

The Coronavirus and the Economy

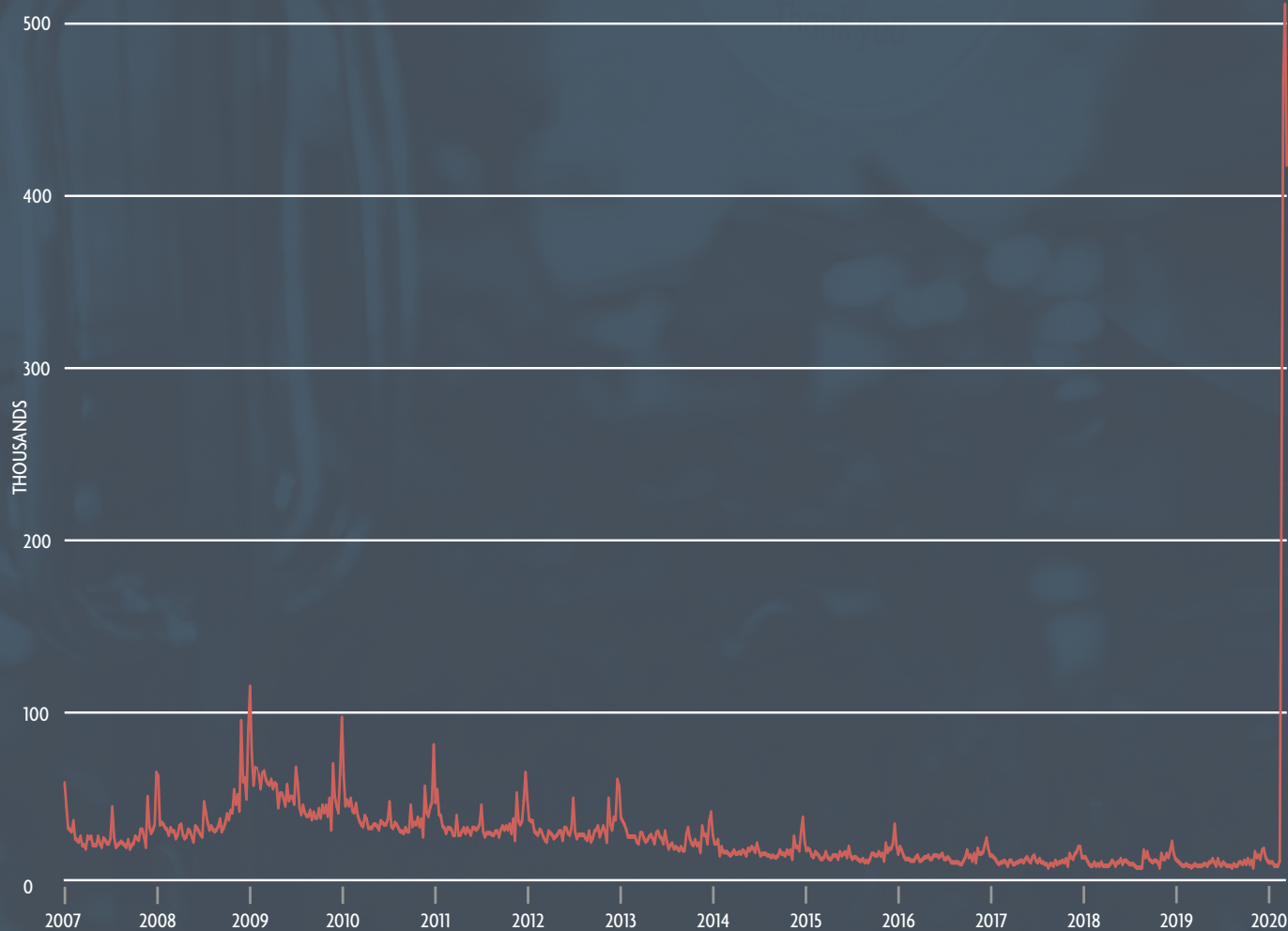
CHARTS BY JACOB CROUSE, DAVID A. PRICE, RACHEL RODGERS, JESSIE ROMERO, AND LUNA SHEN

The spread of SARS-CoV-2, the virus behind the illness COVID-19, brought tragedy to households across the United States in the late winter and spring of 2020. Tens of thousands of people in America have died and many more have suffered serious illness.

For individuals who were spared these direct effects, the virus led to havoc in daily life and in the economy. Millions endured job losses. This gallery offers a record of some of the unprecedented economic changes that Americans experienced.

UNEMPLOYMENT INSURANCE CLAIMS IN THE FIFTH DISTRICT

Initial claims, in thousands



NOTE: Not seasonally adjusted. Date range is Jan. 6, 2007, to April 11, 2020.

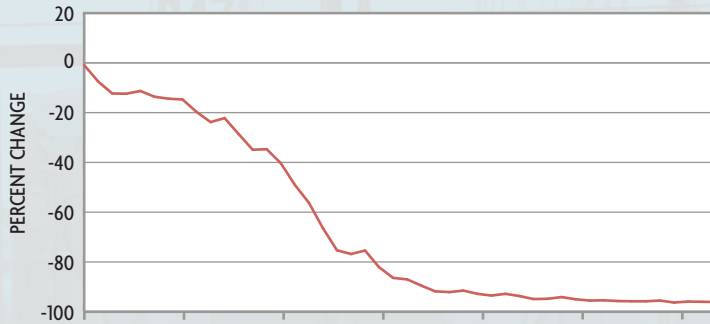
SOURCE: U.S. Department of Labor via Haver

GOING AWAY AND GOING OUT

The effect of the crisis on travel and dining was massive

Airline Passengers, 2020 vs. 2019

Percent change in passengers at TSA airport checkpoints compared with one year previous

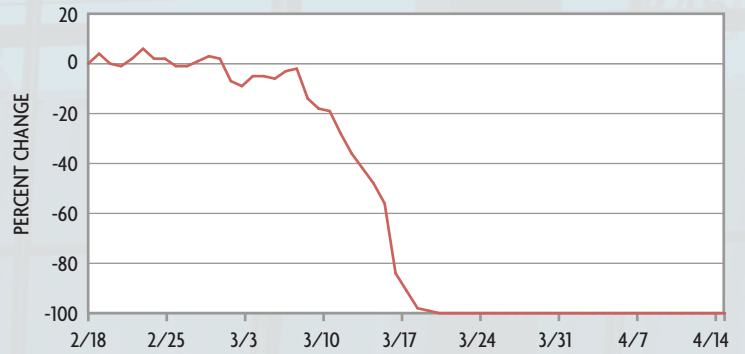


NOTE: Date range is March 1 to April 15.

SOURCE: Transportation Security Administration

Restaurant Diners, 2020 vs. 2019

Percent change in seated diners compared to one year previous



NOTE: Counts include online reservations, phone reservations, and walk-ins at restaurants in the OpenTable network. Date range is Feb. 18 to April 16.

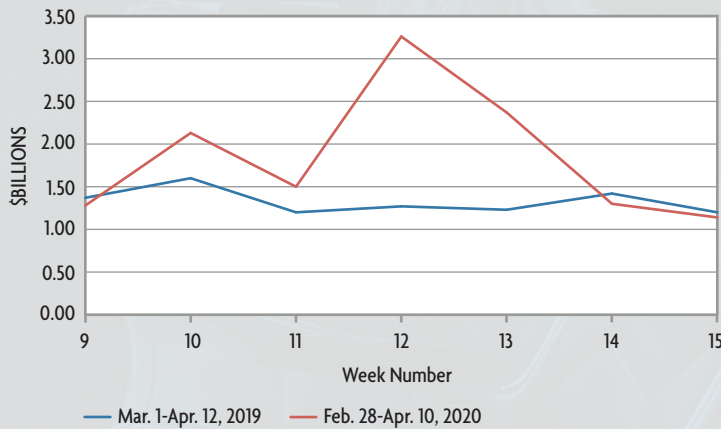
SOURCE: OpenTable

PAYMENTS

Demand for cash increased while use of credit cards went down modestly

Cash Demand, 2020 vs. 2019

Richmond Fed cash and coin volume

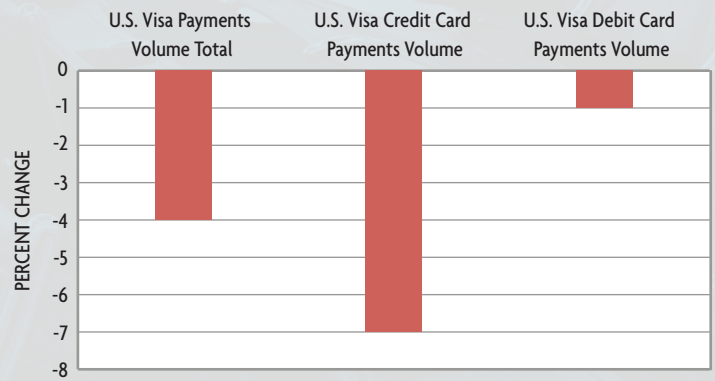


NOTE: Data include cash and coin paid out to depository institutions by the Baltimore, Charlotte, and Richmond offices of the Richmond Fed. In 2019, weeks nine through 15 are the weeks ending Mar. 1-April 12. In 2020, weeks nine through 15 are the weeks ending Feb. 28-April 10.

SOURCE: Federal Reserve Bank of Richmond

Credit Card and Debit Card Trends

Visa Card Usage in March



NOTE: Date range is March 1 to March 28.

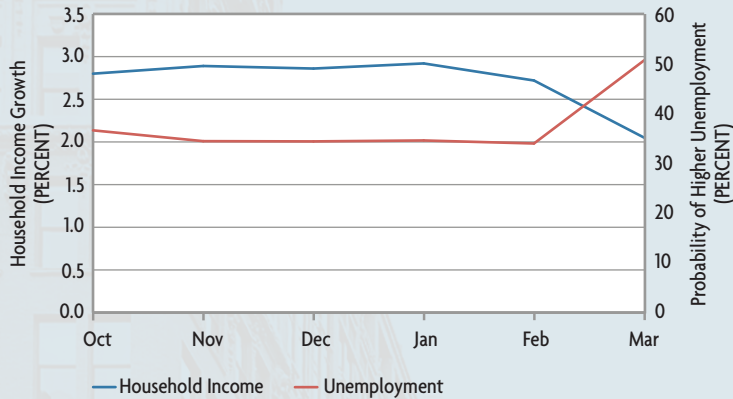
SOURCE: Visa Inc. Form 8-K, March 30, 2020

CONFIDENCE IN THE ECONOMY

The crisis shook measures of business, consumer, and investor sentiment

Household Income and Unemployment Growth Expectations, One Year Ahead

New York Fed Survey of Consumer Expectations

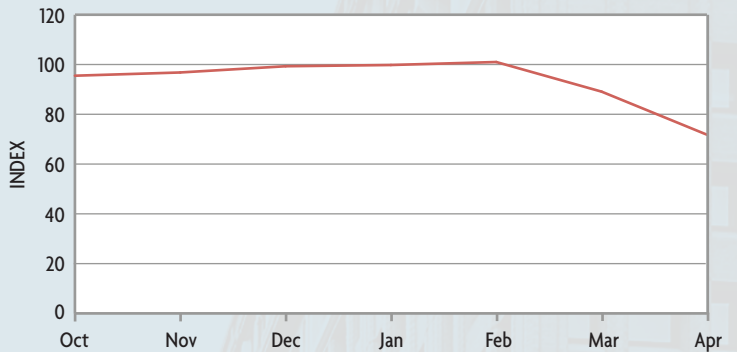


NOTE: Household income predictions are medians; unemployment probabilities are means.

SOURCE: Federal Reserve Bank of New York

Consumer Confidence

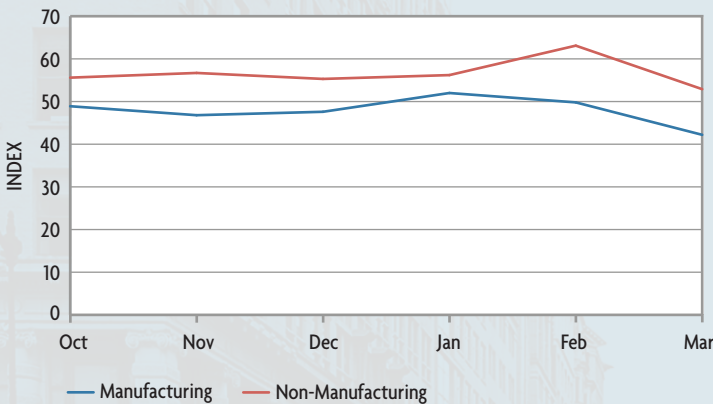
University of Michigan Index of Consumer Sentiment



SOURCE: University of Michigan Surveys of Consumers

New Orders

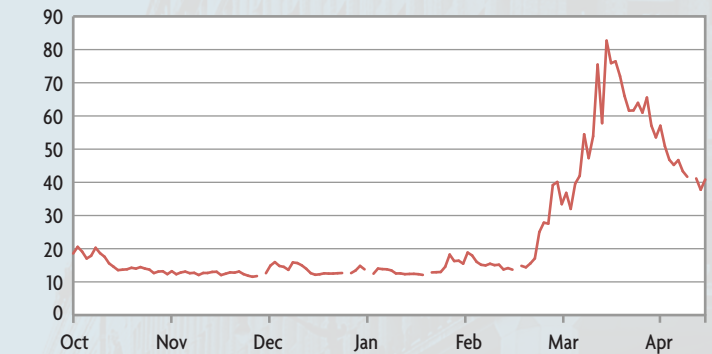
ISM manufacturing and non-manufacturing new orders indexes



SOURCE: Institute for Supply Management

Expectations of Stock Market Volatility

CBOE Volatility Index (VIX)

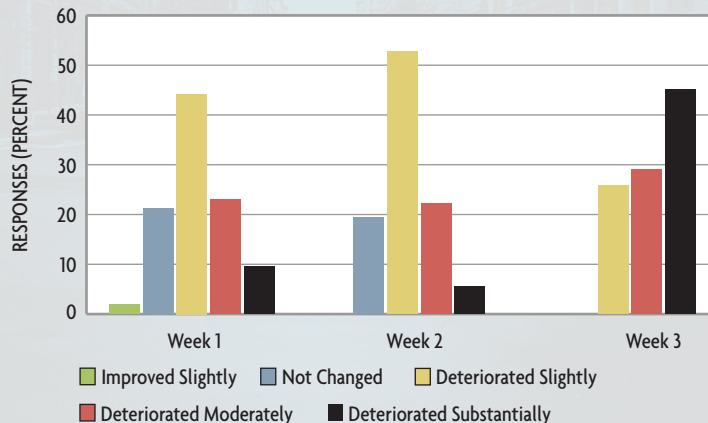


NOTE: Date range is Oct. 1, 2019, to April 15, 2020. Missing values represent dates of CBOE holidays.

SOURCE: Chicago Board Options Exchange via FRED

Fifth District Managers' Changing Outlook in March

"How has the spread of the coronavirus affected your outlook for the U.S. economy?"



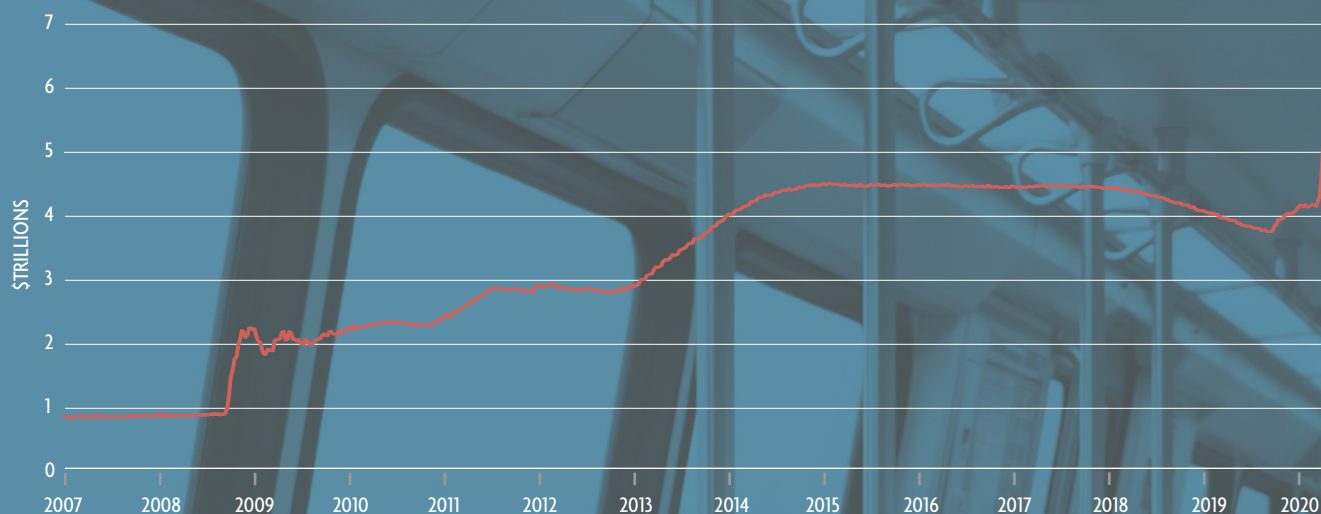
NOTE: Special question included in March 2020 Regional Surveys of Business Activity. Week 1 is Feb. 27 to March 4. Week 2 is March 5-11. Week 3 is March 12-18.

SOURCE: Federal Reserve Bank of Richmond

HOW THE FED RESPONDED

Federal Reserve System Assets

In trillions of dollars



NOTE: Total assets (less eliminations from consolidation). Weekly. Date range is Jan. 3, 2007, to April 15, 2020.

SOURCE: Board of Governors of the Federal Reserve System via FRED

SELECTED ACTIONS OF THE FED IN RESPONSE TO THE 2020 CORONAVIRUS CRISIS

- **March 3.** Federal Open Market Committee (FOMC) lowers the target range for the federal funds rate by 1/2 percentage point, to 1 percent to 1.25 percent, noting that “the coronavirus poses evolving risks to economic activity.”
- **March 15.** FOMC announces it is lowering the target range for the federal funds rate by 1 percentage point, to 0 percent to 0.25 percent. To encourage borrowing from the discount window, Fed lowers the primary credit interest rate by 1.5 percentage points, to 0.25 percent.
- **March 17.** To support the market for commercial paper (short-term corporate debt) and to support primary dealers that buy and sell Treasury securities, Fed revives the Commercial Paper Funding Facility and the Primary Dealer Credit Facility, which were originally created in 2008 during the financial crisis. These programs are based on the Fed’s emergency powers under section 13(3) of the Federal Reserve Act.
- **March 18.** Fed uses its emergency powers to create the Money Market Mutual Fund Liquidity Facility to support the markets for commercial paper and other assets that money market funds hold in order to maintain confidence in money market funds.
- **March 19.** Fed expands its existing arrangements, known as central bank swap lines, that provide lending to foreign central banks to assist them in delivering U.S. dollar funding to financial institutions in their markets. In addition to the five current participants — the Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank, and the Swiss National Bank — nine more foreign central banks are added.
- **March 23.** Fed uses its emergency powers to create the Primary Market Corporate Credit Facility to buy debt securities from corporations and the Secondary Market Corporate Credit Facility to buy those securities on the open market. To further support the availability of credit, Fed also revives the Term Asset-Backed Securities Loan Facility, or TALF, a broader version of the emergency program originally created during the 2007-2008 financial crisis.
- **March 31.** Fed announces the Foreign and International Monetary Authorities Repo Facility to enable foreign central banks not participating in the central bank swap lines, as well as international monetary authorities such as the International Monetary Fund, to borrow dollars using Treasury securities as collateral.
- **April 6.** Fed announces a new emergency lending facility, the Paycheck Protection Program Liquidity Facility, to support the Small Business Administration’s (SBA) Paycheck Protection Program. The SBA program guarantees loans to small businesses so that those businesses can keep workers employed.
- **April 7.** Fed and other bank regulatory agencies issue a revised inter-agency statement encouraging financial institutions to work with borrowers and offer “prudent loan modification programs” to customers affected by COVID-19.
- **April 9.** Fed uses its emergency powers to create the Main Street Lending Program for the purchase of up to \$600 billion in loans, funded in part by \$75 billion from the Treasury Department, and the Municipal Liquidity Facility to lend up to \$500 billion to states and municipalities.
- **April 14.** Fed and other bank regulatory agencies announce temporary changes to appraisal requirements for residential and commercial real estate lending.
- **April 16.** Fed announces that its Paycheck Protection Program Liquidity Facility is fully operational.

— DAVID A. PRICE