

Coronavirus Crisis & Finance



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What are financial crises?

In a financial crisis, [asset](#) prices notice a sharp [decline](#) in value, consumers and businesses are unable to pay their debts, and financial entities face a shortage of liquidity. Often, a [financial crisis](#) is related to a bank [run](#) or panic during which investors sell their assets or withdraw money from their [savings](#) accounts because they believe that if they stay in a financial institution, the [value](#) of those assets will decrease. Certain circumstances that could be described as a financial crisis include a global financial [bubble](#) bursting, a sovereign default, a stock [market](#) crash, or a [currency](#) crisis. Financial crises can be confined to banks or spread across a single economy, a region's economy, or worldwide economies.

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Financial Sector Crises

- Latin American Debt Crisis – late 1970s
- Continental Illinois - 1984
- Black Monday – 1987
- Savings & Loan Crisis – 1986 – 1995
- Asian & Russian Debt Crisis – 1997 – 1998
- Subprime Mortgage Crisis – 2008
- European Debt Crisis – 2009 – 2012
- Coronavirus Crisis – 2020 - ???

2008 Financial Crisis

The Great Recession by the Numbers



\$30 billion federal guarantee for deal between Bear Stearns and JP Morgan Chase

\$182 billion federal bailout for AIG

U.S. Treasury later sold the shares for **\$22.7 billion** in profit

Fannie Mae and Freddie Mac guarantee **90 percent** of all mortgages

\$144.5 billion moved from money markets to treasury bonds



Treasury Department spent **\$439.6 billion**

buying bank and car stocks

By 2010, banks paid back **\$442.6 billion**

2008 Financial Crisis

The 2008 financial crisis was the worst economic disaster since the [Great Depression of 1929](#). It occurred despite the efforts of the Federal Reserve and the U.S. Department of the Treasury. The crisis led to the Great Recession, where housing prices dropped more than the price plunge during the Great Depression. Two years after the recession ended, unemployment was still above 9%. That doesn't count those discouraged workers who had given up looking for a job.

Causes of the Crisis

In 2006, housing prices started to fall for the first time in decades. At first, realtors applauded. They thought the overheated real estate market would return to a more sustainable level. They didn't factor in a number of factors, such as too many homeowners with questionable credit being approved for mortgage loans, even some for 100% or more of the home's value.

Some blamed the [Community Reinvestment Act](#), which pushed banks to make investments in subprime areas. Several studies by the Federal Reserve found it did not increase risky lending.

Others blamed Fannie Mae and Freddie Mac for the entire crisis. To them, the solution is to close or privatize the two agencies. If they were shut down, the housing market would collapse because they guarantee the majority of mortgages.

2008 Financial Crisis Costs

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Coronavirus Crisis Economic Forecasts

But the extent to which, for instance, US durable goods prices have deviated from their longer-run trend does suggest that as we move into 2022 the goods sector may start to be disinflationary.

Another potentially major upward force globally is likely to be higher services inflation. For now, it seems that firms are returning prices to their pre-pandemic trend path, rather than pushing them on to a new higher trajectory. But services firms may view reopening as a timely opportunity to raise prices leading to a larger-than-normal clumping of price hikes.

Coronavirus Crisis Economic Forecasts

We think that recent inflation surprises are not evidence of a regime shift in price-setting behavior. But the path for inflation over the next few months is highly uncertain and depends on several difficult-to-predict factors, ensuring that every development will be intensely scrutinized.

Surging demand for goods along with major supply chain issues are likely to lead to further goods price rises even as spending patterns begin to shift back to pre-crisis norms. It will probably take several more months for freight bottlenecks and semiconductor shortages to be resolved.

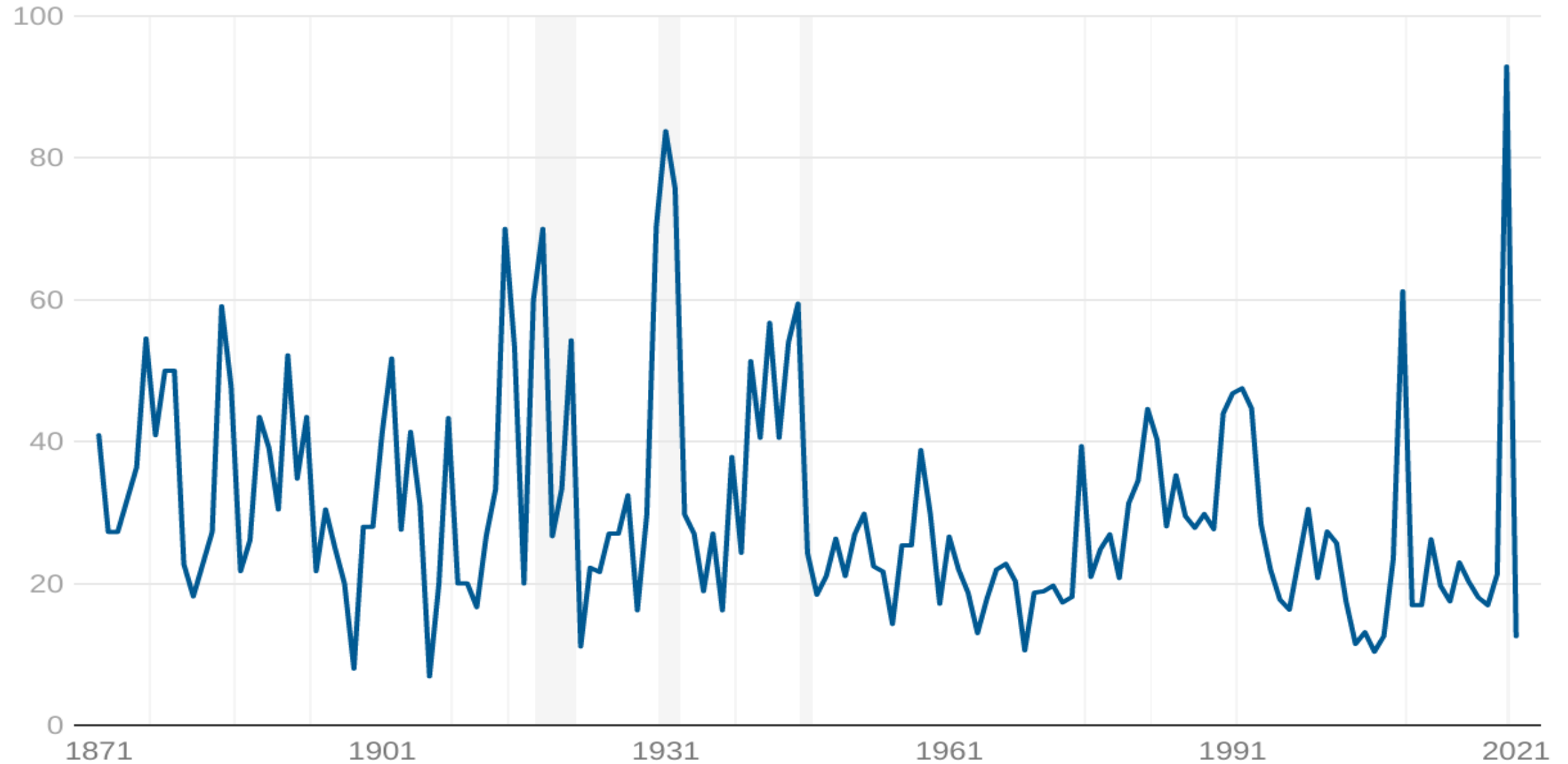
Coronavirus Crisis Economic Forecasts

The pandemic is expected to plunge most countries into recession in 2020, with per capita income contracting in the largest fraction of countries globally since 1870. Advanced economies are projected to shrink 7 percent. That weakness will spill over to the outlook for emerging market and developing economies, who are forecast to contract by 2.5 percent as they cope with their own domestic outbreaks of the virus. This would represent the weakest showing by this group of economies in at least sixty years.

"The crisis highlights the need for urgent action to cushion the pandemic's health and economic consequences, protect vulnerable populations, and set the stage for a lasting recovery."

Most countries are expected to face recessions in 2020

Share of economies in recession, 1871-2021



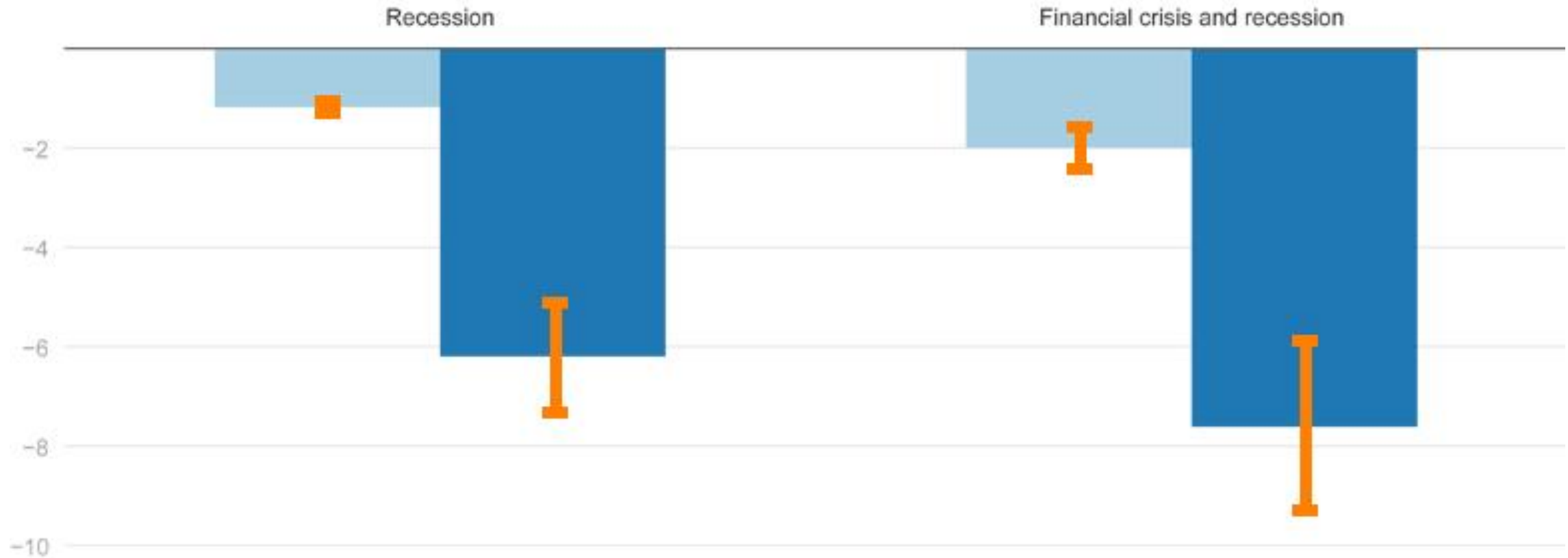
The proportion of economies with an annual contraction in per capita GDP. Shaded areas refer to global recessions. Data for 2020-21 are forecasts.

Source: World Bank

With the recession having deep effects on potential output, reforms that bolster long-term growth prospects will be essential

Cumulative EMDE potential output response after recessions (percent)

■ t ■ t+5



EMDE = Emerging Market and Developing Economies. Data and methodology are detailed in Chapter 3 Box 3.1 and Annex 3.4. Charts show impulse responses for 75 EMDEs from a local projections model. Dependent variable is cumulative slowdown in potential output after a recession or financial crisis. Year t is the year of the event. Bars show coefficient estimates; vertical lines show 90 percent confidence bands.

Source: Ha, Kose and Ohnsorge (2019); World Bank

Source: <https://www.worldbank.org/en/news/feature/2020/06/08/the-global-economic-outlook-during-the-covid-19-pandemic-a-changed-world>

Coronavirus Crisis Economic Forecasts

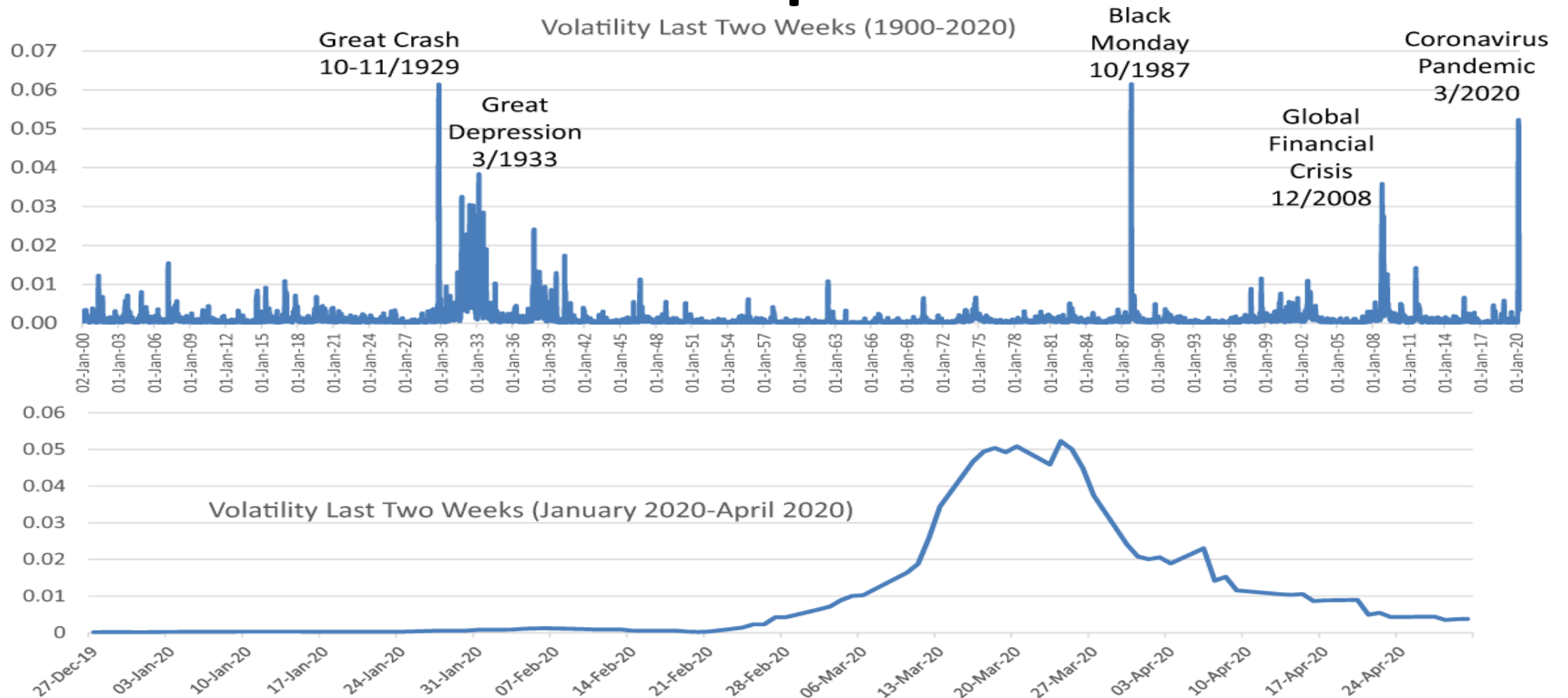
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The Unprecedented Stock Market Reaction to COVID-19

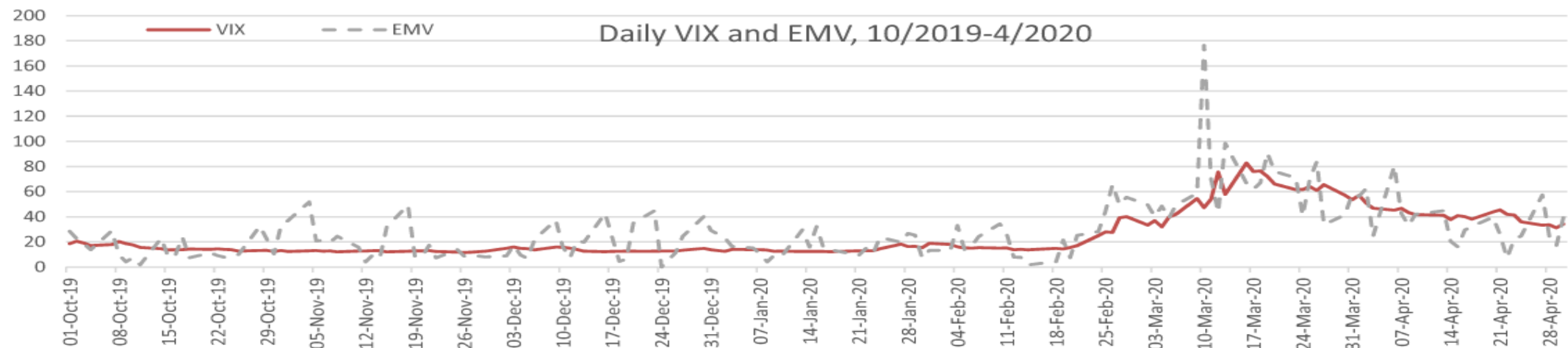
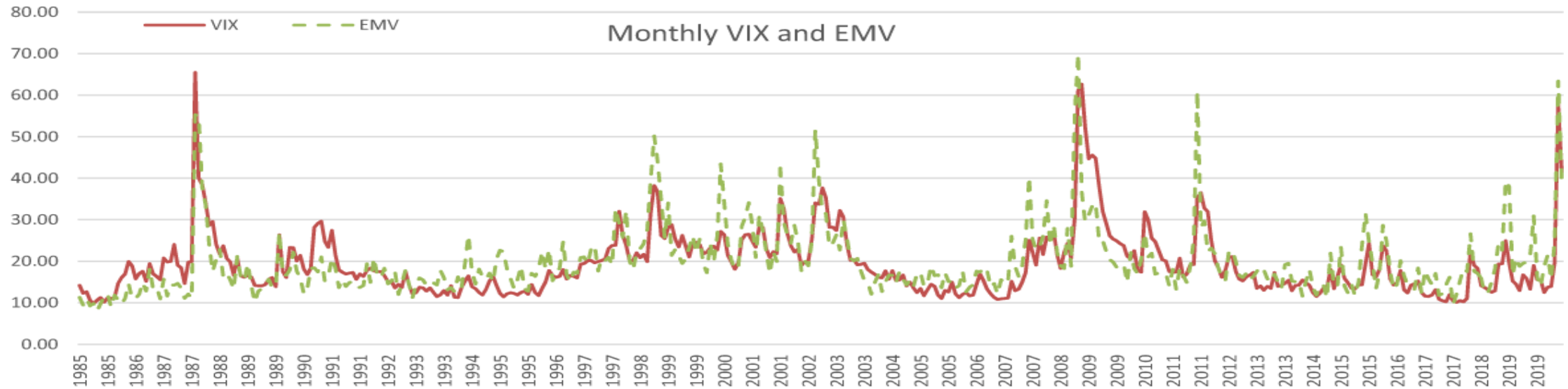
No previous infectious disease outbreak, including the Spanish Flu, has affected the stock market as forcefully as the COVID-19 pandemic. In fact, previous pandemics left only mild traces on the U.S. stock market. We use text-based methods to develop these points with respect to large daily stock market moves back to 1900 and with respect to overall stock market volatility back to 1985. We also evaluate potential explanations for the unprecedented stock market reaction to the COVID-19 pandemic. The evidence we amass suggests that government restrictions on commercial activity and voluntary social distancing, operating with powerful effects in a service-oriented economy, are the main reasons the U.S. stock market reacted so much more forcefully to COVID-19 than to previous pandemics in 1918–1919, 1957–1958, and 1968.

Realized U.S. stock market volatility, January 1900 to April 2020



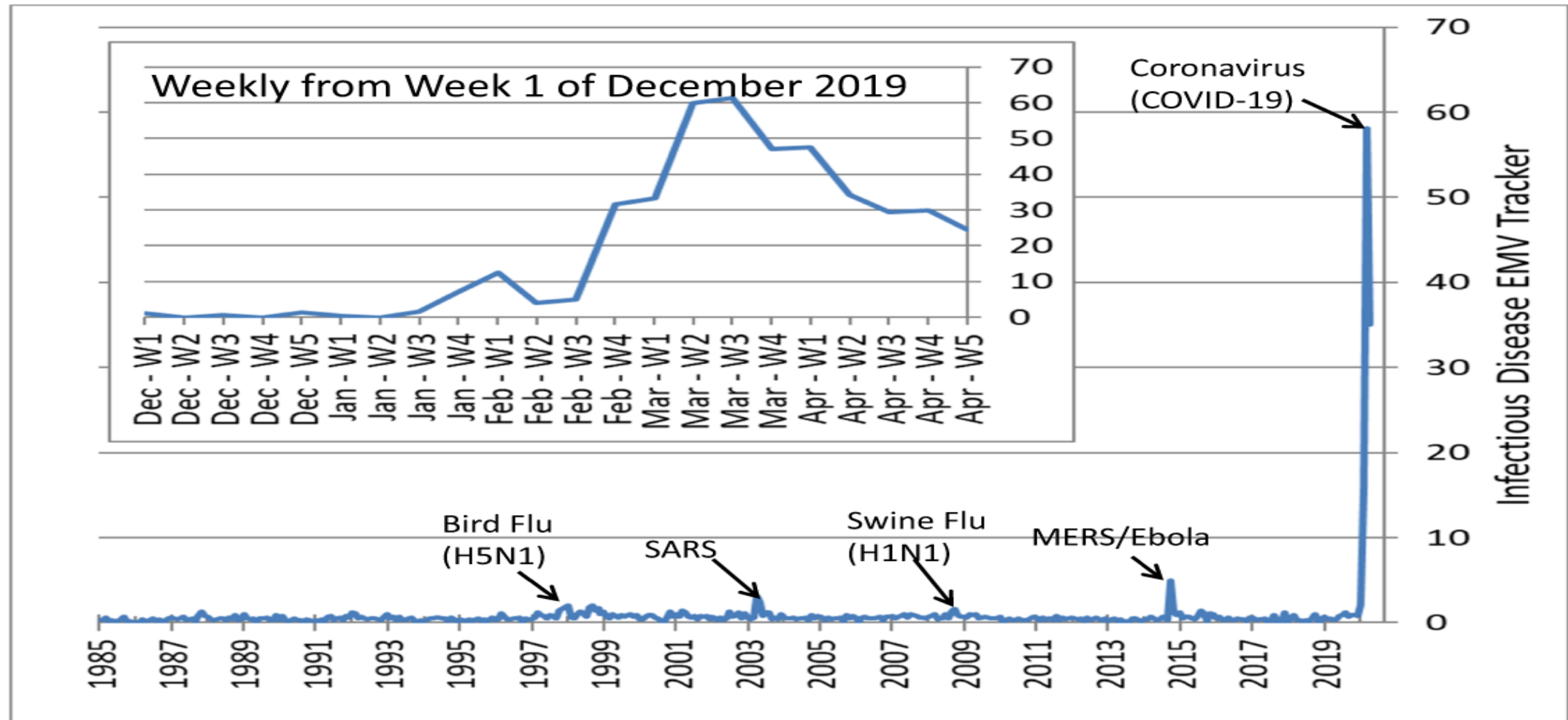
The sample period runs from January 2, 1900, to April 30, 2020. From December 1925 onward, returns are computed using Yahoo Finance’s “adjusted close” series for the S&P 500 (^GSPC). Before that, returns are from the Global Financial Data extension of the Dow Jones index. In both panels, we calculate realized volatility as the sum of squared returns over the past 10 trading days.

Newspaper-based equity market volatility tracker and the 30-day VIX, January 1985 to April 2020



The Equity Market Volatility Tracker reflects the frequency of articles about stock market volatility in leading U.S. newspapers, as quantified by Baker et al. (2019). The 30-Day VIX is constructed as the monthly average of daily closing VIX values collected from Yahoo Finance. Bottom panel displays daily data for each series.

Infectious disease EMV index, weekly and monthly data from 1985 to April 2020

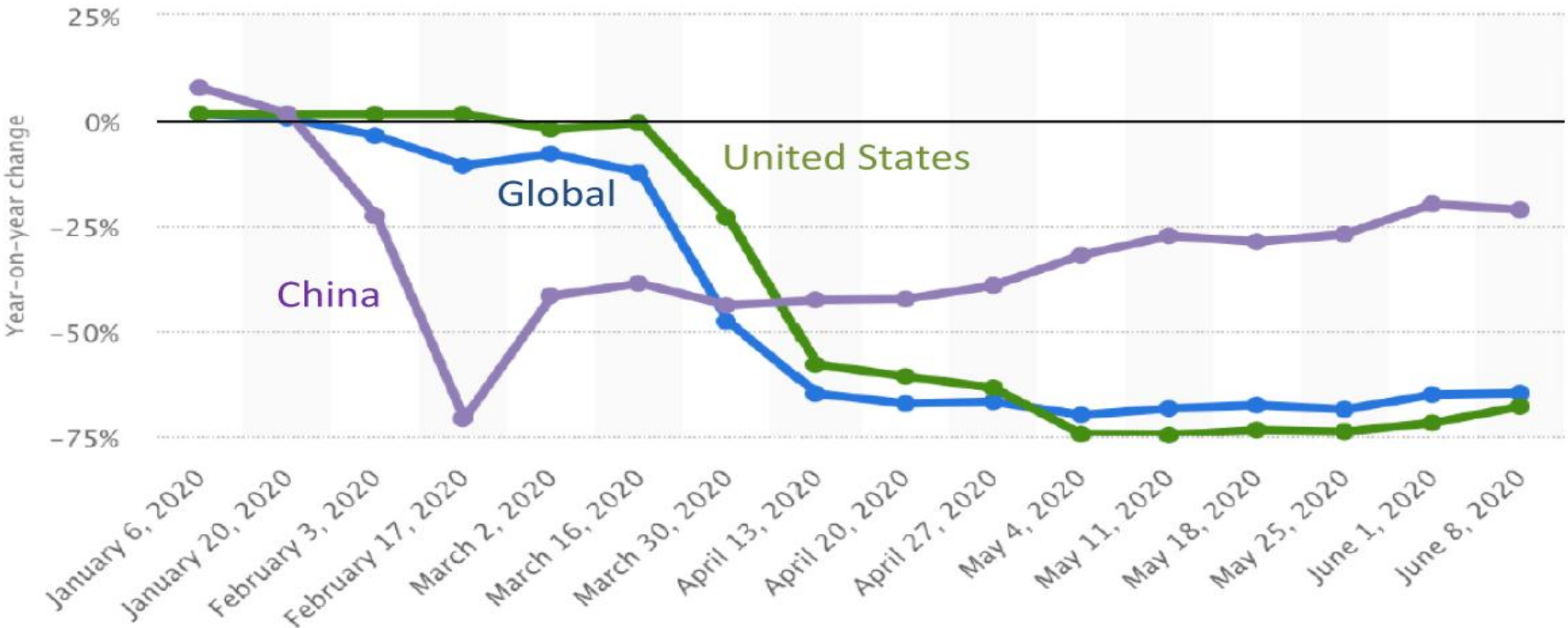


The Infectious Disease EMV Tracker is computed as the overall EMV tracker value multiplied by the share of EMV Articles that contain one or more of the following terms: epidemic, pandemic, virus, flu, disease, coronavirus, mers, sars, ebola, H5N1, and H1N1.

Why Such Powerful Stock Market Effects?

Why have COVID-19 developments powerfully affected the stock market since late February? Clearly, the current pandemic has grave implications for public health. So, part of the answer surely lies in the severity of the COVID-19 pandemic, the apparent ease with which the virus spreads, and the no negligible mortality rate among those who contract it. However, this answer is highly incomplete. The excess mortality rate in the United States during the Spanish Flu pandemic was 14 times as large as the excess mortality rate to date (as of June 23, 2020) during the COVID-19 pandemic.

Year-on-year change of weekly flight frequency by global airlines, January 6 to June 8, 2020



We obtained these data from Statista. The original source is the OAG Schedules Analyzer, published by OAG.com.

Risks & Scenarios

While risk management has existed for centuries, today it remains a consideration that all too often resides in an organizational silo, associated with planning a new project, evaluating a potential financial investment, complying with new regulations, or responding to a previous incident. Whereas, conceptually it is recognized that risks are inherent within an organization at all levels and in various facets, firms are struggling with how to move toward a more holistic, enterprisewide approach to risk management. One major challenge is how to structure a framework for identifying enterprise risks and corresponding scenarios that is all inclusive, an important precursor to performing risk assessments and subsequent development of mitigation strategies.

Scenario Development

To fully understand the potential risks associated with each hazard, multiple scenarios must be evaluated. These scenarios should represent the range of events that are “reasonably foreseeable” that an organization may experience. The basis for determining these event scenarios is based on answering the question, “What could go wrong?” To capture the full breadth of possibilities, the developed scenarios should represent incremental levels of impact severity, ranging from events with minor to catastrophic outcomes. Referring to the previous discussion, for a tornado hazard, at one end of the spectrum, a scenario might be a tornado warning for a two-hour window during the business day in the county where the organization is situated, although a tornado does not subsequently materialize. On the other end of the scenario spectrum might be a direct hit to the facility of interest by an F4 tornado that completely destroys the building and causes human casualties. Of course, other scenarios can be constructed to represent tornado events that fall in between these two extremities.

Economic Policy Responses

The COVID-19 outbreak emerged in Wuhan, China in December of 2019 and still persists globally. By the end of March 2020, the pandemic had spread to 199 countries and territories causing 777,798 cases and 37,272 deaths.¹ In addition to human suffering and loss of lives, the outbreak has generated a major global economic downturn. The world's largest economies (the G7 and China) are among those that have been most affected by the pandemic (Baldwin and Weder DiMauro 2020). To mitigate the negative effects of public health controls on the economy and to sustain public welfare, governments have adopted economic packages including fiscal, monetary, and financial policy measures (Gourinchas 2020). These economic measures targeting households, firms, health systems and banks vary across countries in breadth and scope (Weder di Mauro 2020).

Economic Policy Responses

The economic policy package database we created includes six policy variables classified under three categories: fiscal policy, monetary policy, and balance of payment/exchange rate policy.

- The fiscal policy package includes all the adopted fiscal measures and is coded as a percentage of GDP.
- The monetary policy category includes three variables: (1) interest rate cuts by the monetary policy authority (coded as a percentage of the ongoing rate on 1 February 2020); (2) the size of the macro-financial package (coded as a percentage of GDP); and (3) other monetary policy measures (coded as a dummy variable taking the value of 1 if there are such measures and 0 otherwise).
- Finally, the balance of payment (BoP) and exchange rate policy category includes two variables. The first reports specific BoP measures coded as a percentage of GDP, while the second is a dummy variable taking the value of 1 if there are other reported measures and 0 otherwise.

Coronavirus & FinTech

As the COVID-19 pandemic continues to create uncertainty, many fintech companies (“fintechs”) are under stress on a number of fronts. Access to funding was already becoming difficult, especially for some early-stage ventures, as many investors focused on established fintechs with clear business models. In addition, recent interest rate cuts and the economic slowdown have radically changed many industry assumptions.

Yet as the broader economy shifts from respond to recover, COVID-19 may create new opportunities for some fintechs. For example, as social distancing has taken hold worldwide, there has been tremendous growth in the use of digital financial services and e-commerce.

How fintechs are meeting the COVID-19 challenge

The most immediate concern, of course, is managing through the current uncertainty. Many fintechs, like the rest of the financial system, have gone into overdrive to respond to the crisis. Many, including insurtech and proptech companies, are shoring up their capital and funding from investors and lenders. Others have implemented cost-saving measures, including workforce reduction. Because revenues for many of them are transaction and volume based, a priority strategy right now is making sure that as many expenses as possible are variable and fixed expenses are minimized. Current market conditions and social distancing practices have also affected proptechs' business growth, and many of those investing in real estate are being forced to pause their activities until it is clear that they will be able to sell the properties. Other proptechs, to retain their customers, are offering discounts and attractive retention offers.

Source: <https://www2.deloitte.com/us/en/pages/financial-services/articles/beyond-covid-19-new-opportunities-for-fintech-companies.html>

Coronavirus: FinTech Incumbents & Tech

Big Finance

- Volumes: Capital Markets, Government Debt
- Stimulus Loan Programs
- Allocations for Loan Loss Reserves
- Reliance on Connectivity

Big Tech

- Significant Online Growth
- Possible Shifts in Views on Data Usage - Contact Tracing

Coronavirus: FinTech Startups

1. Runway: Burn Rates, Cash, Revenue Model & Adoption Rates
2. IPOs on Hold
3. VC Investment will Slow
4. Valuations Decline
5. Consolidation Increases
6. Sector Matters:
 - Transaction fees & Consumer Credit?
 - Retail, Travel, Events, Restaurants?
 - Mobile Trading, Remittances, Compliance

Coronavirus: FinTech

1. Additional Opportunities

- Serving Those Tapping Fiscal Stimulus & Loan Programs
- Consumer & SME Refinancing's & Consolidation Loans
- New uses & sources of Alternative Data

2. Additional Challenges

- Delinquencies & Defaults
- Loan Servicing
- Business Models relying on Float

References

1. "8 top Fintech VCs discuss COVID-19 trends, signals and opportunities" TechCrunch
2. <https://cleartax.in/g/terms/financial-crisis>
3. 'Fintech firms race to plug gaps in UK's coronavirus relief measures' CNBC
4. '7 VCs look into the future of Fintech' TechCrunch
5. <https://www.oxfordeconomics.com/coronavirus>
6. <https://www.worldbank.org/en/news/feature/2020/06/08/the-global-economic-outlook-during-the-covid-19-pandemic-a-changed-world>
7. <https://academic.oup.com/raps/article/10/4/742/5873533>
8. https://www.memphis.edu/ifti/pdfs/cait_risk_scenario_identification.pdf
9. <https://voxeu.org/article/economic-policy-responses-pandemic-covid-19-economic-stimulus-index>
10. <https://www2.deloitte.com/us/en/pages/financial-services/articles/beyond-covid-19-new-opportunities-for-fintech-companies.html>