

U.S. Economy in a Snapshot

Research & Statistics Group August 2020

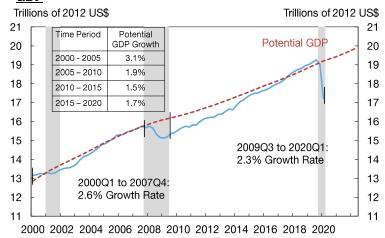
The *U.S. Economy in a Snapshot* compiles observations of staff members of the Federal Reserve Bank of New York's Research and Statistics Group. The views, model results, and analysis presented are solely those of the individual contributors and do not necessarily reflect the position of the Federal Reserve Bank of New York or the Federal Reserve System. The analysis presented herein is based on data released through August 14, 2020.

OVFRVIFW

- Consumer spending continued to rebound in June.
 - Spending on goods is back to its February level, but services expenditures are still significantly below their February level.
 - Nominal personal income fell as the economic impact payments authorized under the CARES Act of 2020 declined in the month.
 - Consumer confidence fell in July.
- Real business equipment spending plunged in 2020Q2, reflecting the disruption linked to the COVID-19 pandemic.
 - New orders and shipments of nondefense capital goods exaircraft rebounded further in June.
- Housing activity continued to recover in June.
 - Single-family housing starts as well as new and existing home sales rose, but uncertainty about the future outlook is high amid significant COVID-19 outbreaks in many states.

- Payroll employment increased at a slower pace in July. The unemployment rate fell, mainly due to a decline in temporary layoffs. The labor force participation rate was essentially unchanged and the employment-to-population ratio increased moderately; both were still low.
 - The recent rise in permanent job losers came to a halt.
- Core PCE inflation remained well below the FOMC's longerrun objective.
- U.S. equity indices rose over the last month. Implied volatility decreased. The nominal 10-year Treasury yield remained low. The market-implied expected policy rate path was little changed. The broad trade-weighted dollar index declined. Oil prices rose modestly.

GDP



Source: Bureau of Economic Analysis,

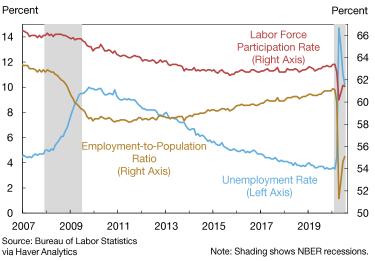
Congressional Budget Office via Haver Analytics Note: Shading shows NBER recessions.

Output falls well below potential in 2020Q2

- The level of real GDP in 2020Q2 was about 10.4% below the estimate of real potential GDP from the Congressional Budget Office (CBO).
 - The 2020Q2 output gap was the largest negative output gap in the post-war era. The previous low was -7.3% in 1982Q4.
 - The 10.2% unemployment rate in July was well above the CBO's estimate of its longer-run natural rate (4.38%).
 - 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 indicate that there is considerable resource slack in the U.S. economy.
 - Despite a rebound in June, capacity utilization rates continue to be at very low levels.

OVERVIEW

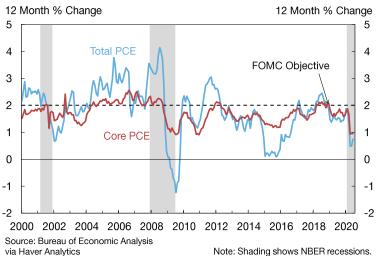
Labor Market Indicators



Labor market conditions slowly improve in July

- The unemployment rate decreased from 11.1% in June to 10.2% in July.
- Nonfarm payrolls rose by about 1.8 million in July.
 - Employment in goods-producing industries saw an increase of 39,000, driven by increases in manufacturing (+26,000) and construction (+20,000).
 - Employment in private service-providing industries increased by 1.4 million, with large increases in leisure and hospitality (+592,000), retail trade (+258,000), and education and health services (+215,000).
- The employment-to-population ratio increased from 54.6% in June to 55.1% in July.

PCE Deflator

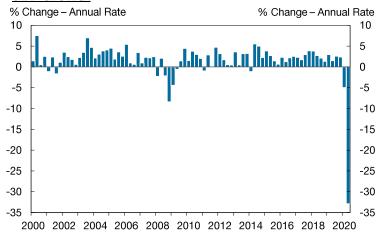


Inflation continues to run below 2 percent

- The total PCE price index rose 0.4% in June, after increasing 0.1% in May. The core PCE price index (which excludes food and energy prices) rose 0.2% in June, after rising 0.2% in May.
 - Energy prices rose 4.6% in June, and are down 12.8% relative to one year ago. Food prices rose 0.5% and are up 5.2% compared to one year ago.
- The 12-month change in the total PCE price index rose to +0.75% while the 12-month change in the core PCE price index remained fairly stable at +0.9%.
 - Core PCE inflation remains appreciably below the FOMC's 2 percent longer-run goal.

ECONOMIC ACTIVITY

GDP Growth

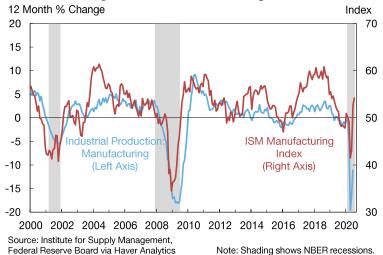


Source: Bureau of Economic Analysis via Haver Analytics

Real GDP plunges in 2020Q2

- In the BEA's first estimate, real GDP plummeted at a -32.9% annual rate (-9.5% at a quarterly rate) in 2020Q2, the most severe fall in the post-war era. The 4-quarter change was -9.5%.
- Real personal consumption expenditures fell at a 34.5% annual rate in Q2, its largest decline. The decline was most severe for services affected by COVID measures.
- There were also large declines in business investment, residential investment, exports, and imports.
- Federal government expenditures rose, reflecting spending associated with the PPP program. State and local government expenditures fell.
- Personal income rose in the quarter because of COVIDrelated transfers. The personal saving rate rose to 25.7%.

Manufacturing and ISM Manufacturing Index

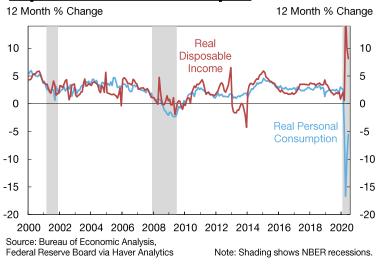


Manufacturing activity continues to rebound

- Manufacturing production increased 7.2% in June, after rising 3.8% in May.
 - Nevertheless, the 12-month change in manufacturing production was -11.2%.
- The ISM PMI rose 1.6 percentage points in July to 54.2.
 - The New Orders and Production indices rose 5.1 and 4.8 percentage points to 61.5 and 62.1, respectively.
- All five regional Fed surveys for July suggest continued improvement in manufacturing conditions as parts of the economy have reopened
 - All five surveys were in positive territory for the first time since the pandemic began

HOUSEHOLDS

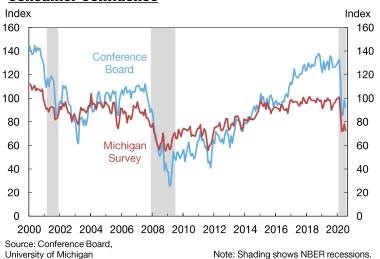
Disposable Income and Consumption



Consumer spending grows again in June

- Real personal consumption expenditures (PCE) increased
 5.2% in June, leaving them 6.6% below their February level.
 - Goods consumption expenditures rose 5.7%, with durables consumption up 8.8% and nondurables up 4.1%.
 Goods expenditures are back to their February level.
 - Expenditures on services increased 5%, and remain about 12% below their February level.
- Nominal personal income fell 1.1% in June.
 - The decline was driven by a fall in the Economic Impact Payments even as unemployment insurance payments rose.
- Disposable personal income fell 1.4% in June and the personal saving rate fell to 19.0% from 24.2% in May.

Consumer Confidence

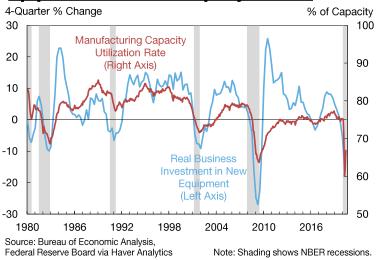


Consumer confidence deteriorates in July

- Consumer Confidence Indices declined in July.
 - The Conference Board Index fell from 98.3 to 92.6 in July.
 - The Michigan Index of Consumer Sentiment declined from 78.1 to 72.5.
- The decline in the Conference Board Index was driven by a 15-point decline in the Expectations Index.
 - In contrast, the Present Situations Index increased from 86.7 to 94.2 in July.
- Consumers' short-term outlook on employment and business conditions also deteriorated in July.

BUSINESS SECTOR

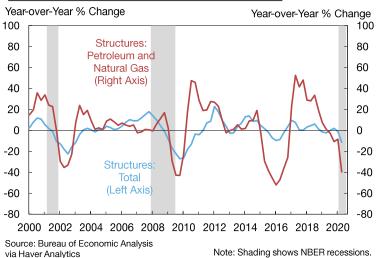
Equipment Investment and Capacity Utilization



Equipment spending plummets in 2020Q2

- Real business equipment investment dropped 37.7% (annual rate) in 2020Q2. It has fallen for five straight quarters. The 4-quarter change was -15.5%, the lowest since 2009Q3.
 - In 2020Q2, spending rose for information processing equipment, but fell for all other major categories of equipment. The fall was particularly acute for transportation equipment.
- Weak equipment investment has occurred alongside low levels of the manufacturing capacity utilization rate.
 - This rate was 66.9% in June, above the trough in the last recession but below troughs in prior recessions.
 - Historically, low utilization rates have been associated with weak equipment investment.

Investment in Nonresidential Structures



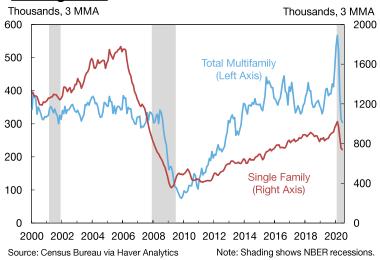
Nonresidential structures spending drops in 2020Q2

- Real nonresidential structures investment declined 34.9% (annual rate) in 2020Q2, its 3rd consecutive fall. The 4-quarter change was -11.5%.
- In 2020Q2, spending dropped considerably for all major categories of structures. The most severe fall occurred for mining exploration, shafts, and wells.
- Over the past several quarters, structures spending has been weak for petroleum and natural gas, reflecting the impact of low energy prices. Continued low rig counts point to further weakness in the near term.
 - Structures investment outside of energy also has been sluggish or falling in recent quarters.

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HOUSING SECTOR

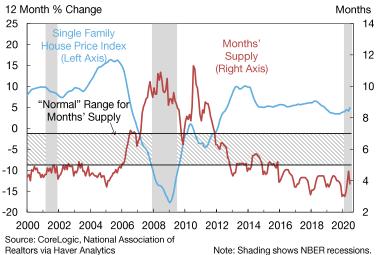
Housing Starts



Housing starts bounce back in June

- Total housing starts rose 17.3% in June. Starts were down 4.0% in the 12 months ending in June.
 - The three-month moving average of starts was about
 1.044 million units (annual rate) in June.
- Single-family starts were 831,000 (annual rate) in June, 17.2% above the May level and 3.9% below the June 2019 figure.
 - The 3-month average of single-family starts fell to 740,000.
- Multifamily starts rose to 355,000 (annual rate) in June,
 17.5% above May, and 4% below the June 2019 level.
 - The 3-month average of multifamily starts fell to 304,000.

Single Family Housing Market



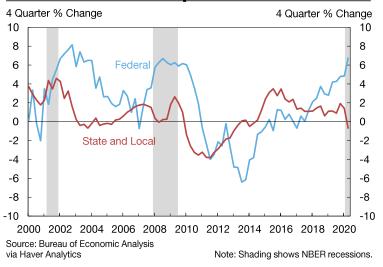
Home prices remain firm

- CoreLogic's single family home price index continues to register solid growth.
 - Prices were up 4.9% in the 12 months ending in June.
 - Home price appreciation has ticked up since late 2019.
 - Price growth over 2020Q2 exceeded that in 2020Q1.
- The supply of housing units for sale tightened in June.
 - June's for-sale inventory was 3.8 months' worth of sales.
 - Inventories have been re-tightening as sales recover from their large drop in March and April.

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GOVERNMENT SECTOR

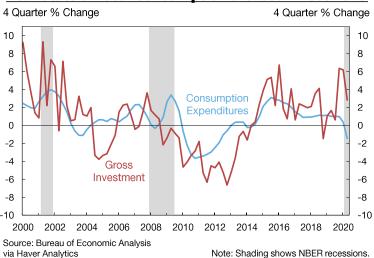
Real Government Consumption and Gross Investment



Growth of real government spending slows

- Real government consumption and gross investment grew 2.1% over the four quarters ending in 2020Q2, down from 2.7% in Q1.
- There was a sharp divergence in developments at the federal versus the state and local levels.
 - The 4-quarter change in real federal spending was +6.7% in 2020Q2, the strongest since 2008.
 - The 4-quarter change in real state and local government spending was -0.6%, the weakest since 2013.
- The pickup in real federal spending was driven by payments to banks for processing and administration of Paycheck Protection Program loan applications.

Real State & Local Consumption & Gross Investment

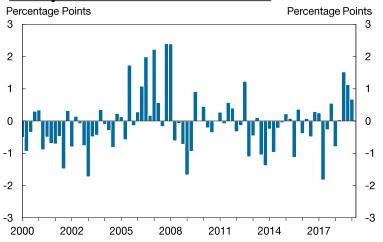


State and local sector declines sharply

- Over the four quarters ending in Q2, growth of real consumption at the state and local level was -1.47%, a rate of decline not seen since 2012.
 - Consumption expenditures consist largely of employee salaries and make up over 80% of the sector's total spending.
- The 4-quarter change in state and local government gross investment spending was +2.8% in Q2, a sharp slowing from recent quarters.
 - In order of importance, the categories of gross investment are new equipment (such as computers), intellectual property products (such as software), and public works and infrastructure projects.

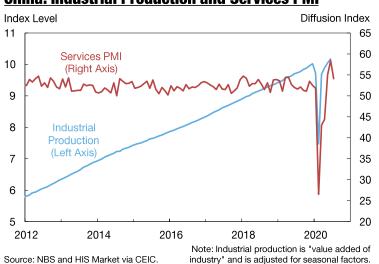
INTERNATIONAL DEVELOPMENTS

Net Exports: Contribution to GDP Growth



Source: Bureau of Economic Analysis via Haver Analytics

China: Industrial Production and Services PMI



Net exports still a boost to GDP, but impact fading

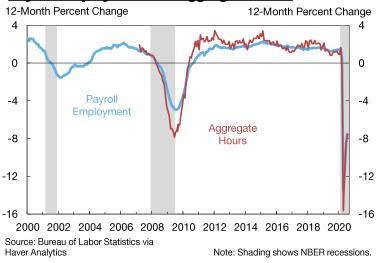
- Based on the advance release, net exports added 0.68 percentage point to GDP growth in 2020Q2.
 - Real exports fell by 22.0% (annual rate), and real imports contracted by 17.4% (annual rate).
 - Both real exports and imports showed steep declines from the previous quarter as the COVID-19 pandemic took a toll on world trade.
- The trade deficit was \$50.7 billion in June, down \$4.1 billion from \$54.8 billion in May.
 - Real exports of goods rose by 12.2% over the month, driven primarily by an increase in durable goods, such as capital goods and autos.
 - Real imports of goods also rose, but only by 4.1%. The major driver of this rise was an increase in the demand for autos, reversing the decline seen in previous months.

China economy recovers strongly

- Industrial output in China has rebounded quickly after the country's "lock down" in Q1 and now exceeds its December 2019 level.
 - Output in June grew at a 16.8% annual rate and was about 1.6% above its end-2019 level.
 - Growth has been supported by very strong automobile production and sales, following a protracted slump during 2018 – 19.
 - Production has also been boosted by strong demand for electronics and medical equipment.
- The services sector has recovered more slowly, but is now also showing a solid recovery. The services PMI dropped to a low of 26.5 in February and remained below 50 through April. It has been well above 50 since May.

LABOR MARKET

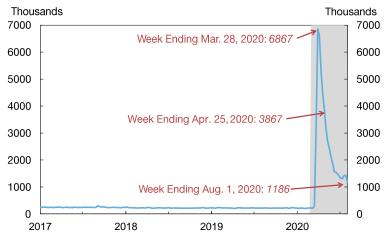
Payroll Employment and Aggregate Hours



Payroll employment continues recovery

- Nonfarm payrolls expanded by about 1.8 million in July.
 - Payroll employment remains 12.9 million below its level in February.
- Private payroll employment increased by about 1.5 million in July.
 - Government employment increased by 301,000, primarily due to seasonal adjustments in education and the hiring of temporary Census workers.
- Aggregate weekly hours worked by all private employees were up 1.0% in July, driven by the monthly gain in payroll employment.

SA Initial Unemployment Insurance Claims



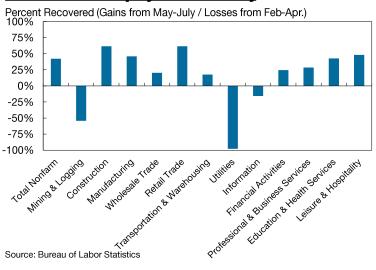
Source: Department of Labor

Unemployment claims continue their gradual decline

- After a slight rise at the end of July, seasonally adjusted initial unemployment insurance claims stood at 1,186,000 for the week ending August 1.
 - This is the lowest level since March, but still extraordinarily high on a longer historical basis.
- In addition to initial claims under state programs, 51 states reported 655,707 initial claims for Pandemic Unemployment Assistance (PUA).
- Seasonally adjusted continuing claims under state programs fell to 16,107,000, but they are still high at 10 times their 2019 average.
 - The insured unemployment rate decreased to 11%.

LABOR MARKET

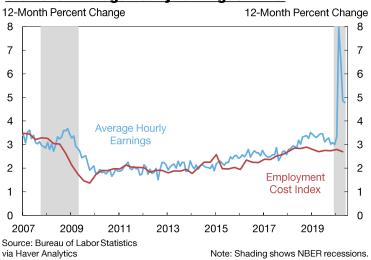
Cumulative Unemployment Recovery



Job recovery weak, regardless of industry

- Comparing the job gains from May through July with the job losses from February to April, total nonfarm payrolls have only recovered 42% of previously lost jobs.
- Industries that recovered more of their job losses include retail trade (62%), construction (62%), and leisure and hospitality (48%).
- Industries that have yet to see job recoveries are utilities (-98%, which means it continues to lose jobs), mining and logging (-54%), and information (-16%).

Growth of Average Hourly Earnings and ECI

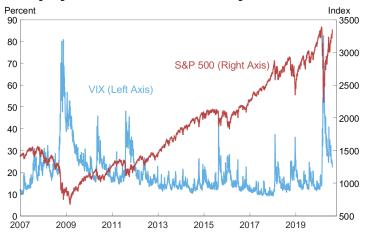


Average hourly earnings rise in July

- Average hourly earnings rose by 0.2% between June and July. The 12-month change was +4.8%.
 - The month-on-month increase partially reverts decreases in the prior two months.
 - Sharp compositional shifts related to large changes of payrolls in low-wage industries have affected measured wage growth using average hourly earnings.
- The ECI for civilian workers increased 0.5% in 2020Q2, below the Bloomberg median forecast and the change in 2020Q1.
 - The 12-month change in the ECI was 2.7%, slightly lower than in the previous quarter (2.8%).
 - The ECI is less affected by compositional shifts.

FINANCIAL MARKETS

U.S. Equity Market Index and Volatility

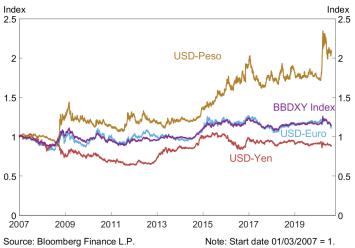


Source: Bloomberg Finance L.P.

U.S. equity markets improve

- U.S. equity markets have been broadly stable during the past month and are nearing all-time highs.
 - The S&P 500 index increased 5.7% between July 8 and August 7. It is up 49.7% from its recent low on March 23, and is only 1.0% below its February 19, 2020 all-time high.
 - As of August 7, the index is up 3.7% year to date.
- Option-implied stock market volatility, as measured by the CBOE Volatility Index (VIX Index), remains somewhat elevated.
 - The VIX Index closed at 22.21 on August 7, well below its 82.69 record high on March 16, 2020, but still above its 2019 year-end value of 13.78.

USD Exchange Rates

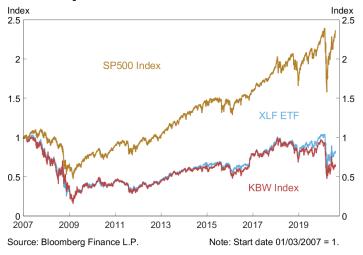


U.S. dollar foreign exchange value declines

- The exchange value of the dollar against a basket of global currencies decreased 2.4% between July 8 and August 7.
 - Over this same period the dollar depreciated by 3.9% against the euro, by 1.2% against the Japanese yen, and by 1.3% against the Mexican peso.
- Since the start of 2020, the dollar is little changed on net against a basket of global currencies.

FINANCIAL MARKETS

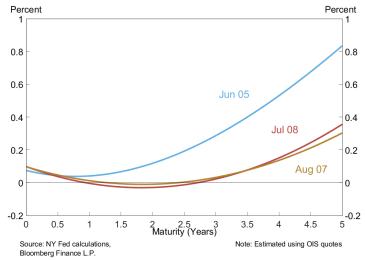
US Bank Equities Performance



Performance of bank stocks improves

- As measured by the KBW Nasdaq bank index, bank equities increased 7.3% between July 8 and August 7, and are 37.8% above their recent low on March 23.
 - As of August 7, the index was still down 31.7% year to date.
- The XLF financial sector ETF also increased 7.2% between July 8 and August 7, and is up 40.6% from its low on March 23.
 - As of August 7, the index was down 19.3% year to date.

Expected Federal Funds Rate

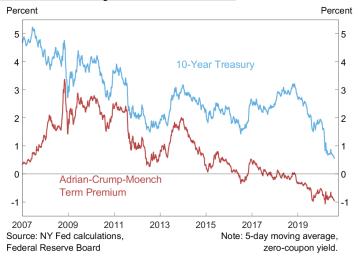


Implied path for federal funds little changed

- The expected path of the federal funds rate implied by rates on overnight indexed swaps (OIS) increased slightly for short maturities but decreased slightly for longer maturities between July 8 and August 7.
- The market-implied path remains slightly below the median path of the FOMC's Summary of Economic Projections from June 2020 and the NY Fed's Survey of Primary Dealers from June 2020.

FINANCIAL MARKETS

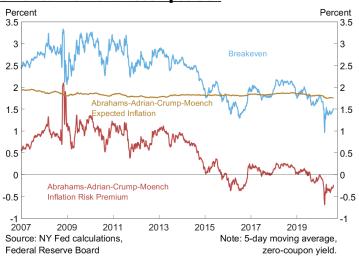
10-Year Treasury and Term Premium



Longer-term Treasury yields continue to decline

- Longer-term Treasury yields have decreased slightly since early July.
 - The 10-year yield decreased about 15 basis points between July 8 and August 7.
 - The 10-year yield is about 140 basis points lower than its level at the end of 2019.
- Estimates from the Adrian-Crump-Moench term structure model indicate that the term premium also decreased.
 - The 10-year term premium decreased by about 15 basis points between July 8 and August 7 as a five-day moving average.

5-10 Year Forward Decomposition

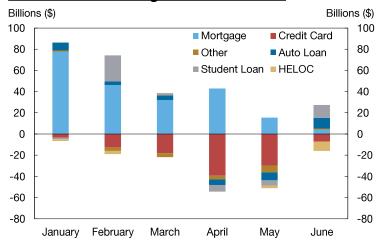


Inflation breakevens increase

- Market-implied TIPS-based measures of long-term inflation compensation ("breakevens") increased slightly in recent weeks.
 - The five-to-ten year breakeven inflation rate was 1.52% on August 7 increasing by about 10 basis points over the past month as a five-day moving average.
- According to the Abrahams-Adrian-Crump-Moench model, the inflation risk premium also increased.
 - The estimated five-to-ten year inflation risk premium has increased 5 basis points as a five-day moving average.

SPECIAL TOPIC: HOUSEHOLD DEBT

Contribution to Change in Debt Balances

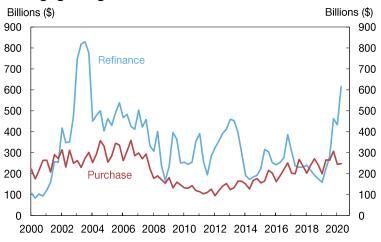


Source: New York Fed Consumer Credit Panel / Equifax.

Credit card balances decline as consumption falls

- The total outstanding household debt balance fell by \$34 billion in 2020Q2.
 - This decline, the first since 2014Q2, was driven by a \$76 billion decline in card balances, more than double the previous record of \$34 billion from the previous quarter, at the beginning of the COVID-19 pandemic.
 - Auto loans and student loans were roughly flat.
 - Mortgage loans had a small increase.
- On a monthly basis, using newly acquired Consumer Credit Panel data, credit card balances sharply declined in March, April, and May of 2020 as consumption fell with lock-down orders in place in much of the U.S.

Mortgage Originations



Source: New York Fed Consumer Credit Panel / Equifax

Mortgage refinances jump with low mortgage rates

- Mortgage originations, in total, reached \$856 billion in the second quarter.
- Splitting into the two components purchase originations and refinance originations – reveals very different trends.
 - Mortgage refinances jumped notably, as many homeowners sought to refinance their existing mortgages and take advantage of low mortgage interest rates.
 - Purchase originations were roughly stagnant.
- Due to this shift in the mix towards a larger share of refinances, the median credit score of newly originated mortgages increased to the highest level seen yet.