



Point of View

Economy – Markets – Investment Strategy

April 2nd, 2020 – Stimulus Package

Important Information

The views and opinions expressed are those of the speaker, Fritz Meyer and are subject to change based on factors such as market and economic conditions. These views and opinions are not an offer to buy a particular security and should not be relied upon as investment advice. Past performance cannot guarantee comparable future results.

Important Information

Performance quoted is past performance and cannot guarantee comparable future results; current performance may be higher or lower.

Results shown assume the reinvestment of dividends.

An investment cannot be made directly in an index.

Investments with higher return potential carry greater risk for loss.

Investing in small companies involves greater risks not associated with investing in more established companies, such as business risk, significant stock price fluctuations and illiquidity.

Foreign securities have additional risks, including exchange rate changes, political and economic upheaval, the relative lack of information about these companies, relatively low market liquidity and the potential lack of strict financial and accounting controls and standards.

Investing in emerging markets involves greater risk than investing in more established markets such as risks relating to the relatively smaller size and lesser liquidity of these markets, high inflation rates, adverse political developments and lack of timely information.

Fluctuations in the price of gold and precious metals often dramatically affect the profitability of the companies in the gold and precious metals sector. Changes in political or economic climate for the two largest gold producers, South Africa and the former Soviet Union, may have a direct effect on the price of gold worldwide.

Fritz Meyer



Fritz Meyer, economist and market commentator, publishes periodic updates and opinion on the economy, markets and investment strategy. He has been a frequent guest on CNBC, Bloomberg TV and Fox Business Network, he has often been quoted in financial and business publications and he regularly speaks to financial advisors and their clients.

Prior to starting his own firm in 2011, Mr. Meyer spent 15 years with Invesco and began his investment career in 1976. He was Invesco's Senior Market Strategist, and has managed large-cap equity mutual funds and multi-cap equity and fixed-income client portfolios.

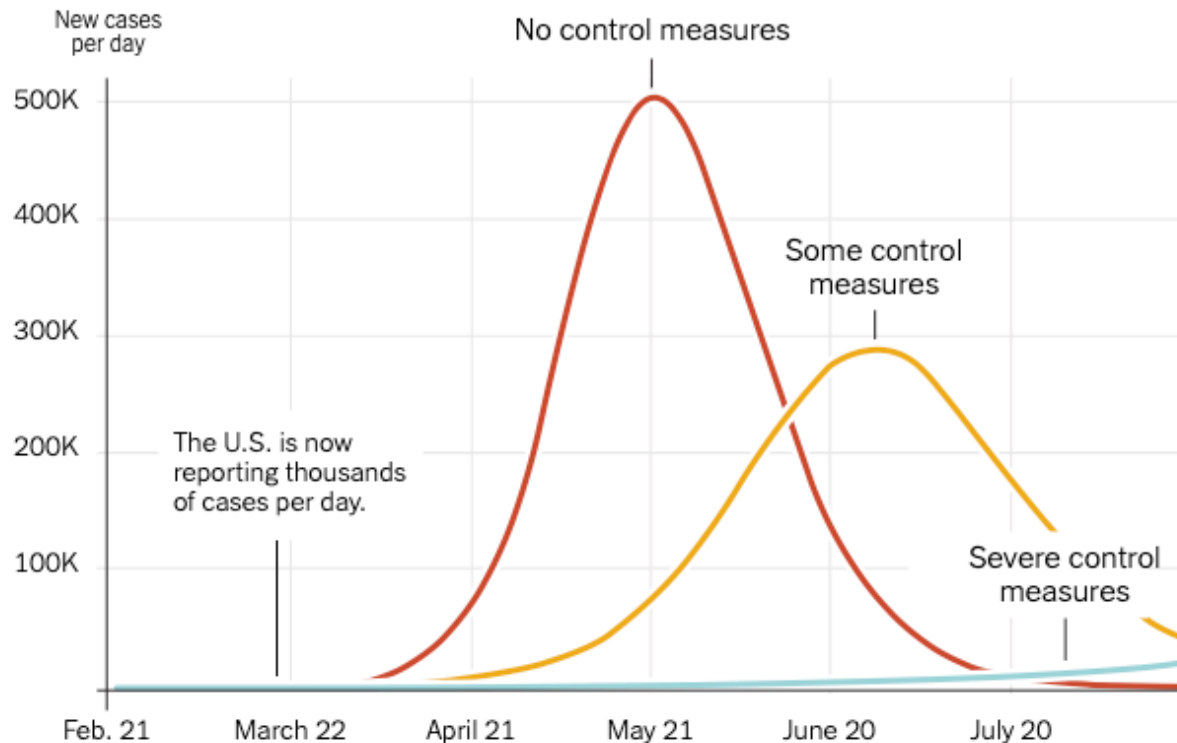
Mr. Meyer earned his A.B. degree from Dartmouth College with a distinction in economics and his Master of Business Administration degree from the Amos Tuck School at Dartmouth College.

- Coronavirus
- CARES Act
- Stock market
- GDP forecasts
- Earnings
- Valuation
- Fed policy
- Federal deficits and debt
- MPT

Coronavirus Could Overwhelm U.S. Without Urgent Action, Estimates Say

By James Glanz, Lauren Leatherby, Matthew Bloch, Mitch Smith, Larry Buchanan, Jin Wu and
Nicholas Bogel-Burroughs March 20, 2020

How Control Measures Could Slow the Outbreak

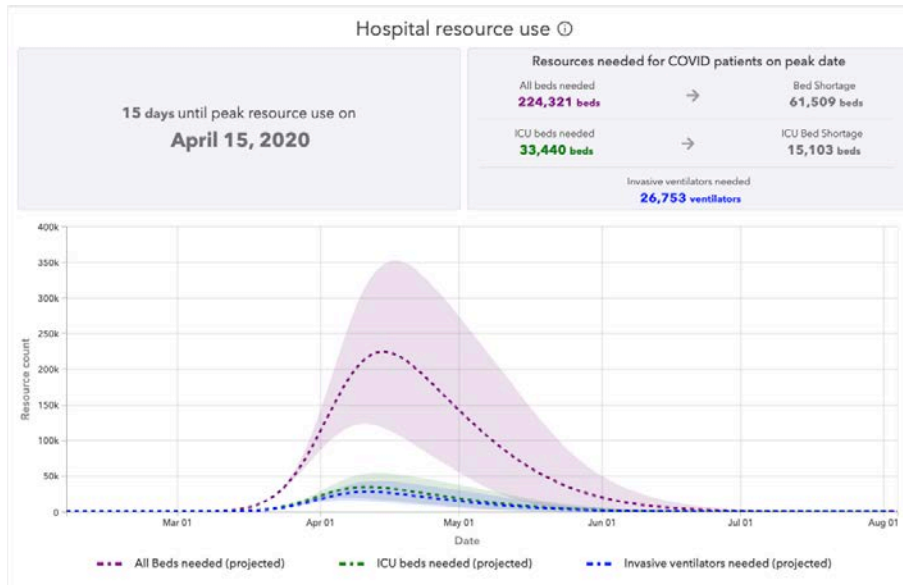


Cases peak late-June.

By The New York Times • Source: Sen Pei and Jeffrey Shaman, Columbia University

Point of View

Covid-19 timeline – latest study



Deaths peak mid-April.



Discussion

This study has generated the first set of estimates of predicted health service utilization and deaths due to COVID-19 by day for the next 4 months for all US states, assuming that social distancing efforts will continue throughout the epidemic.

Source: Institute for Health Metrics and Evaluation (IHME) at the University of Washington. *Forecasting COVID-19 impact on hospital bed-days, ICU-days, ventilator-days and deaths by US state in the next 4 months.* March 26, 2020.
Funding sources: Bill and Melinda Gates Foundation and the State of Washington.

Studies Peg Weather As Factor in Infections

By ROBERT LEE HOTZ

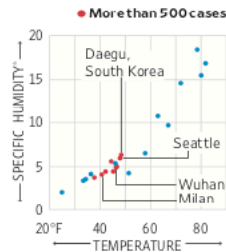
As Covid-19 circles the globe, the most severe outbreaks so far clustered in areas of cool, dry seasonal weather, according to four independent research groups in the U.S., Australia and China that analyzed how temperature and humidity affect the coronavirus that causes the disease.

If their conclusions are borne out, sweltering summer months ahead might offer a lull in new cases across the heavily populated temperate regions of the Northern Hemisphere, they said.

Even so, several of the scientists predicted that the disease would surge again in the fall, when cooler temperatures and low humidity again favor survival and transmission of the SARS-CoV-2 coronavirus responsible for the illness.

The four studies—which the

Cities with low temperatures and humidity had the severest coronavirus outbreaks.



^aIn grams of water vapor per kilogram of air.
Note: Temperatures and humidity averages 20–50 days before first death of community-spread case.
Source: Institute of Human Virology, University of Maryland.

research teams themselves posted this month on open-access servers to share the data more quickly—suggest that Covid-19, if unchecked by med-

ical controls, could take its place in a calendar of seasonal epidemics that range from malaria, measles and meningitis to tuberculosis and whooping cough.

“We should prepare for annual or sporadic outbreaks every few years,” said Stephen Kissler, a biomathematician at the Harvard T.H. Chan School of Public Health. He was the lead scientist on a team that developed computer simulations to study scenarios of how the epidemic might spread over the next five years.

These studies rely on data gathered during the epidemic’s first six weeks or so. They are preliminary and haven’t yet been peer-reviewed.

Public-health experts at the World Health Organization and the U.S. Centers for Disease Control and Prevention, who weren’t involved in the studies, say it is too soon to



A beach in Galveston, Texas. Studies suggest the summer could bring a lull in new coronavirus cases.

draw conclusions about seasonal behavior of the new coronavirus. While many coronaviruses such as those that cause the common cold are seasonal, medical experts say there isn’t enough evidence to conclude that Covid-19 will go away this summer.

“We don’t know with the Covid-19 virus how it will behave in the warmer weather,” said Andy Pekosz, a microbiologist at the Johns Hopkins

University Bloomberg School of Public Health who wasn’t involved in the studies.

Many diseases follow the seasons. Influenza outbreaks occur each winter. Chickenpox typically peaks in the spring. Polio historically was a scourge of summer. No one is exactly sure why. However, when a new virus first appears among people who have no immunity to it, it may be years before the contagion settles

into a predictable pattern, several scientists said.

“First you get the one big pandemic wave, and then it will start to settle in,” said infectious-disease ecologist Micaela Martinez at Columbia University’s Mailman School of Public Health. “Even if we get a seasonal decline [this summer] in the transmission rate, it could get swamped because there are so many susceptible people.”

Trump Sparks Run on Two Drugs

BY JOE PARKINSON
AND DAVID GAUTHIER-VILLARS

Health officials across the world are issuing warnings over the use of antimalarial drugs after President Trump's comments about treating the coronavirus with them sparked panic-buying and overdoses.

In recent days, thousands of consumers across Africa and South Asia rushed to stockpile chloroquine and hydroxychloroquine, drugs that are usually used to combat malaria, vacuuming up supplies in cities in the developing world, sending prices skyrocketing and prompting panicked warnings from local authorities.

In the U.S. and some other developed countries, meantime, some doctors have started to prescribe the drugs against the coronavirus, sparking heated ethical debates because their efficacy has yet to be demonstrated in full-scale clinical studies.

At issue, health officials said, is how to reconcile the pace of rigorous scientific research with the exponential spread of the infection.

"There is no known dosage for Covid-19 and whether it can actually cure it, it's safer to avoid chloroquine," said Dr. Chris Kaganda, a Ugandan public-health expert, referring to the respiratory disease caused by the coronavirus. "But you know these are desperate times."

Nigeria's government on Saturday said three people had been hospitalized after overdosing on chloroquine, while pharmacies in Lagos, the continent's largest city at 20 million people, reported running out of supplies.

Similar panic-buying scenes took place in Uganda, Ghana, Kenya and Morocco. Chloroquine has also sold out in pharmacies across Pakistan, those looking for the drug said.

Chloroquine-based drugs are common in Africa, which accounts for 92% of malaria cases in the world. The drugs can be bought over the counter without prescription and are also used to treat lupus



Employees at a factory in Nantong, China, work on a production line that makes chloroquine phosphate.

and rheumatoid arthritis.

President Trump said at a White House briefing last week that he told the Food and Drug Administration to expedite the study and use of the "very powerful" drug chloroquine to treat coronavirus. The president doubled down on Saturday, posting on his Twitter feed that hydroxychloroquine and the antibiotic azithromycin "taken together" could be "one of the biggest game-changers in the history of medicine" and urged them to be deployed "IMMEDIATELY."

Mr. Trump's claims immediately began trending on social media across Africa. In Nigeria, which has reported 22 cases of the virus, the stockpiling and hospitalizations forced health officials to warn citizens against self-medicating with the drug. The country's Centre for Disease Control said the World Health Organization hasn't approved use of the drug against the virus.

Antimalarial drugs chloro-

quine phosphate and hydroxychloroquine have both shown early signs of improving symptoms of some patients diagnosed with Covid-19, based on reports by doctors and researchers in South Korea, France and China.

In France, interest in antimalarial drugs surged last week after a French professor released a study showing that 100% of patients infected by coronavirus and treated with a combination of hydroxychloroquine and the azithromycin antibiotic were cured after six days. The proportion of cured patients was 70% for those treated only with hydroxychloroquine and 12.5% for those who received no treatment, the study showed.

Although the study had a very limited scope—it encompassed only 30 patients—French Prof. Didier Raoult said he opted to publish the findings because of the urgent need for an effective drug against coronavirus.

Inserm, a research institute

affiliated with the French health ministry, on Sunday said it had added hydroxychloroquine to a list of experimental treatments it will test as part of a broader European study.

But while experts have warned that there is no scientific evidence yet that the drug is effective against the virus, some doctors say they can't wait for the results of clinical studies.

In the U.S., hospital orders for chloroquine were up 3,000% from March 1 to 17 compared with typical demand, according to Premier Inc., one of the largest group-purchasing organizations in the U.S. for drugs and other hospital supplies. During that same period, hydroxychloroquine orders were up 260% compared with typical demand.

Chloroquine, approved for Americans in the 1940s, and hydroxychloroquine, greenlighted the next decade, are also prescribed for patients with lupus and rheumatoid arthritis.

Hydroxychloroquine and
Zithromax.

Coronavirus Aid, Relief, and Economic Security Act (CARES)

March 27, 2020

“In weeks, it will send direct payments of \$1,200 to individuals earning up to \$75,000, with smaller payments to those with incomes of up to \$99,000 and an additional \$500 per child. It will substantially expand jobless aid, providing an additional 13 weeks and a four-month enhancement of benefits—including an extra \$600 per week—and extend it to freelancers and gig workers. The package also suspends all federal student loan payments for six months through September, and the loans will not accrue interest during that period.”

“For companies struggling under the strain of the crisis, the measure will provide \$377 billion in federally guaranteed loans to small businesses and establish a \$500 billion government lending program for distressed companies, including allowing the administration the ability to take equity stakes in airlines that received aid to help compensate taxpayers. It also sends \$100 billion to hospitals on the front lines of the pandemic.”¹

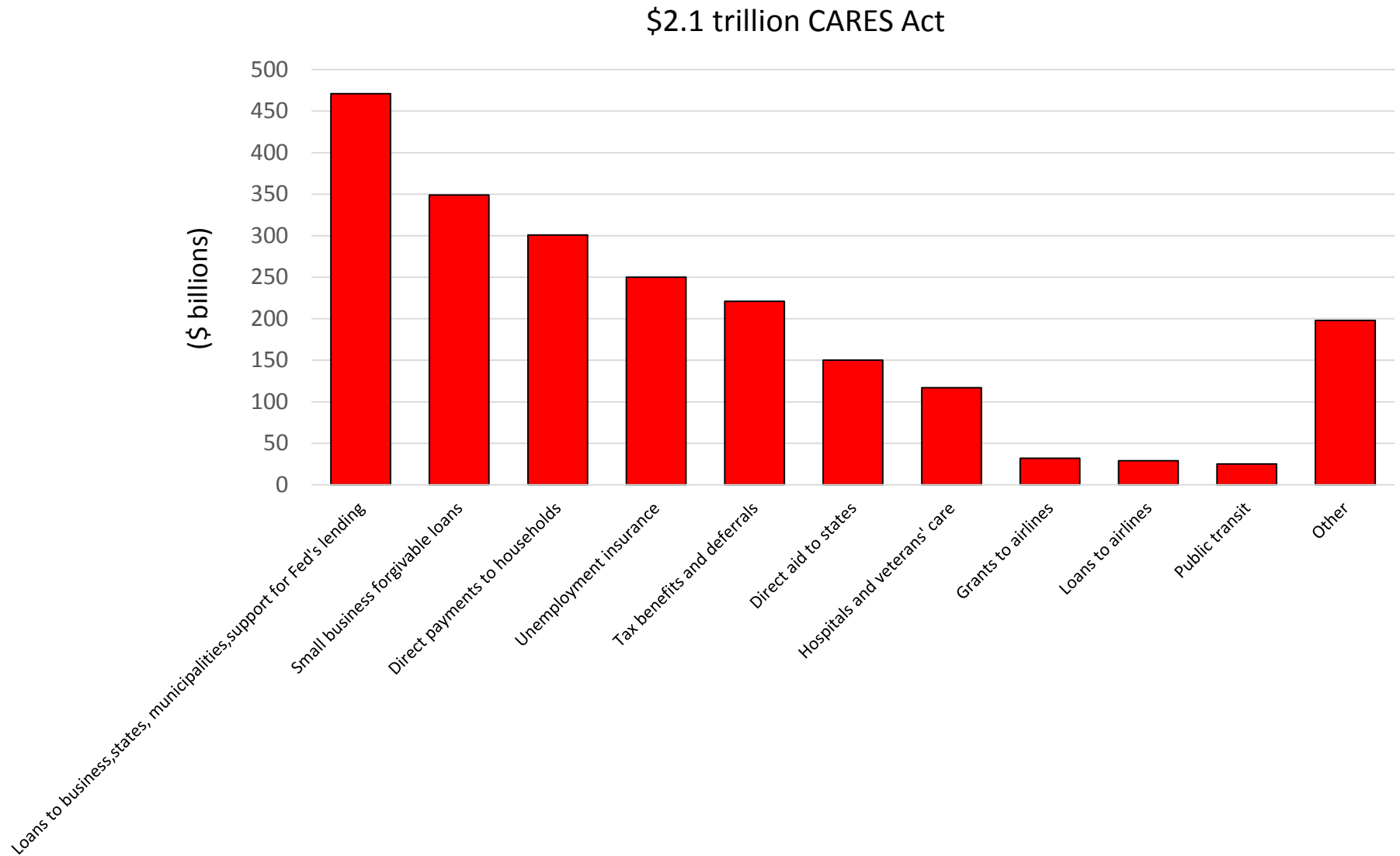
“The epicenter of the intervention will be the Treasury Department, where Secretary Steven Mnuchin will oversee nearly a third of the \$2 trillion in economic relief funds that Congress is approving.”

“The money will be held in two pots: \$350 billion will be devoted to loans and loan guarantees for small businesses. And \$500 billion will be divided among airlines and companies that are critical to national security ... and will prop up the Federal Reserve’s new emergency lending facilities, which are intended to inject nearly \$4 trillion into the economy.”²

¹The New York Times, March 27, 2020. ²The New York Times, March 26, 2017.

Point of View

Covid-19 relief



Source: *The Wall Street Journal*, March 28, 2020.

How Fast the Economy Crashed— And Washington Responded

The Fed and Congress sped up the response to the coronavirus pandemic using strategies tested a decade ago in the financial crisis

BY JACOB M. SCHLESINGER
AND HANNA SENDER

There are similarities between the financial crisis of 2008 and the coronavirus pandemic of 2020. A sudden, jarring breakdown in the economy and markets, followed by a massive response from policy makers to try to prevent a 21st-

century Great Depression.

One big difference: speed. Washington has this time done in weeks what took a year and a half back then.

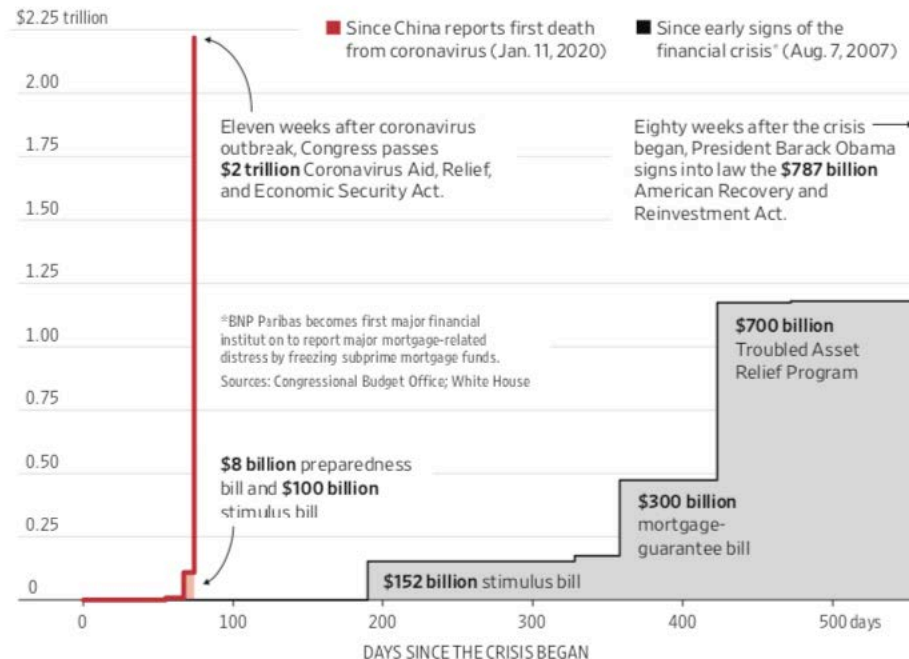
The first signs of the financial crisis emerged in August 2007, when securities backed by subprime mortgages plunged. Congress and the White House ultimately allocated about

\$2 trillion to subdue the disaster. The final big piece wasn't enacted until February 2009.

This year, Congress has in March alone passed three laws throwing about the same amount of money at the problem, barely two months after the first officially reported coronavirus death in China.

Quick government response compared to 2008-2009 financial crisis.

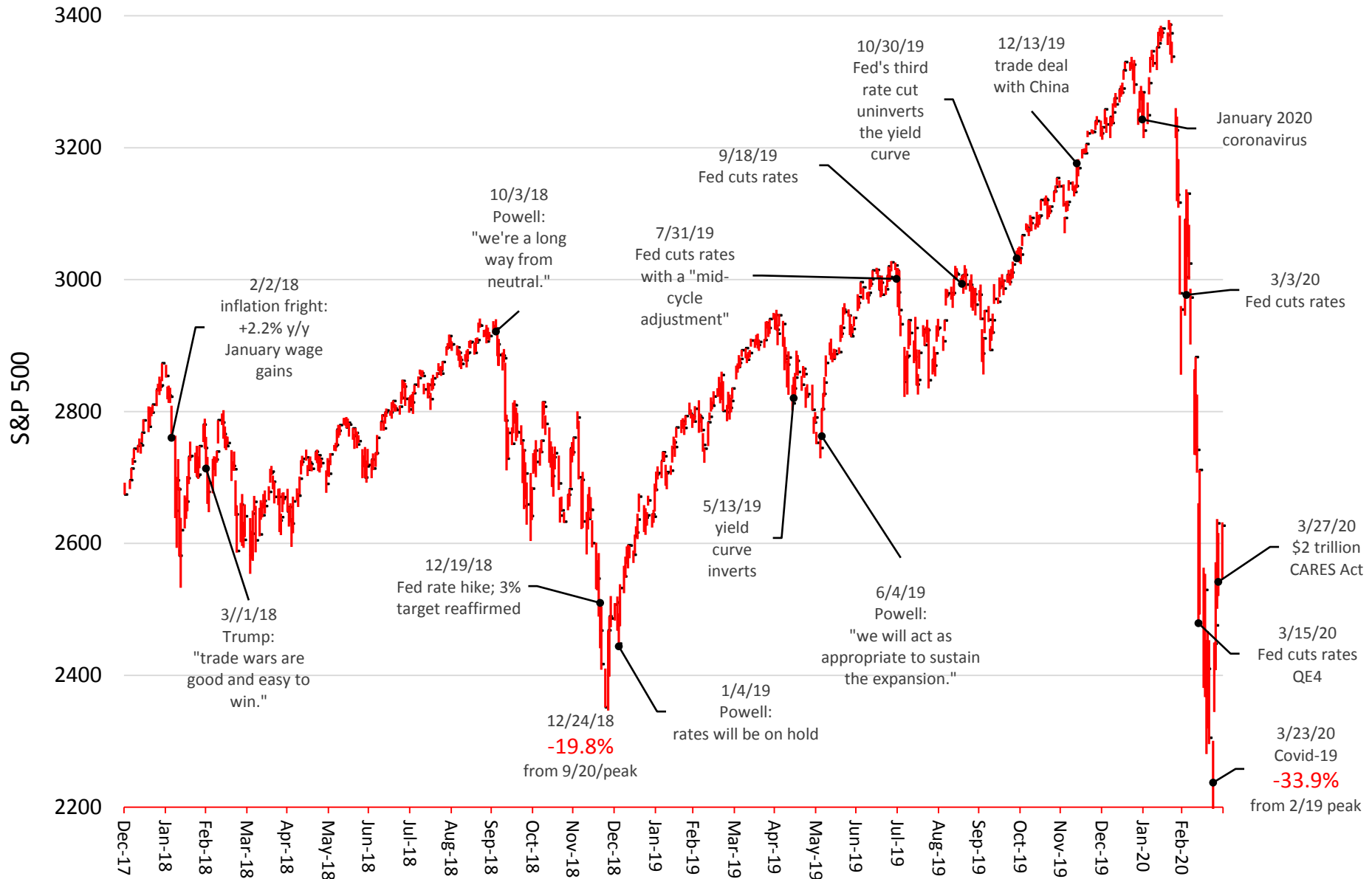
Total funds authorized by Congress



Source: *The Wall Street Journal*,
March 28, 2020.

Stock market

S&P 500 – coronavirus bear



Source: Standard & Poor's. Data through January March 30, 2020.

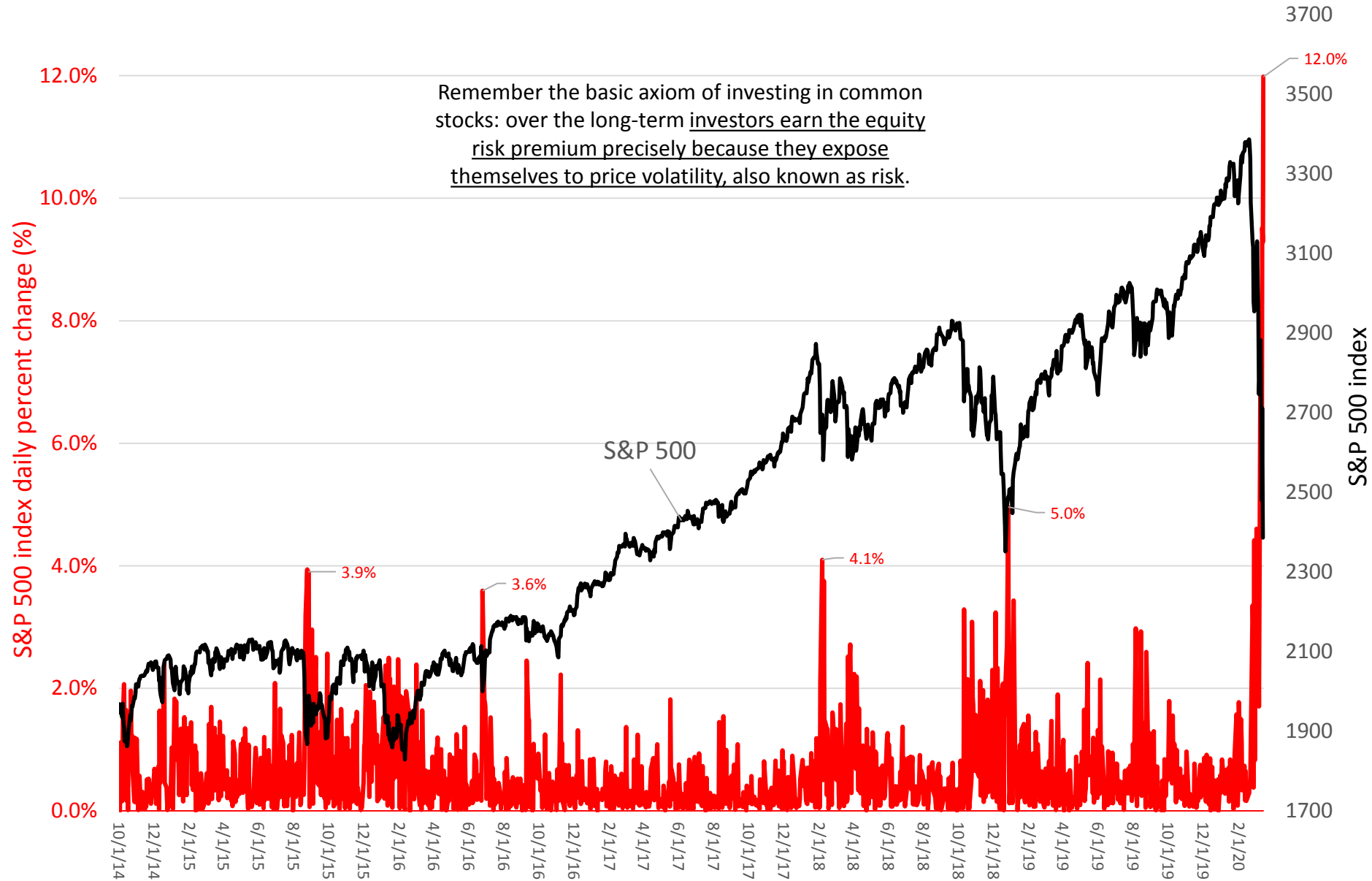
Stock market

S&P 500 and EAFE – coronavirus bear



Foreign markets faring worse than U.S.

Stock market S&P 500 volatility



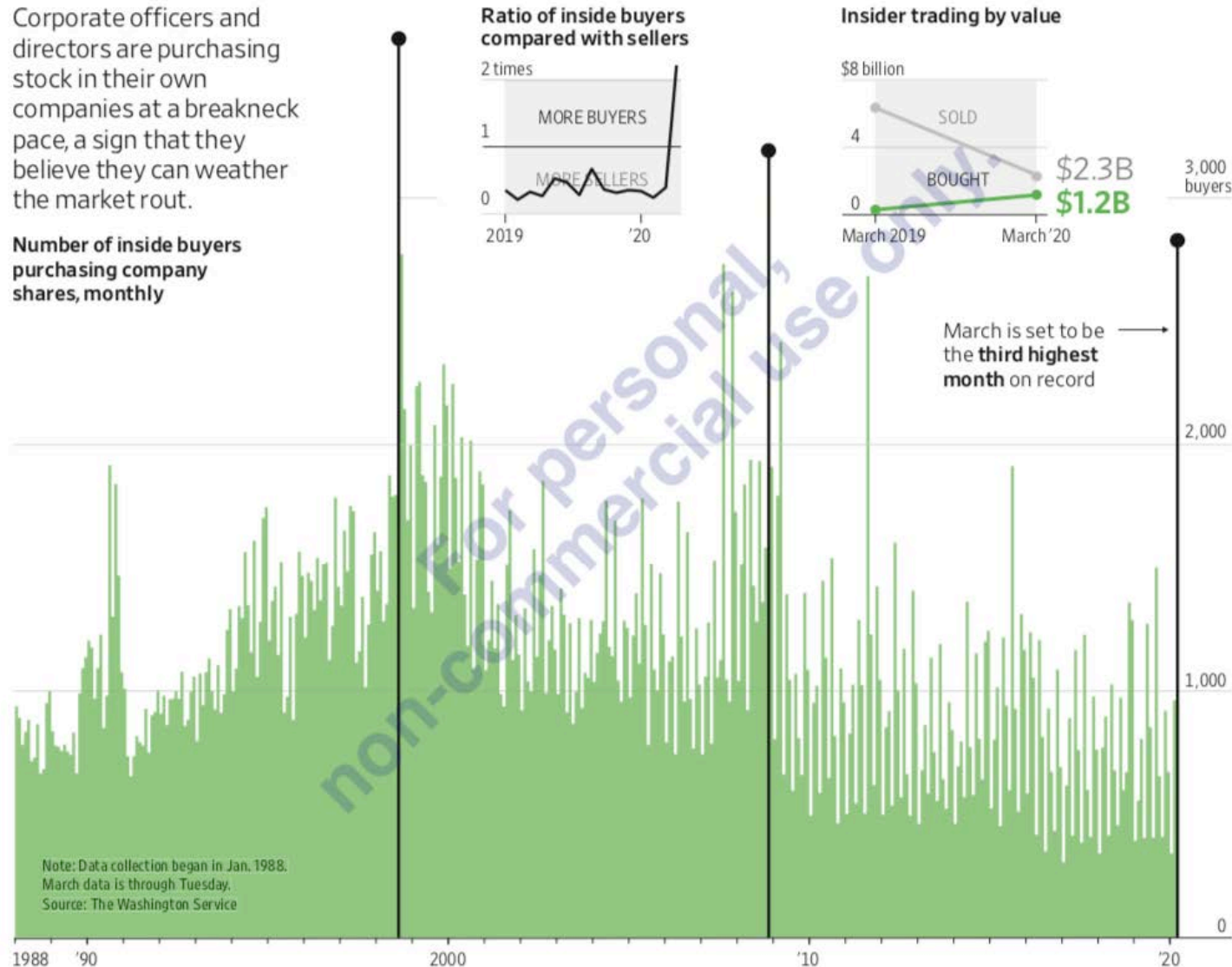
Source: Standard & Poor's. data through March 16, 2020.

Stock market

Insider buying

Corporate officers and directors are purchasing stock in their own companies at a breakneck pace, a sign that they believe they can weather the market rout.

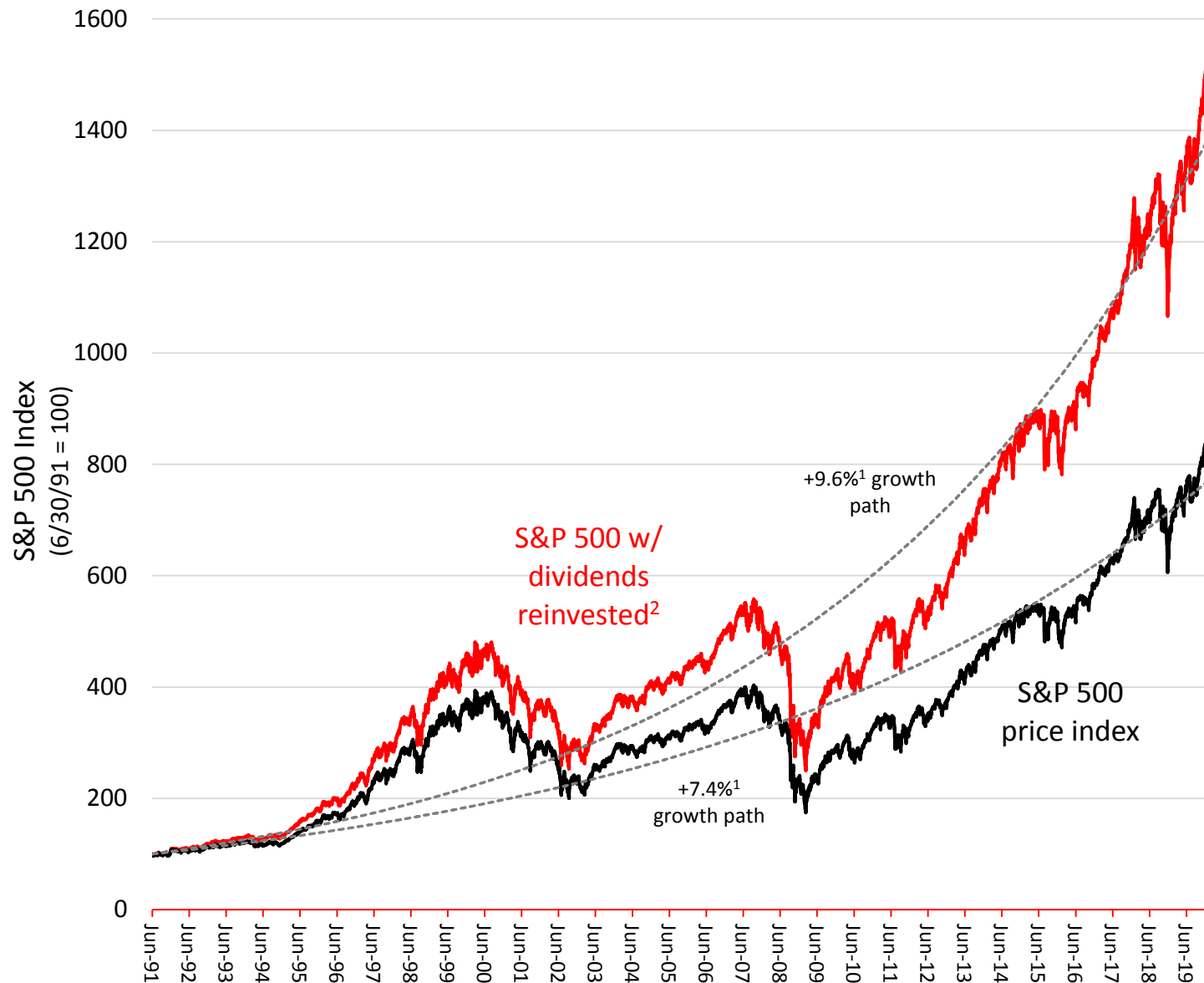
Number of inside buyers purchasing company shares, monthly



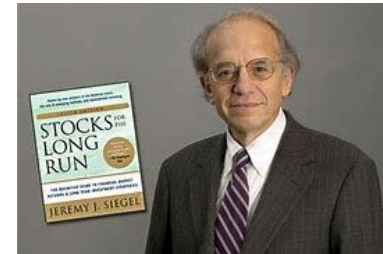
Third highest insider buying on record.

Stock market arithmetic

Total return = 7.4% earnings-driven price + 2.2% dividends reinvested



+9.6% per year S&P 500 total return over the last 28 years is in line with the stock market's long-term returns going back to 1926, or back even further to 1871.³



Source: Standard and Poor's. Data through March 30, 2020.¹ Compound annual growth rate. ² S&P 500 total return index.

³ per Professor Jeremy Siegel's seminal *Stocks for the Long Run*, first published in 1994.

Stock market arithmetic

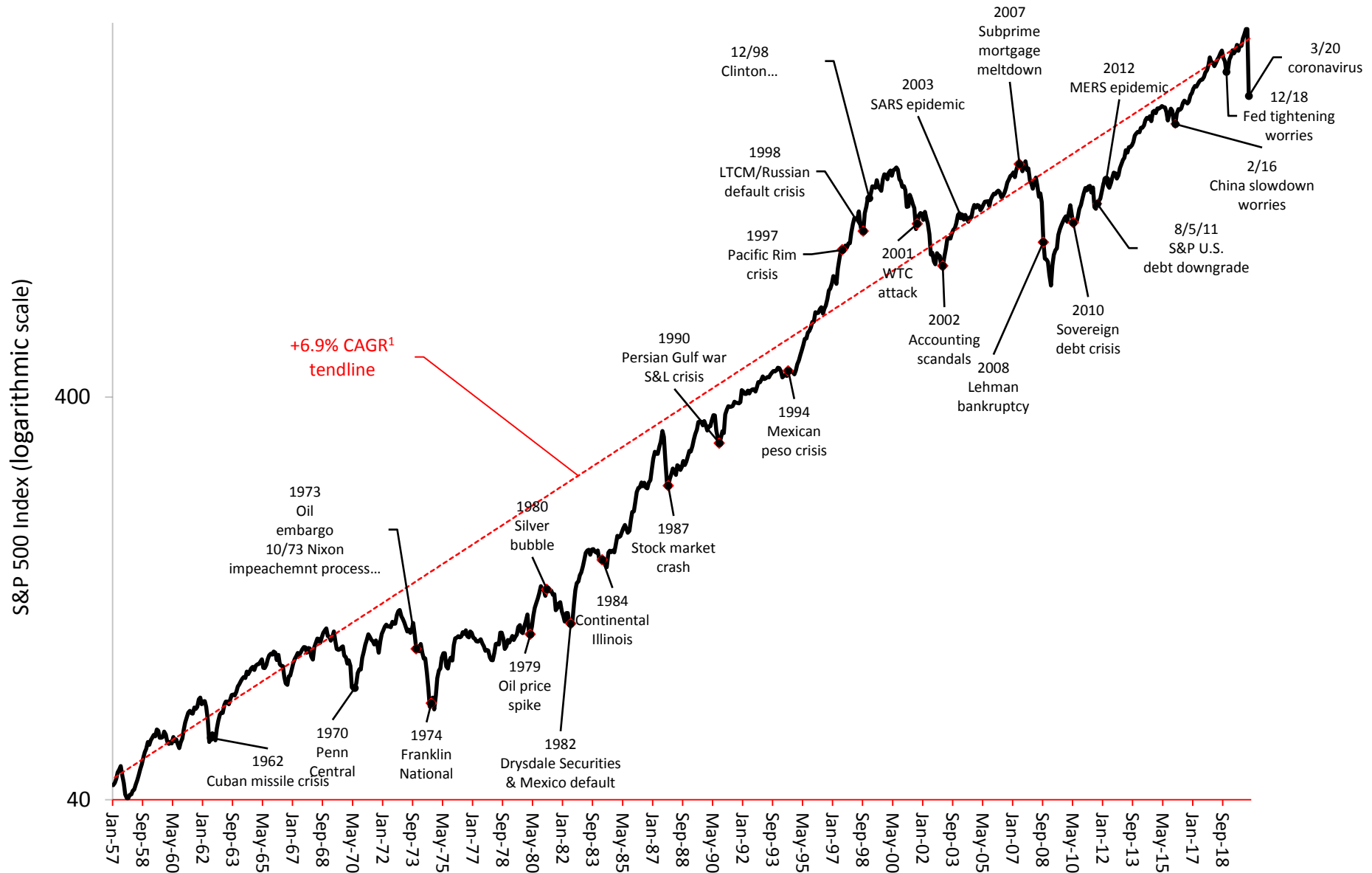
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Stock market

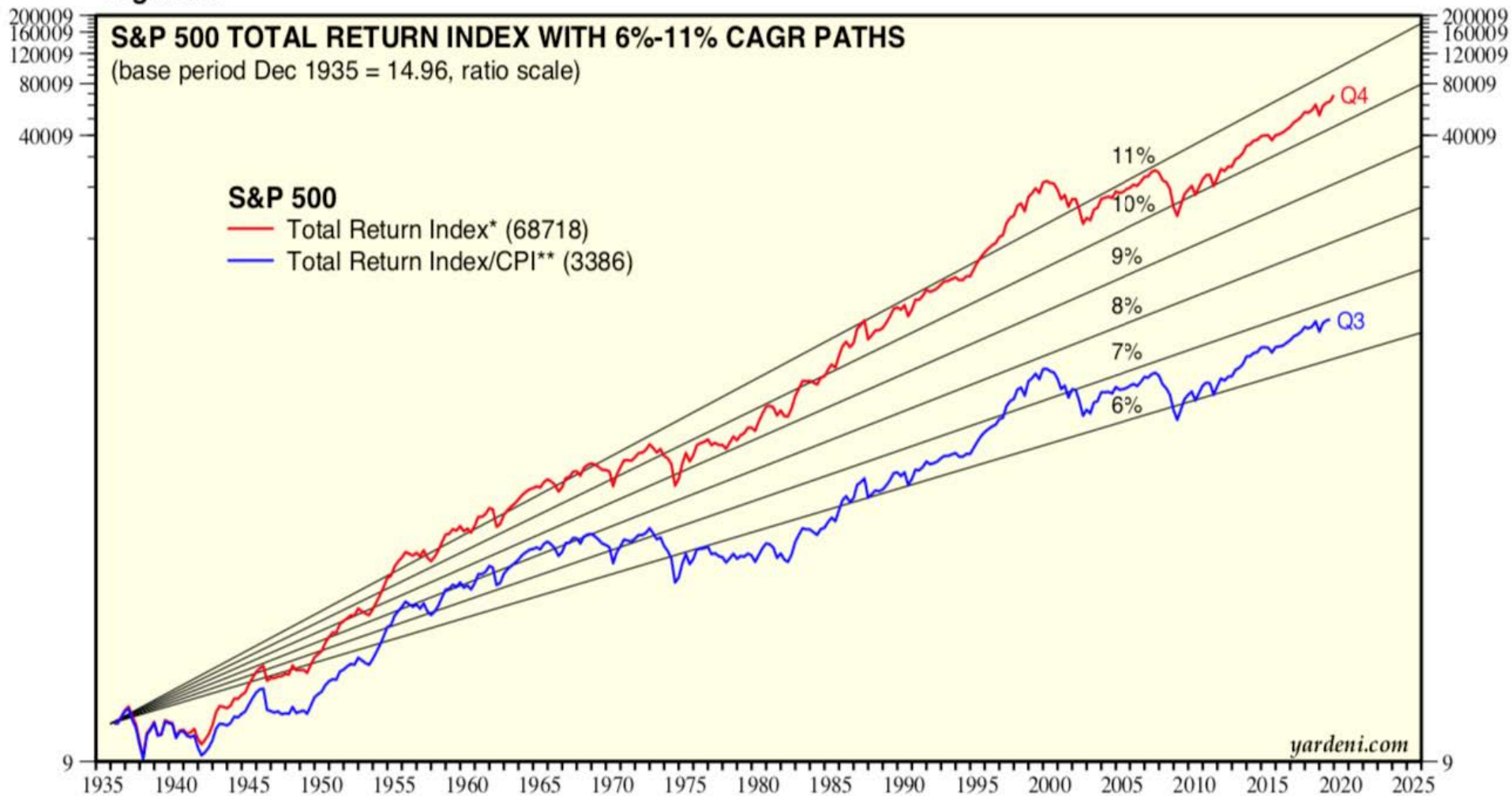
S&P 500 and crises



Source: Standard and Poor's. Data through March 23, 2020. ¹ Compound annual growth rate.

Total return and real total return

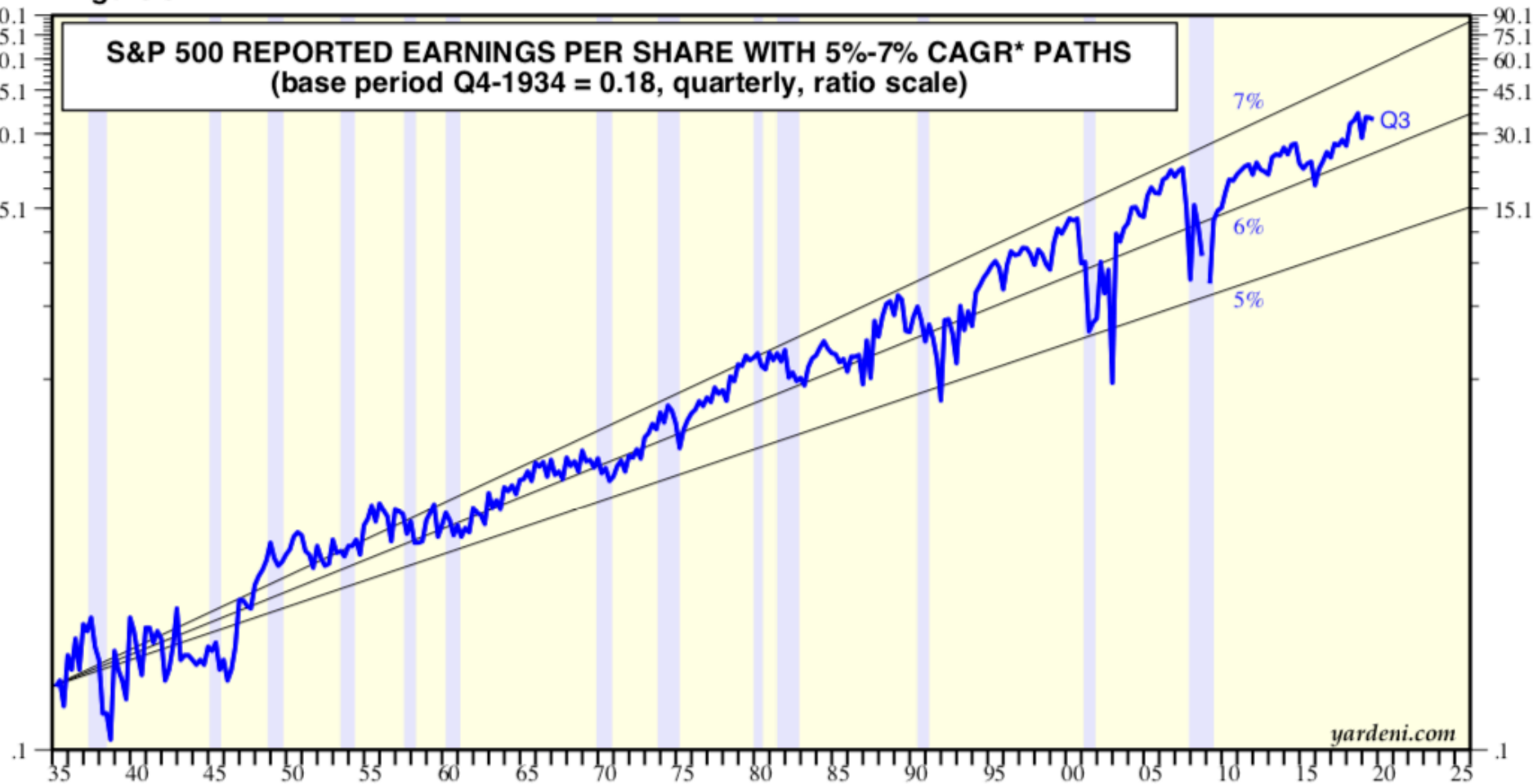
Figure 2.



Stock market arithmetic

84 years of S&P 500 earnings growth

Figure 9.



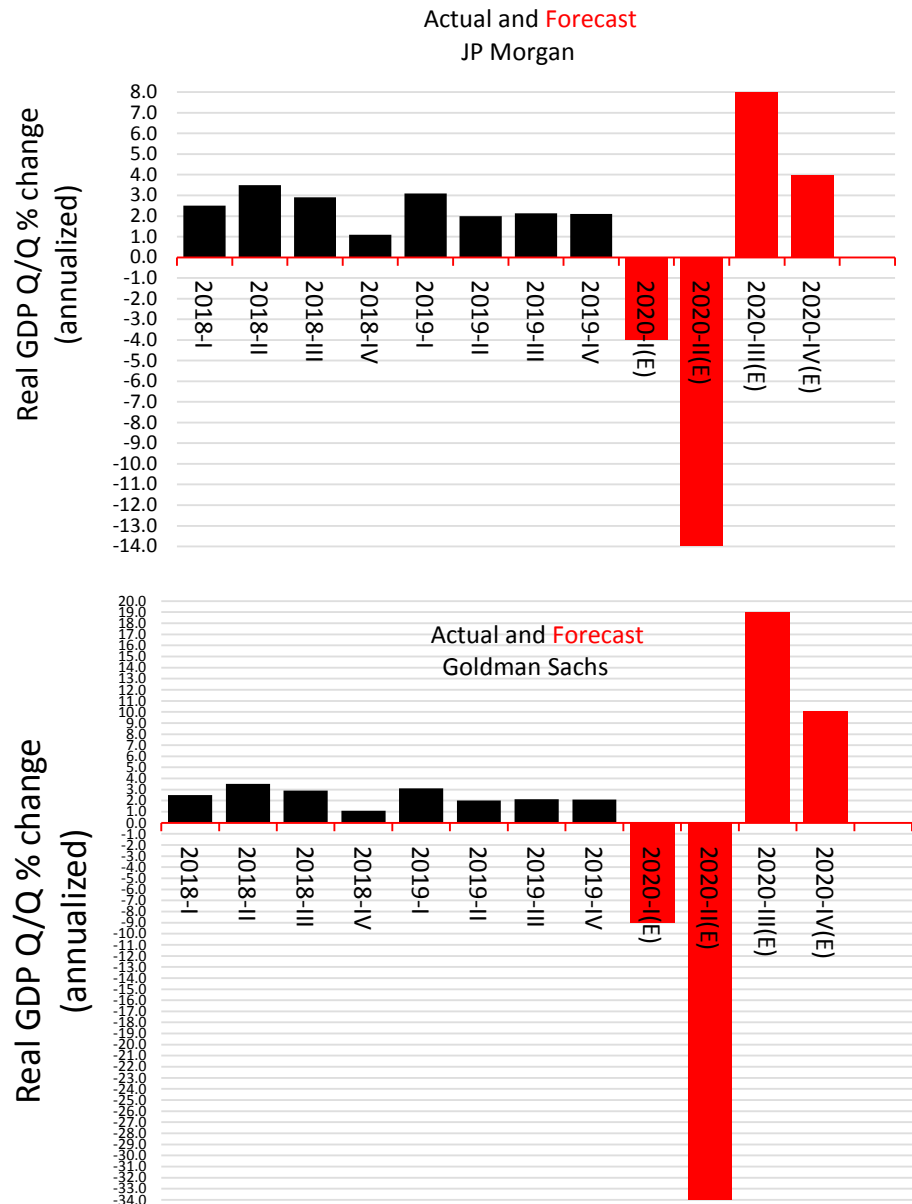
* Compounded annual growth rate from base value using monthly data. Q4-2008 not shown because of large negative value.
Note: Shaded areas denote recessions according to the National Bureau of Economic Research.
Source: Standard & Poor's.

GDP forecast

Sharp but quick recession in the forecast

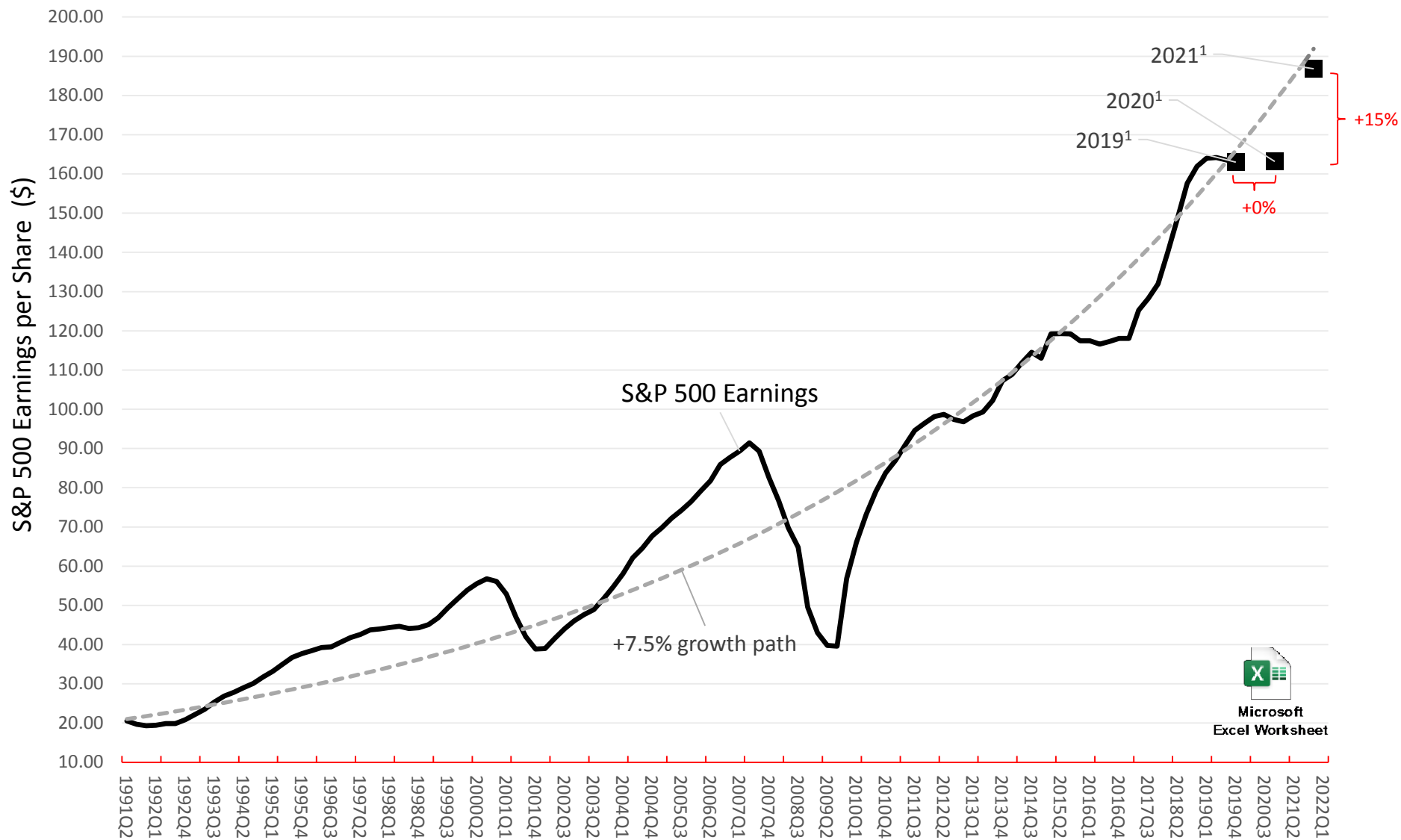
JP Morgan forecast published March 20, 2020. Goldman Sachs forecast published March 31, 2020.

China's virus case load flattened about three months after major government intervention to curtail social interaction, with devastating effects on economic growth. If the U.S. follows the same path, the initial shock to the economy could begin to wane by May.



Stock market arithmetic

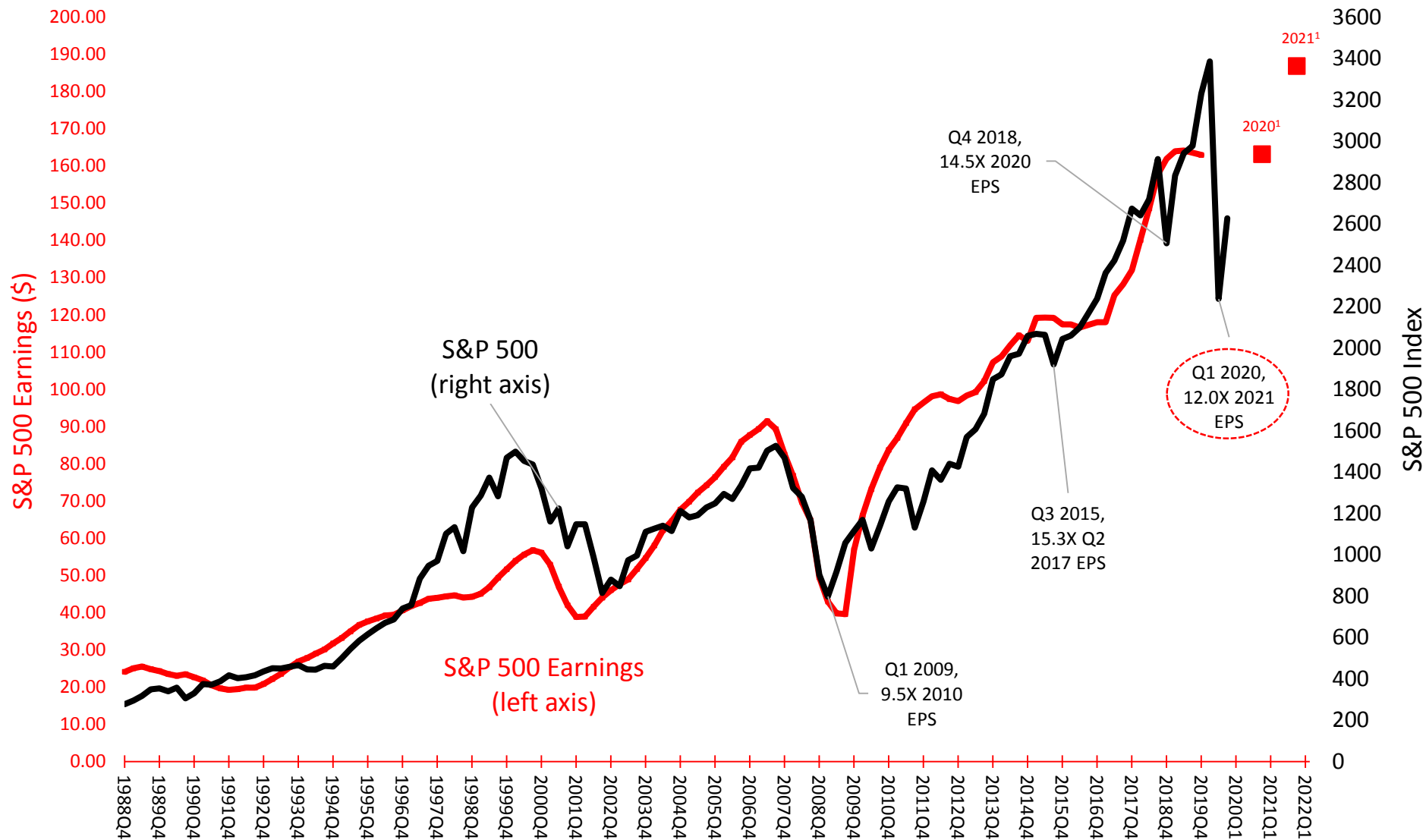
+7.5% earnings growth has driven +7.9% stock price gains



¹ 2019 (actual), 2020 (estimated) and 2021 (estimated) bottom-up S&P 500 operating earnings per share as of March 30, 2020: for 2019(a), \$162.97; for 2020(e), \$163.19; for 2021(e), \$186.83. Sources: Yardeni Research, Inc. and Thomson Reuters I/B/E/S for actual and estimated operating earnings from 2015. Standard and Poor's for actual operating earnings data through 2014.

Valuation

S&P 500 vs. actual and estimated earnings

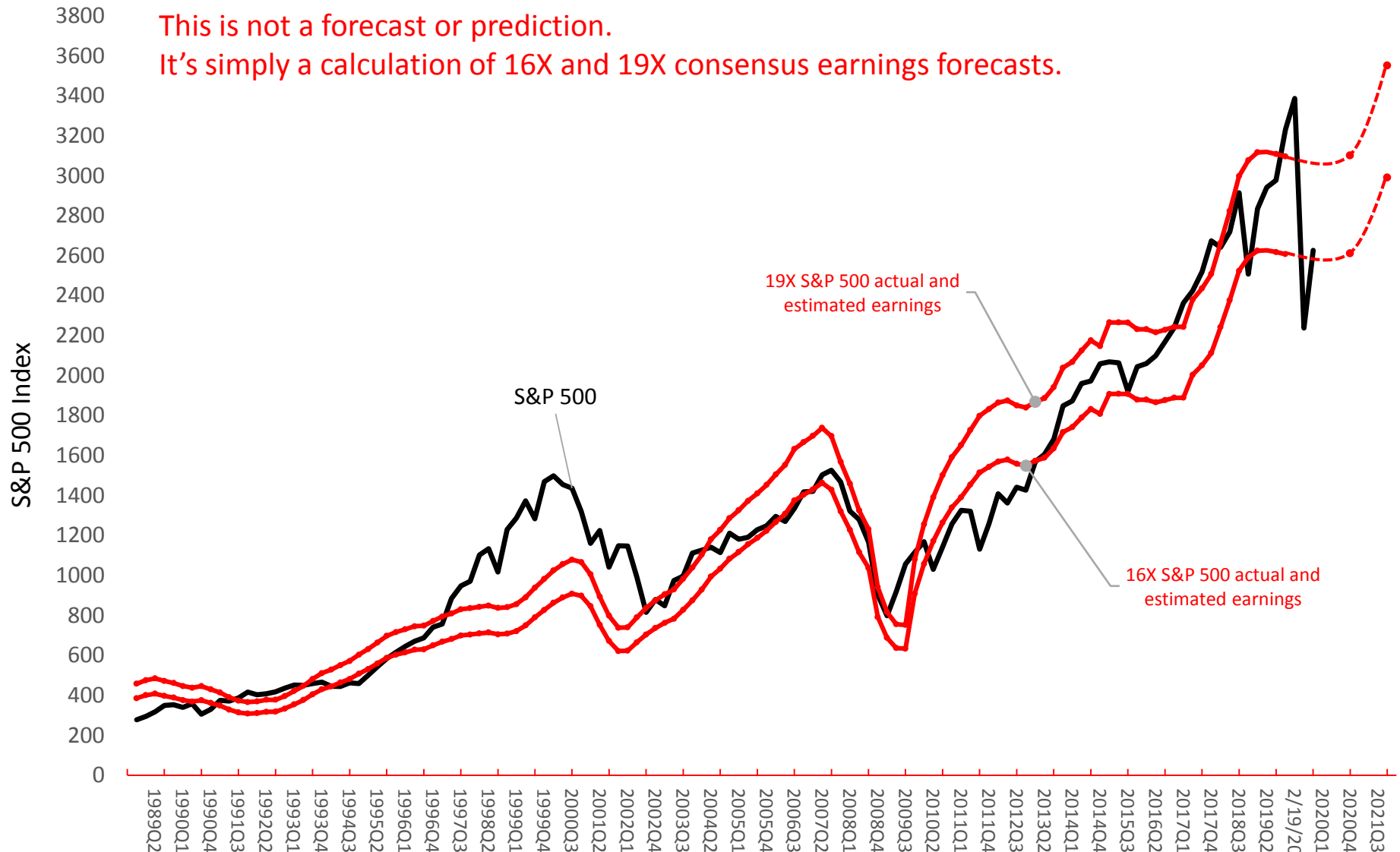


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S&P 500 vs. 16X and 19X actual and estimated earnings

This is not a forecast or prediction.

It's simply a calculation of 16X and 19X consensus earnings forecasts.



2019 (actual), 2020 (estimated) and 2021 (estimated) bottom-up S&P 500 operating earnings per share as of March 30, 2020: for 2019(a), \$162.97; for 2020(e), \$163.19; for 2021(e), \$186.83. Sources: Yardeni Research, Inc. and Thomson Reuters I/B/E/S for actual and estimated operating earnings from 2015. Standard and Poor's for actual operating earnings data through 2014; and stock index prices data through March 27, 2020.

Fed policy

- first coronavirus rate cut 3/3
- \$1.5 trillion repo loans offered 3/12
- coronavirus cut Sunday 3/15
- 6 liquidity programs announced 3/23
- the Phillips Curve is broken
- the Fed's inflation forecasts have consistently been too high
- inflation expectations trending lower for past 15 years
- the Fed manages the yield curve
- the Fed has created every recession since the 1950s
- “the Great Unwinding” – bond yields were supposed to start rising, but they aren't

March 23rd actions – 6 programs

March 23, 2020

Federal Reserve announces extensive new measures to support the economy

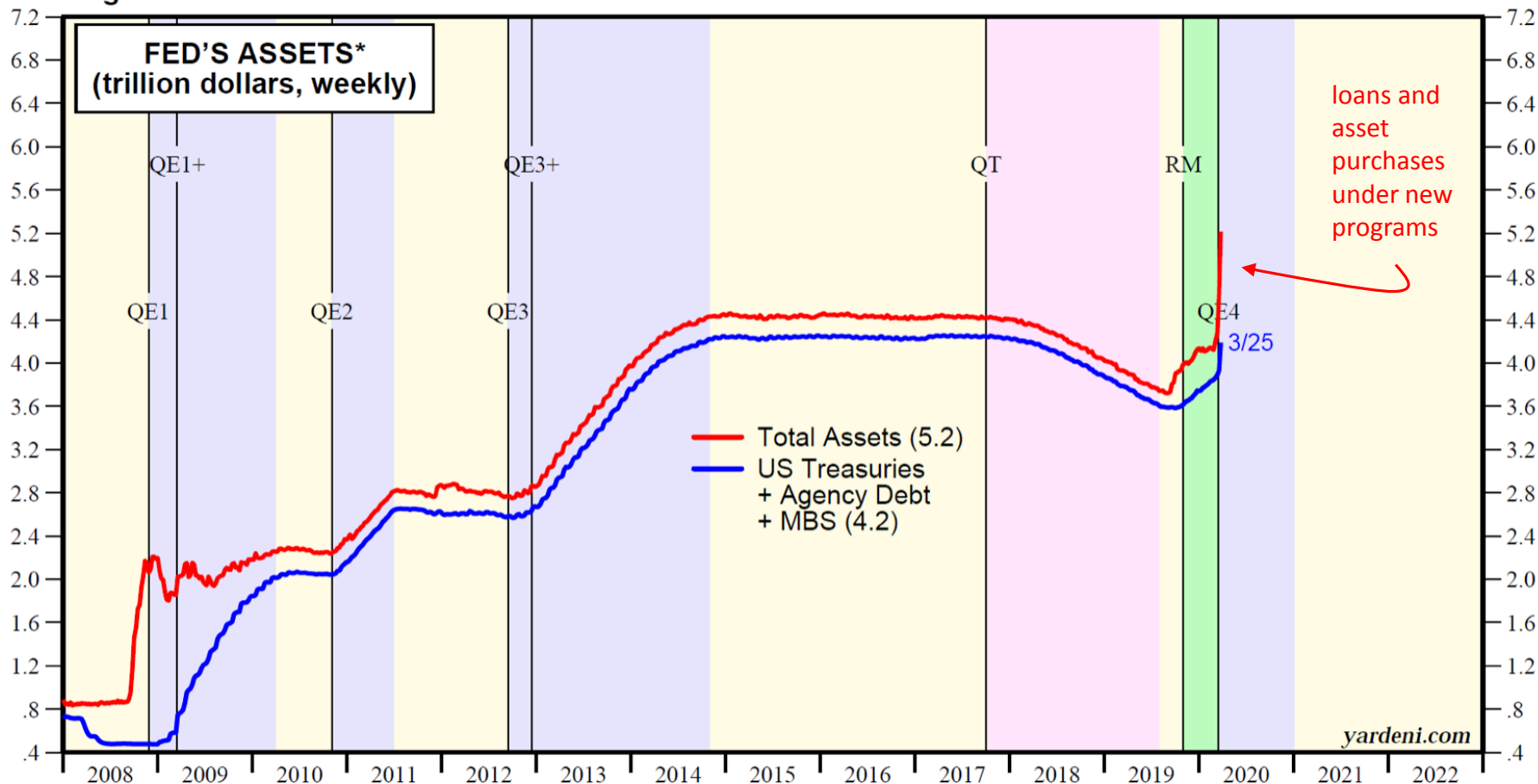
... In support of these goals, the Federal Reserve is using its full range of authorities to provide powerful support for the flow of credit to American families and businesses. These actions include:

- Support for critical market functioning. The Federal Open Market Committee (FOMC) will purchase Treasury securities and agency mortgage-backed securities in the amounts needed to support smooth market functioning and effective transmission of monetary policy to broader financial conditions and the economy. The FOMC had previously announced it would purchase at least \$500 billion of Treasury securities and at least \$200 billion of mortgage-backed securities. In addition, the FOMC will include purchases of agency commercial mortgage-backed securities in its agency-backed security purchases. [This is QE4.]
- Supporting the flow of credit to employers, consumers, and businesses by establishing new programs that, taken together, will provide up to \$300 billion in new financing. The Department of the Treasury, using the Exchange Stabilization Fund (ESF), will provide \$30 billion in equity to these facilities.
- Establishment of two facilities to support credit to large employers – the Primary Market Corporate Credit Facility (PMCCF) for new bond and loan issuance and the Secondary Market Corporate Credit Facility (SMCCF) to provide liquidity for outstanding corporate bonds.
- Establishment of a third facility, the Term Asset-Backed Securities Loan Facility (TALF) to support the flow of credit to consumers and businesses. The TALF will enable the issuance of asset-backed securities (ABS) backed by student loans, auto loans, credit card loans, loans guaranteed by the Small Business Administration (SBA), and certain other assets.
- Facilitating the flow of credit to municipalities by expanding the Money Market Mutual Fund Liquidity Facility (MMLF) to include a wider range of securities, including municipal variable rate demand notes (VRDNs) and bank certificates of deposit.
- Facilitating the flow of credit to municipalities by expanding the Commercial Paper Funding Facility (CPFF) to include high-quality, tax-exempt commercial paper as eligible securities. In addition, the pricing of the facility has been reduced. In addition to the steps above, the Federal Reserve expects to announce soon the establishment of a Main Street Business Lending Program to support lending to eligible small-and-medium sized businesses, complementing efforts by the SBA.

Federal Reserve policy

Fed's balance sheet

Figure 8.



Note: QE1 (11/25/08-3/31/10) = \$1.24tn in mortgage securities; expanded (3/16/09-3/31/10) = \$300bn in Treasuries. QE2 (11/3/10-6/30/11) = \$600bn in Treasuries. QE3 (9/13/12-10/29/14) = \$40bn/month in mortgage securities (open ended); expanded (12/12/12-10/1/14) = \$45bn/month in Treasuries. QT (10/1/17-7/31/19) = balance sheet pared by \$675bn. RM (11/1/19-3/15/20) = reserve management, \$60bn/month in Treasury bills. QE4 (3/16/20-infinity).

* Fed data are averages of daily figures for weeks ending Wednesday. Source: Federal Reserve Board.



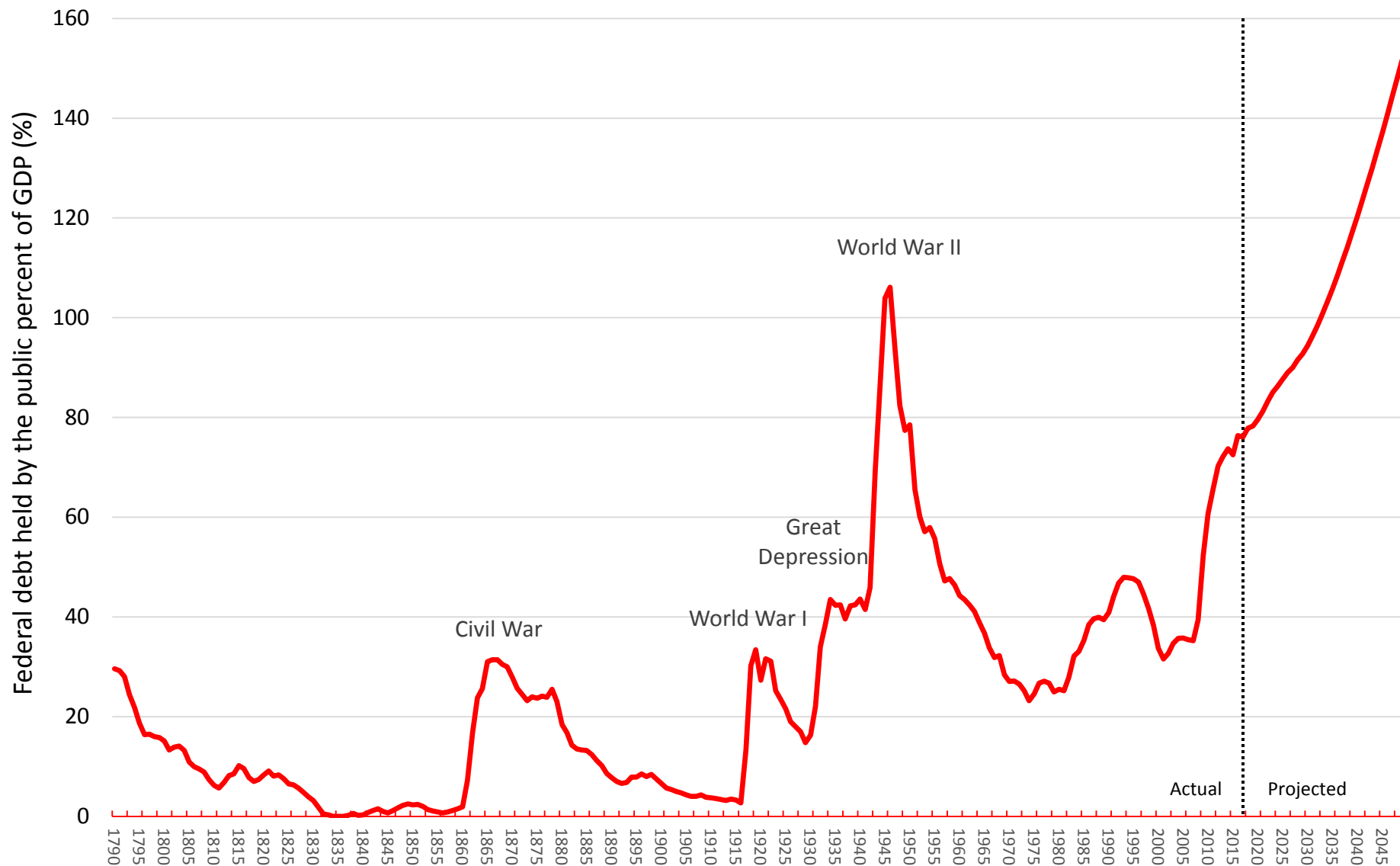
Missing from the president's State of the Union address was any mention of a looming threat: the growing national debt.¹

Federal budget

- CBO's January 2020 projections
- increasing deficits, rising debt
- Could we fix it?
- low U.S. tax burden allows flexibility to solve long-term entitlements problem

Federal deficit and debt

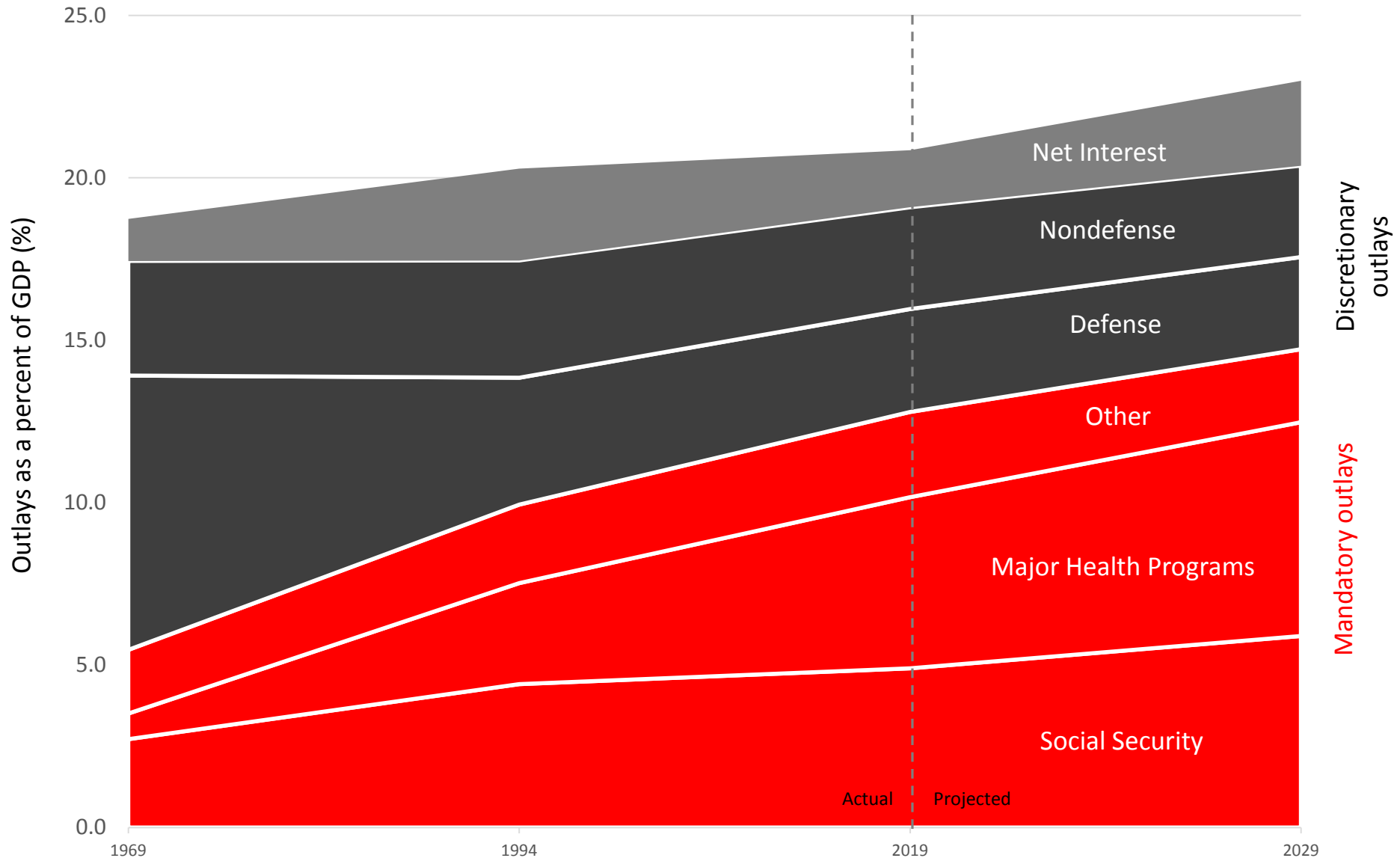
Federal debt % of GDP through 2049



Source: Congressional Budget Office, *The 2019 Long-Term Budget Outlook*, released June 2019. The extended baseline generally reflects current law, following CBO's 10-year baseline budget projections through 2029 and then extending most of the concepts underlying those baseline projections for the rest of the long-term period through 2049.

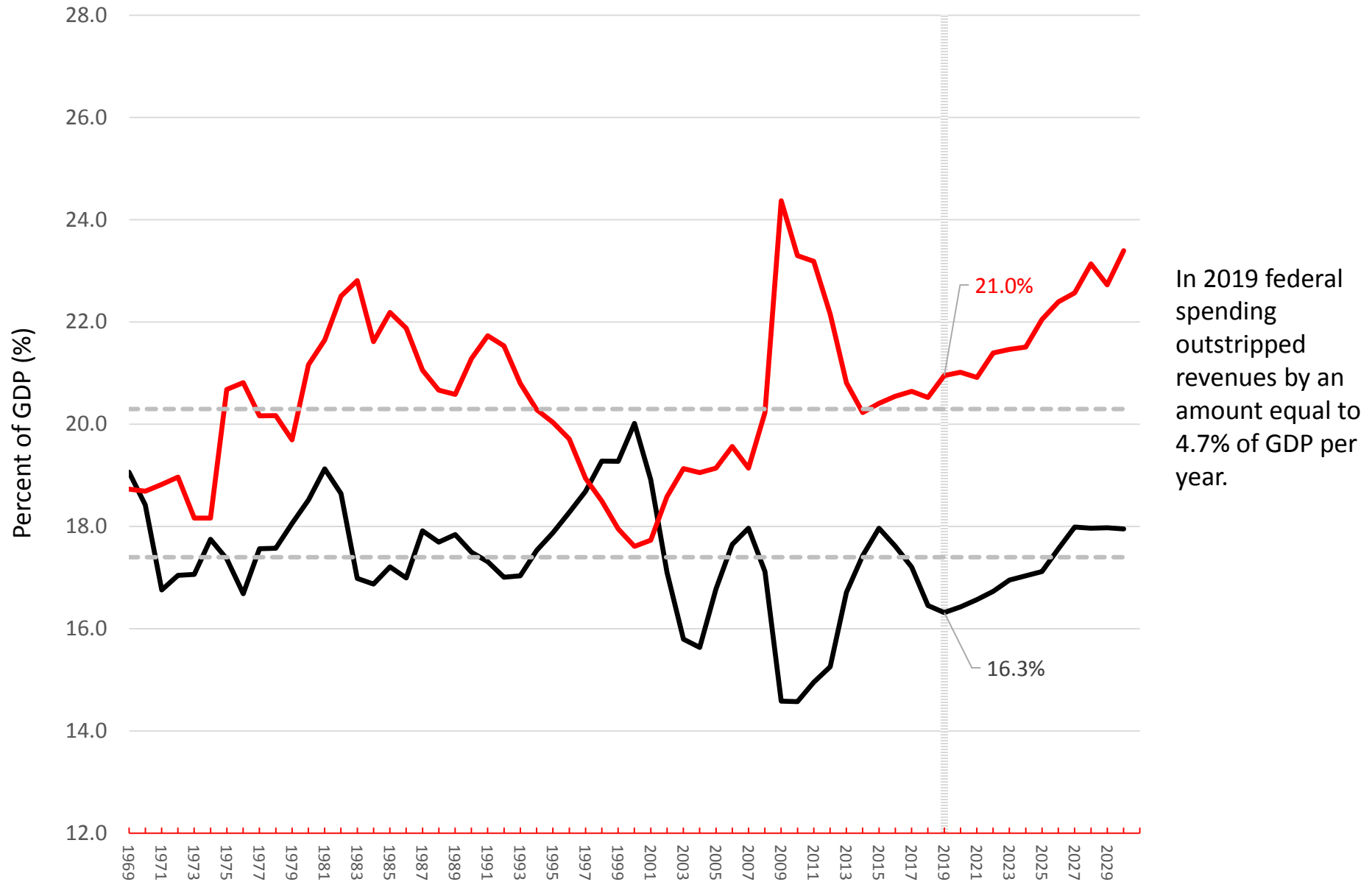
Federal deficit and debt

Federal outlays % of GDP



Source: Congressional Budget Office, *An Update to the Budget and Economic Outlook: 2019 to 2029*, released August 2019. Major health care programs consists of outlays for Medicare (net of premiums and other offsetting receipts), Medicaid, and the Children's Health Insurance Program, as well as outlays to subsidize health insurance purchased through the marketplaces established under the Affordable Care Act and related spending. CBO's interest rate forecasts have the fed funds rate rising gradually to 2.7% by 2029 and the 10-year Treasury bond yield rising to 3.2% by 2029.

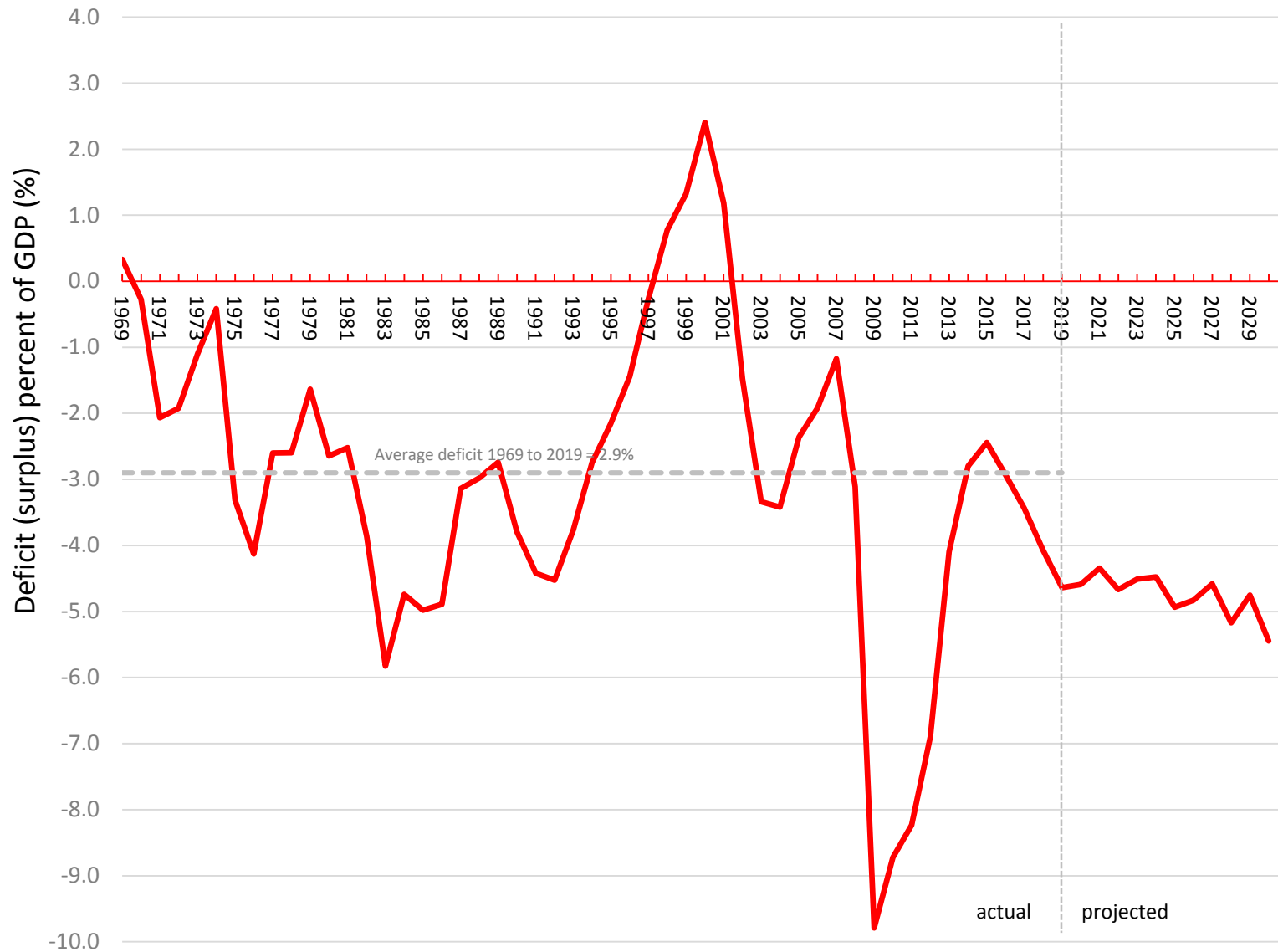
Federal revenues and outlays – budget deficit equal to 4.7% of GDP



In 2019 federal spending outstripped revenues by an amount equal to 4.7% of GDP per year.

Federal deficit and debt

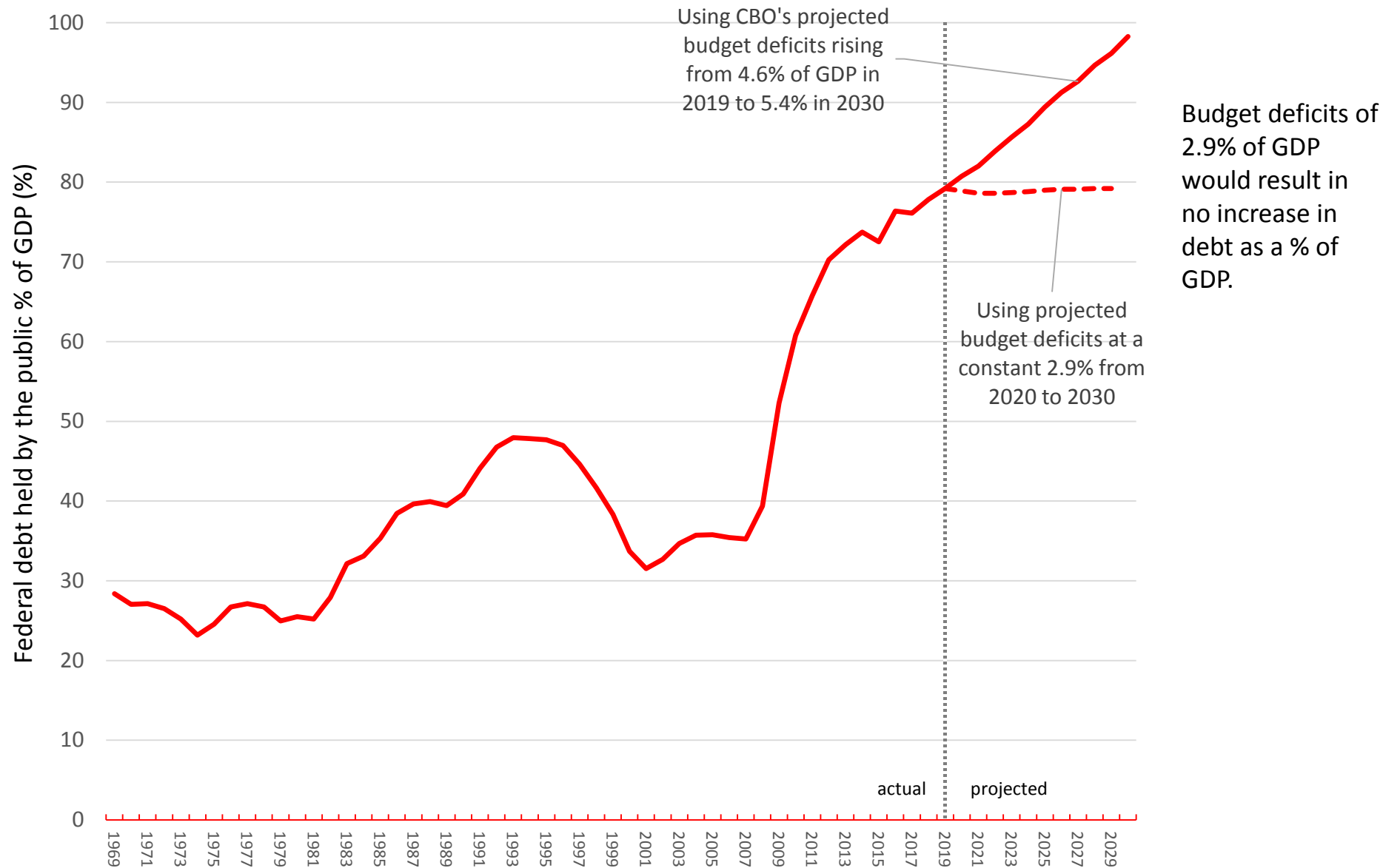
Federal deficit – equal to 4.0% of GDP



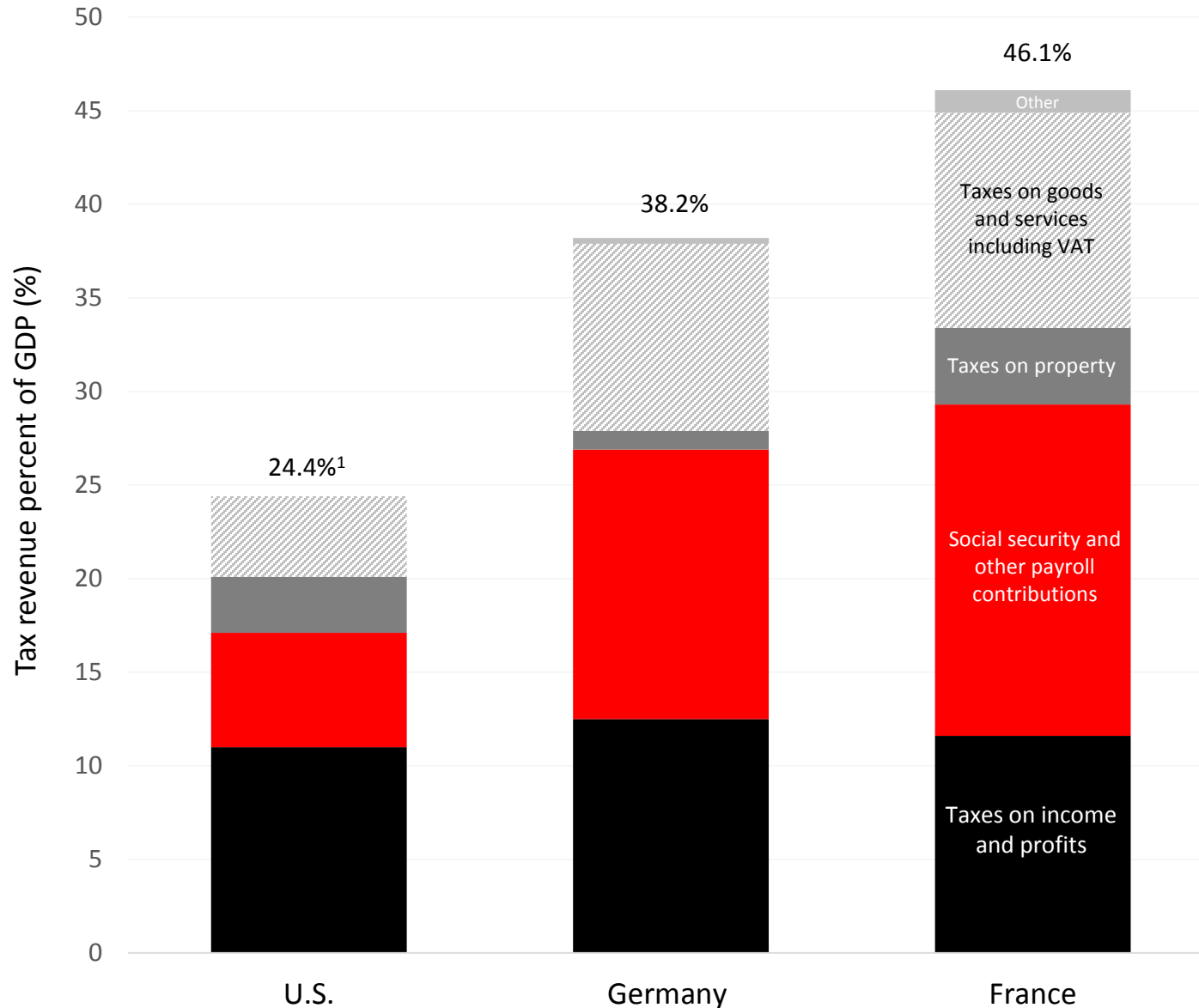
The deficit is projected to rise from 4.7% of GDP in 2019 (actual) to 5.4% of GDP in 2030.

Federal deficit and debt

What level of deficits would it take to hold debt constant?



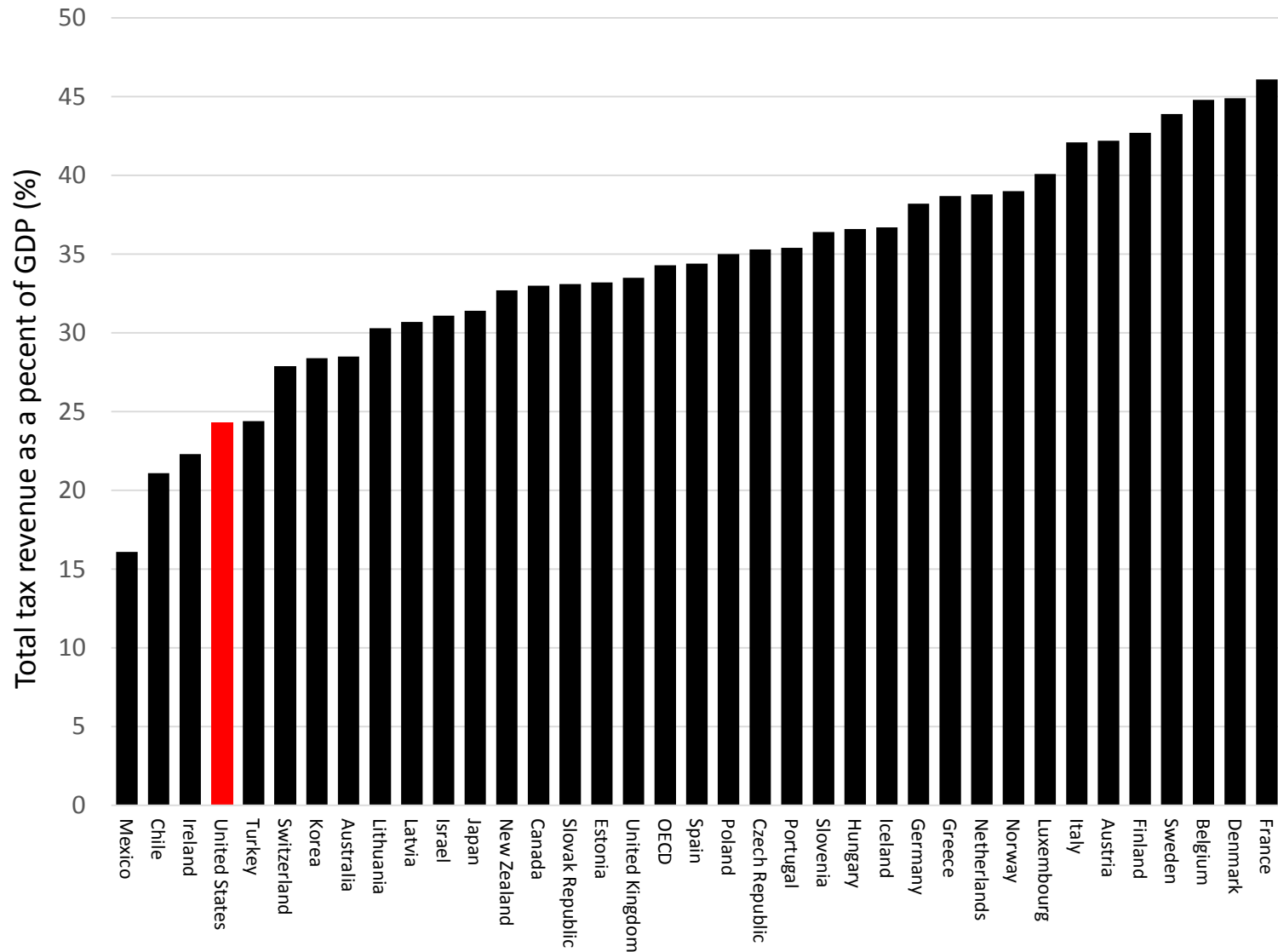
Tax structure U.S. vs. France and Germany



The U.S. has a much lower total tax burden and takes a very different approach to raising tax revenues compared to most other developed economies.

Taxes

Taxes % of GDP – U.S. is the lowest of major developed



The U.S.'s comparatively low tax burden allows flexibility in solving its long-term entitlement spending problem.

Source: OECD, Revenue Statistics 2019. 2018 data for all countries except 2017 data for Australia and Japan. Includes data for the 36 OECD countries and does not include non-OECD countries such as China, Brazil, India and Russia. Includes all forms of taxes: federal, state and local; income taxes, sales taxes, VAT taxes, estate taxes, property taxes, etc.

Modern Portfolio Theory = Asset Allocation

Modern portfolio theory was introduced by Harry Markowitz with his paper “Portfolio Selection,” which appeared in the 1952 *Journal of Finance*.

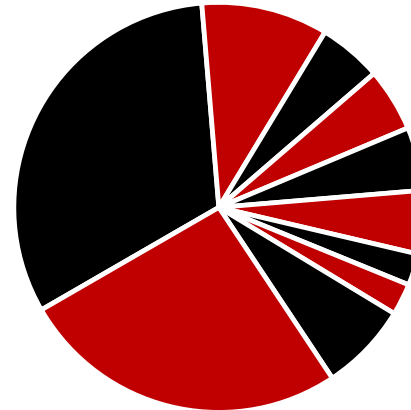
Thirty-eight years later, he shared a Nobel Prize with Merton Miller and William Sharpe for what has become a broad theory for portfolio selection.

Modern Portfolio Theory

Diversify

Optimize

Rebalance



Asset allocation and diversification do not guarantee a profit or eliminate the risk of loss.
Source: Riskglossary.com

Important Information

All material presented is compiled from sources believed to be reliable and current, but accuracy cannot be guaranteed. This is not to be construed as an offer to buy or sell any financial instruments and should not be relied upon as the sole factor in an investment making decision. As with all investments there are associated inherent risks. Please obtain and review all financial material carefully before investing.

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