remained constant for both time horizons.
- Home price growth expectations rose slightly but remained low.
 - Median expected change in home prices rose to 2.9% in October, after reaching a series low at 2.8% in September.
- Expectations about household income and spending growth remained stable.

FINANCIAL MARKETS

U.S. Equity Market Index and Volatility

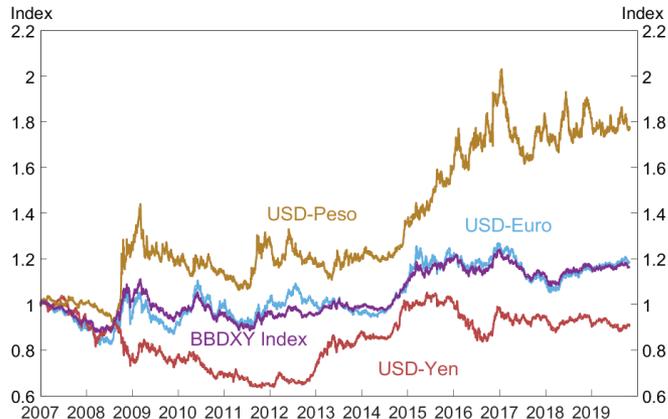


Source: Bloomberg Finance L.P.

U.S. equity markets at all-time highs

- U.S. equity markets have broadly increased during the past month and remain at their all-time highs.
 - The S&P 500 index rose 4.36% between October 7 and November 1 and 11.8% from its recent low on June 3. The index is currently at an all-time high as of November 1.
 - As of November 1, the index was up 22.2% year-to-date.
- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), remains low.
 - The VIX Index closed at 12.30 on November 1, well below the 2018 highs of 37.32 on February 5 and 36.07 on December 24.

USD Exchange Rates



Source: Bloomberg Finance L.P.

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

U.S. dollar depreciates

- The exchange value of the dollar against a basket of global currencies decreased 1.65% between October 7 and November 1.
 - Over this same period the dollar depreciated 1.74% against the Euro, 2.30% against the Peso, and appreciated 0.87% against the Yen.
- Since the start of 2019, the dollar has depreciated 0.46% against a basket of global currencies.

FINANCIAL MARKETS

U.S. Bank Equities Performance



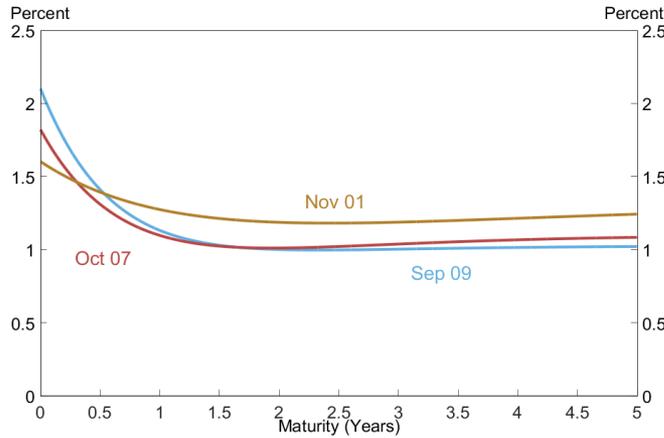
Source: Bloomberg Finance L.P.

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

Strong performance in bank stocks

- As measured by the KBW Nasdaq bank index, bank equities gained 9% between October 7 and November 1, and are currently near their all-time highs. The index is up 31% from its recent low on December 24, 2018.
 - As of November 1, the index is up 21% year to date.
- The XLF financial sector ETF also gained 6.6% between October 7 and November 1, is up 30% from its recent low on December 24, 2018 and is also trading close to its all-time high.
 - As of November 1, the index is up 21% 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 flattens

- The expected path of the federal funds rate implied by rates on overnight indexed swaps (OIS) flattened out between October 7 and November 1, with expected rates moving slightly down for maturities less than 3 months and up for all longer maturities.
- The market-implied path remains below the median path of the FOMC's September 2019 Summary of Economic Projections and the September 2019 NY Fed Survey of Primary Dealers at longer horizons.

FINANCIAL MARKETS

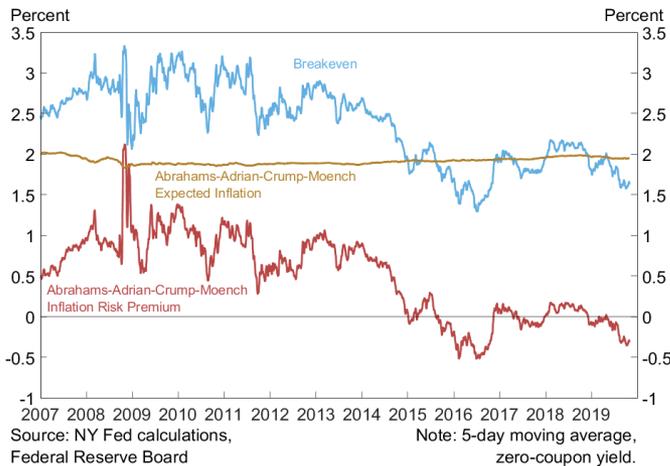
10-Year Treasury and Term Premium



Longer-term Treasury yields increase modestly

- Longer-term Treasury yields have increased since early October.
 - The 10-year yield increased about 19 basis points between October 7 and November 1, closing at 1.78%.
- Estimates from the Adrian-Crump-Moench term structure model attribute the increase to a less negative term premium:
 - The 10-year term premium increased by 14.1 basis points between October 7 and November 1, currently 29.6 basis points higher than its low on September 3.

5-10 Year Forward Decomposition

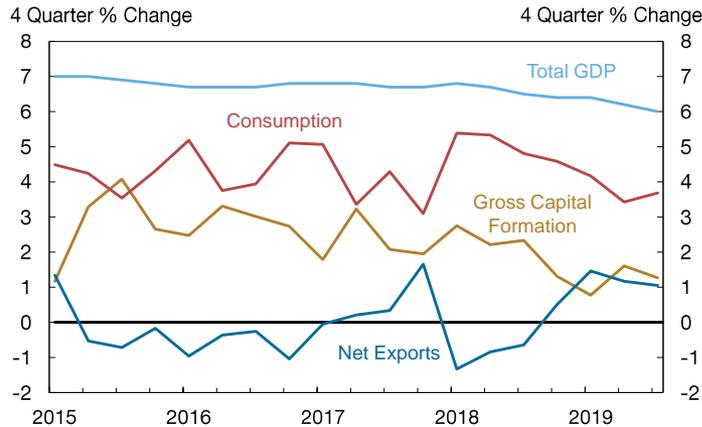


Breakeven inflation little changed

- 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 was 1.63% on November 1, little changed over the last month but down by about 16 basis points year-to-date.
- 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 has decreased 24 basis points year-to-date. Last month saw little change in the inflation risk premium.

SPECIAL TOPIC: CHINA

China: Real GDP and Growth Contributions

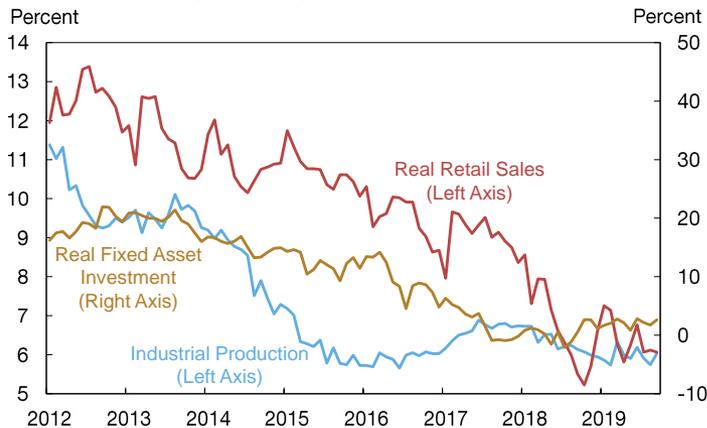


Source: NBS via CEIC

GDP growth slows in 2019Q3

- China's GDP growth slowed from 6.2% to 6% in 2019Q3 from the same period a year earlier. Growth had entered 2019 at 6.4% (Q4/Q4).
- The contribution of household and government consumption to GDP growth increased from 3.4 to 3.7 percentage points.
 - Consumption growth rose from 6.4% to 6.9%, the first increase after four consecutive quarters of deceleration.
- The growth contribution of investment expenditure dipped from 1.6 to 1.3 percentage points, as its four quarter growth rate slowed from 3.6% to 2.9%.
 - The Q3 investment growth rate was only modestly lower than the 3% rate recorded at the end of 2018.
- Real net exports contributed slightly more than 1 percentage point to GDP growth, a bit lower than Q2 but the fourth consecutive month of positive contribution.

China: Monthly Activity and Trade



Note: Industrial production is adjusted for Chinese New Year and other seasonal factors.

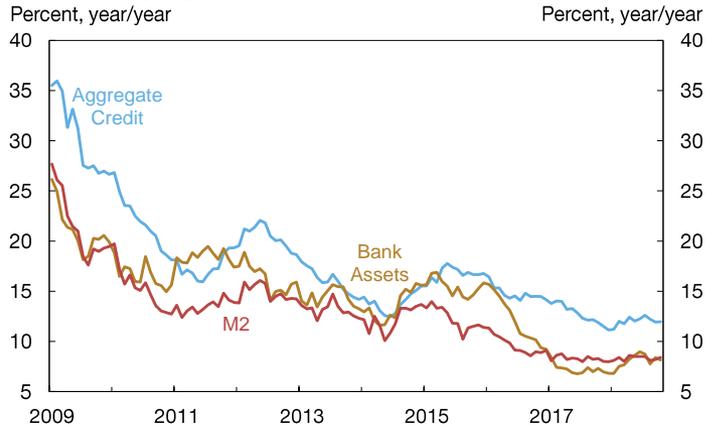
Source: NBS via CEIC and staff estimates.

Monthly activity data steady at lower level

- China's industrial production data for the end of Q3 printed at 6% YoY, close to the levels observed over the past 12 months.
 - China's manufacturing PMI indices for October showed divergent trends. The official series decreased from 49.8 to 49.3, while the Caixin/Markit PMI increased from 51.4 to 51.7, a 34 month high and the second consecutive increase.
- Real retail sales slowed to just below 6.1% YoY, below the average of the previous three months of 6.3%.
- Real fixed asset investment printed at 2.6% in September, maintaining a similar growth rate to that which has persisted since 2018Q3.
- The non-manufacturing PMI (construction and services) weakened notably in October, falling from 53.7 to 52.8. This was driven by a steep decline in services from 53 to 51.4.

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China: Aggregate credit, M2 and bank assets

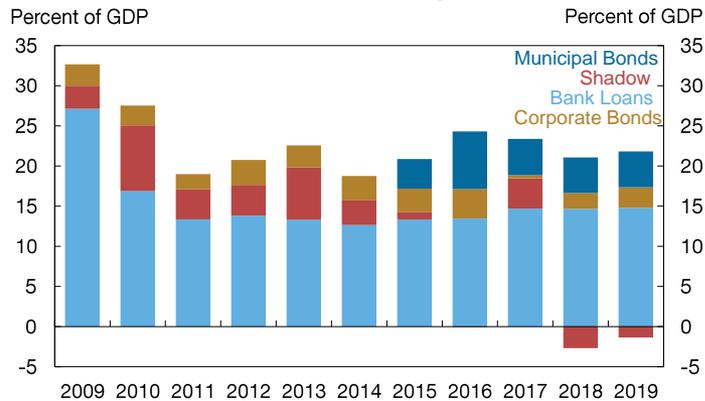


Source: PBOC via CEIC. Note: Excludes some components of official aggregate credit and includes additional muni bonds not part of official credit data.

Policy easing has been notably restrained

- Despite slowing growth, China's policy response, thus far, has been relatively muted. Concerns over already high leverage in the financial system, associated financial risks, and a still buoyant property market may be limiting authorities' interest in pursuing more aggressive easing policies.
- As a result, macro-prudential policy has remained relatively tight as evidenced by:
 - The pace of growth in aggregate credit, money supply and bank assets all remaining close to historic lows;
 - The ongoing contraction in non-traditional (i.e., "shadow") credit and inter-financial lending (i.e., bank claims on non-banks);
 - Continued restrictions on the property-related lending.

China: New Credit as a Percentage of GDP



Source: PBOC via CEIC. Notes: Only considers the first three quarters of each year. Excludes some components of official aggregate credit and includes additional muni bonds not part of official credit data.

Growth outlook hinges on credit

- China's leadership has signaled a shift toward some stimulus in recent months (e.g., reserve requirement cuts, lower restrictions on local government borrowing, and modest cuts to lending rates on new loans), but the authorities appear reluctant to ease policy as forcefully as they have in past downturns.
- New credit over the first three quarters of 2019 was modestly higher than a year ago – 20% of GDP compared to 18% of GDP over the same period in 2018 – but below levels of recent turns in the credit cycle (2016-2017 and 2013) and well below the 2009-2010 cycle.
- Maintenance of restrictive policies on shadow banking, the property sector, and local government finances continues to be a key drag on economic growth.