Economic Resilience and Vulnerability: Divisive Effects of Coping with the Coronavirus Threat

presented by David Ranson* for Swiss CFA Society

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*Exhibits and related written materials are available upon request from <u>rdranson@hcwe.com</u>



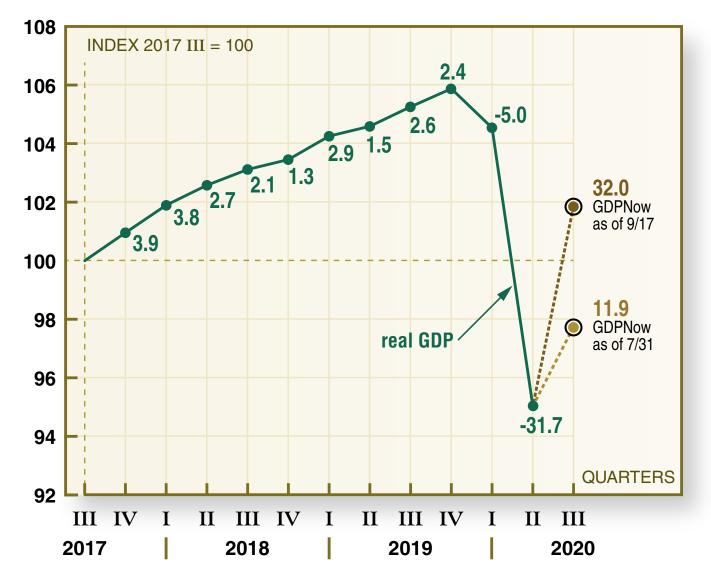
Opening Points

- Resilience is as much a key to economic success as it is in personal life
- Although this is no secret, consensus opinion on the economy places greater emphasis on economic vulnerability to shocks and challenges – and constant need for artificial stimulation
- Resilience is neglected as a factor in government policy and forecasting
- If markets and the economy perform well it's attributed to "stimulus" from government policies; if they perform poorly, it's because Washington hasn't been generous enough
- This is a "Catch 22" keeping us from asking how much inherent resilience the economy possesses
- But whether "stimulus" adds to resilience, or subtracts from it, is an open question
- We can use stock market data to infer something about resilience
- It varies widely among economies as well as between different sectors of an economy even among different segments of the workforce



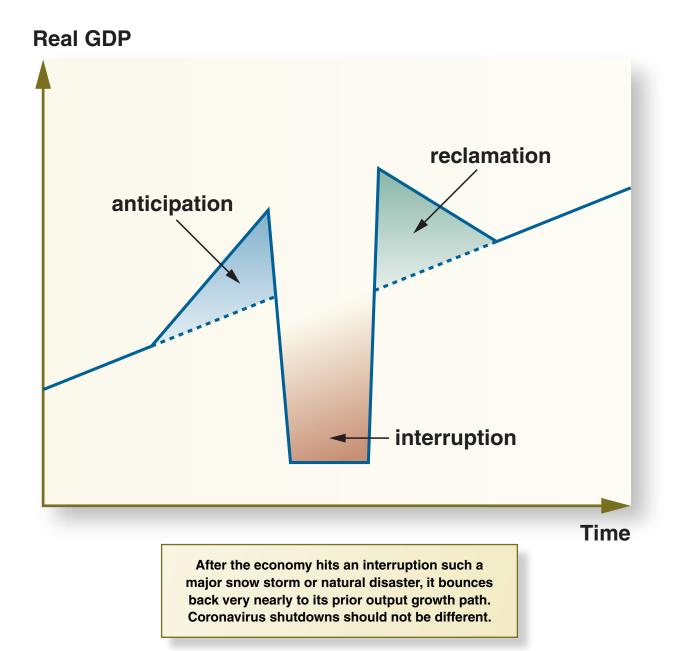
Recent Growth of GDP

from the third quarter of 2017



Data: Quarterly chain-type quantity indexes. See Interactive data/Industry Data/GDP-by-industry/Gross Output by industry (Bureau of Economic Analysis). Real GDP labels show quarterly growth re-expressed as seasonally adjusted annual rates.

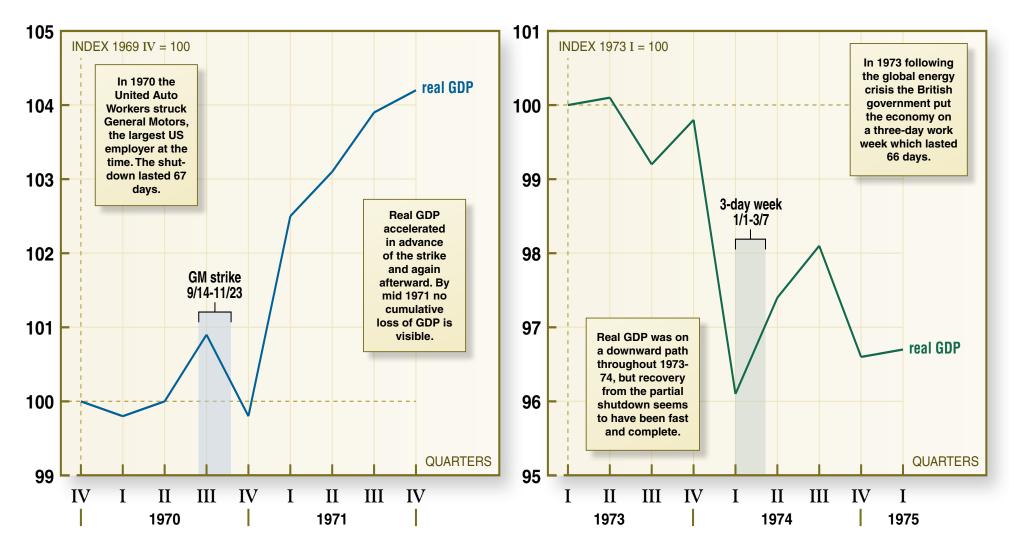
Stylized Profile of a Hiatus in Economic Activity



National Output during Historical Economic Shutdowns

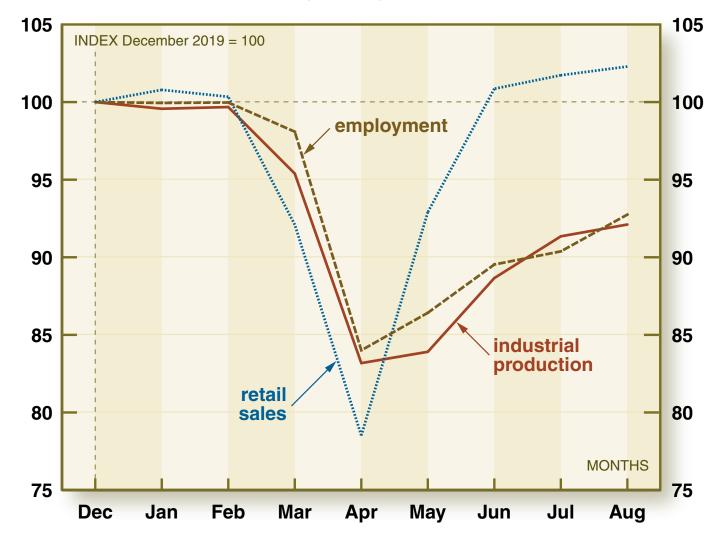
a) the General Motors strike of 1970

b) Britain's three-day week of 1974



Data: : Bureau of Labor Statistics.

US Economic Activity During the Pandemic

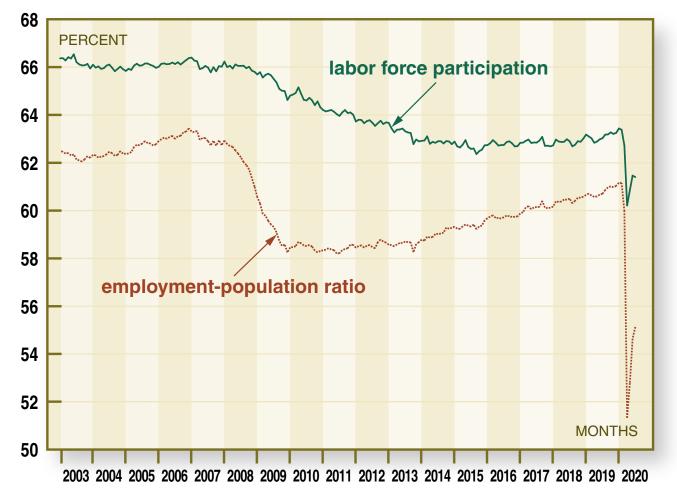


monthly data, year to date

Data: Advance retail sales including food services (Bureau of the Census) and civilian employment (Bureau of Labor Statistics household survey), seasonally adjusted.

US Labor Force and Employment as a Percentage of Working-Age Population

from the beginning of 2003



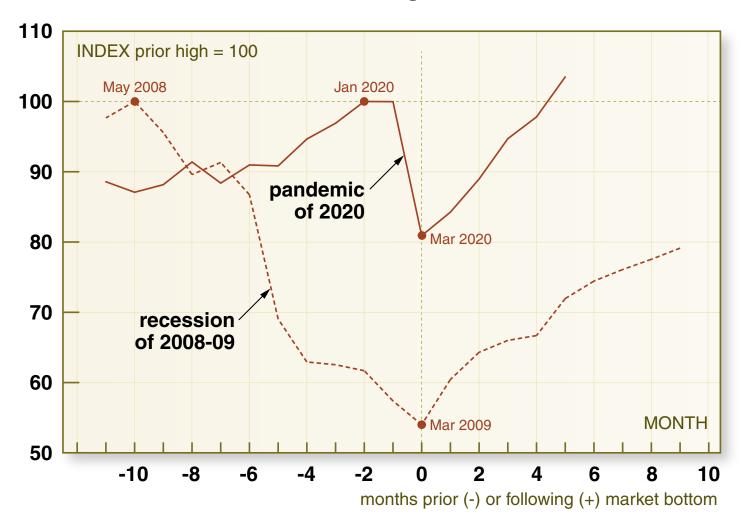
Data: Monthly civilian population, 16 years and over, not seasonally adjusted, and civilian labor force and employment, 16 years and older, seasonally adjusted (Bureau of Labor Statistics Current Population Survey).

What Have We Further Concluded?

- The US economy as a whole has high resilience
- The economy's behavior so far suggests no disconnect with the stock market
- The third-quarter GDP rebound will be far the most vigorous on record
- But the economy will have a different constitution after the pandemic than before
- This change in shape is exactly what resilience is all about
- Parts of the economy that are not resilient include largescale production and employment
- Twelve years after 2008, for example, employment had grown only halfway back to its previous ratio to population!



Stock-Market Vulnerability and Resilience in 2008-09 and 2019-20



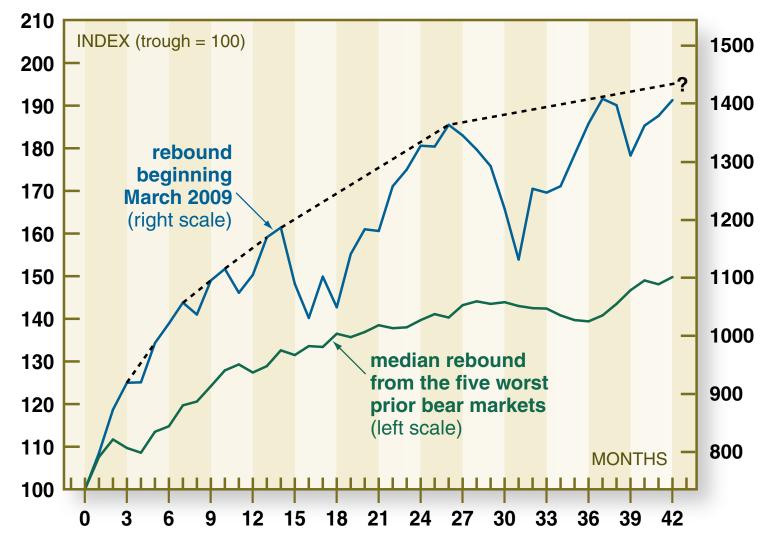
month-average data

Data: Month-average price index for the S&P 500 companies (Standard & Poor's).

How the Market's Course since 2009 Compares with Past Rebounds from Historic Market Declines

from month-end price data since 1949

cumulative change in the S&P 500 price index from the beginning of the rebound

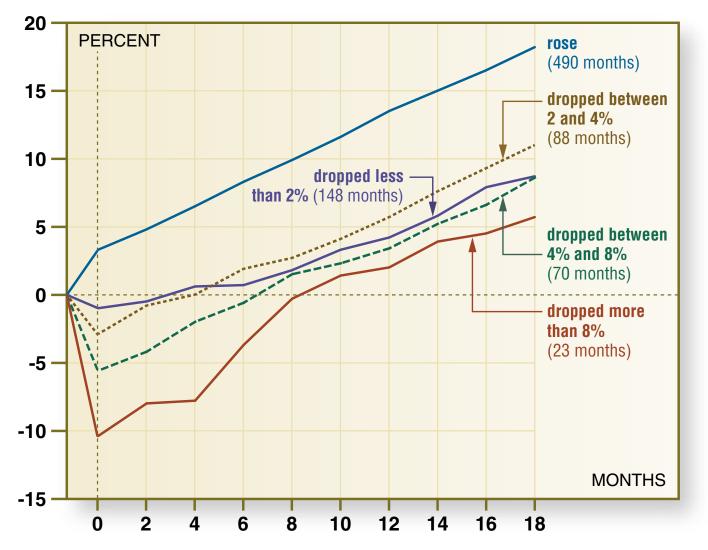


Data: End-of-month prices for the Standard & Poor's 500 (University of Chicago/Dimensional Fund Advisors).

The Further the Market Drops, the Higher it Bounces

month-end S&P price index from the end of 1948

AVERAGE cumulative price-index change following months in which the index:



Data: S&P price index (Standard & Poor's).

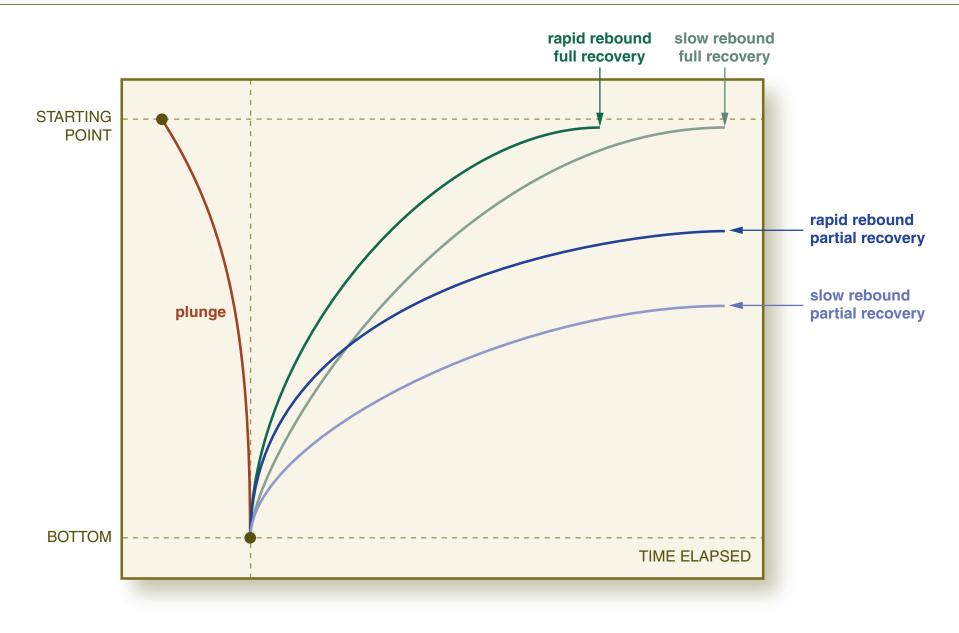
What are We to Conclude from the Stock-Market Experience?

- Over time, the level of stock prices moves with some regularity as well as with randomness
- Lengthy periods of advancing prices are interrupted by periods of downturn and turbulence that are usually brief
- Miniature instances of setbacks and rebounds are visible over shorter time frames
- When the market drops, it typically follows a rebound trajectory along a reverse-exponential curve, as lost ground is recovered

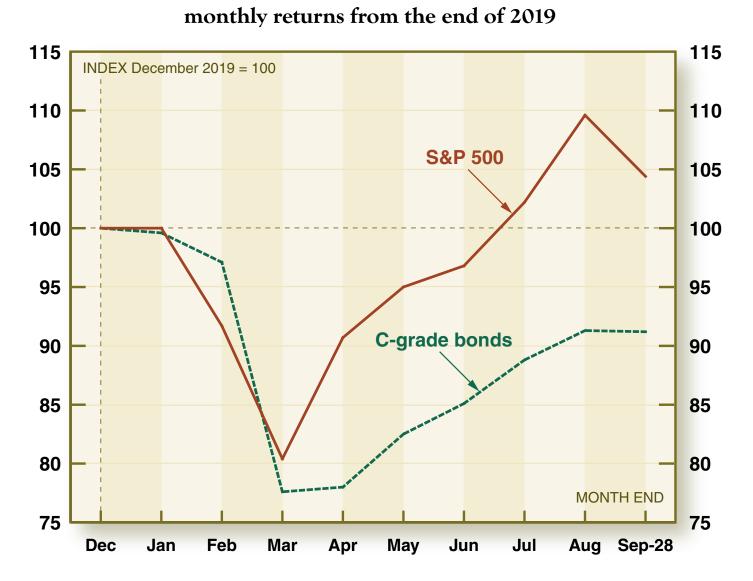




Stylized Profiles of Stock-Market Rebounds



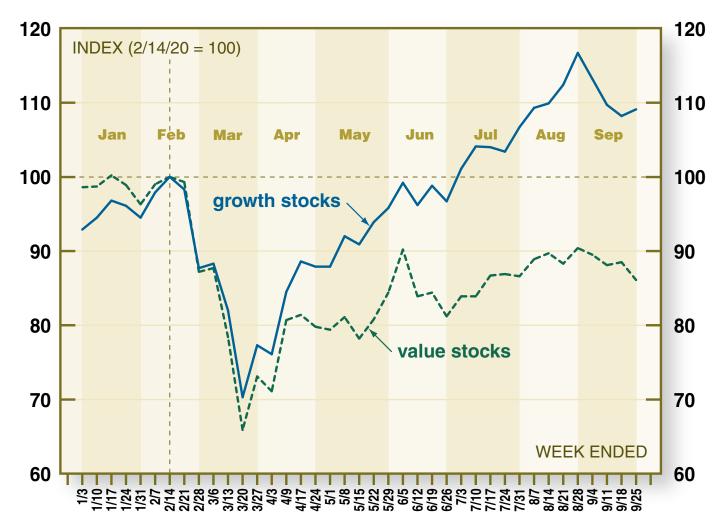
Upside Potential in Junk Bonds?



Data: Month-end total-return indices for the S&P 500 (University of Chicago) and C-grade high-yield corporate bonds (ECU Merrill Lynch).

Pandemic-related Stock-Market Plunges and Rebounds: Value versus Growth

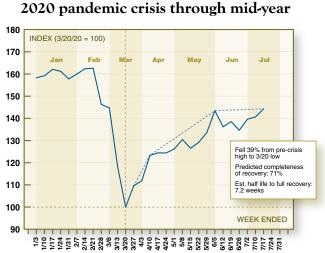




Data: Week-end prices of exchange-traded funds for the S&P 500 value and growth stock indices (iShares)

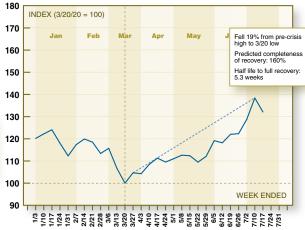
Resilience Statistics for Foreign Stock Markets

the Canadian Stock Market



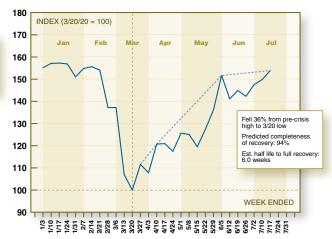
the Chinese Stock Market

2020 pandemic crisis through mid-year



the German Stock Market

2020 pandemic crisis through mid-year



the Japanese Stock Market

180 INDEX (3/20/20 = 100) 170 160 Fell 28% from pre-crisis high to 3/20 low Predicted completeness of recovery: 80% 150 Est. half life to full recovery 140 3.5 weeks 130 120 110 100 WEEK ENDED 90 1/3 1/10 1/110 1/110 1/110 1/124 1/22 1/22 1/22 1/22 1/110 1/100 1 %19 %26 7/2 7/10 7/17 7/17 7/17 7/17 7/17

2020 pandemic crisis through mid-year

Data: Morgan Stanley Capital International.

the Swiss Stock Market

2020 pandemic crisis through mid-year



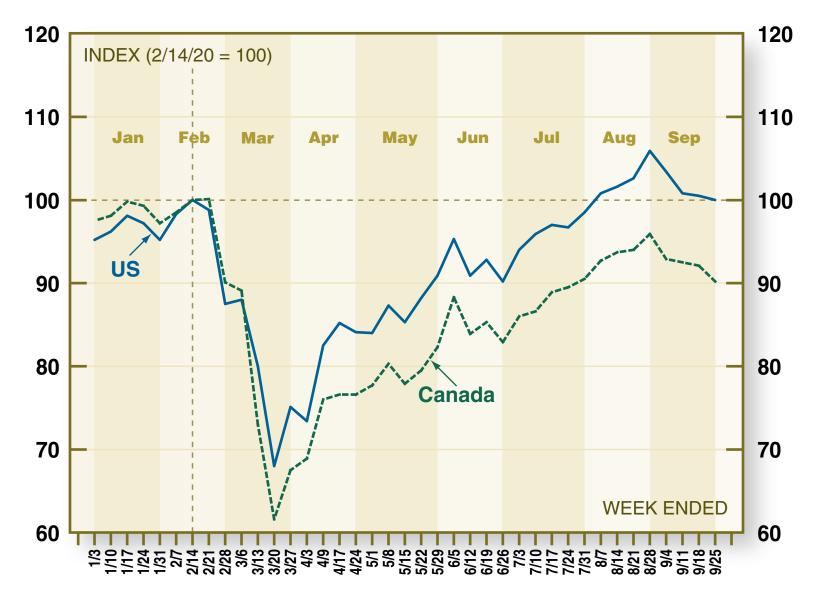
2020 pandemic crisis through mid-year

the UK Stock Market



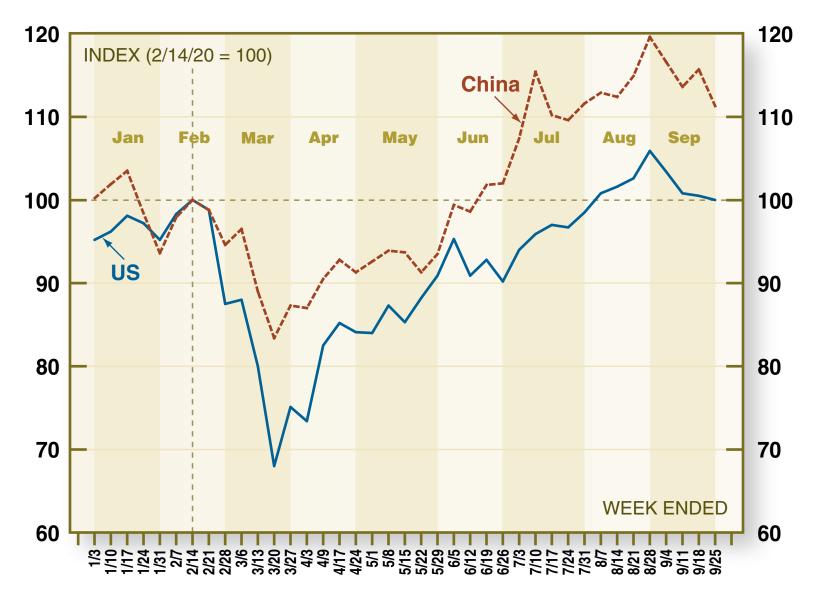
Predicted completeness

US and Foreign Stock-Market Vulnerability and Resilience



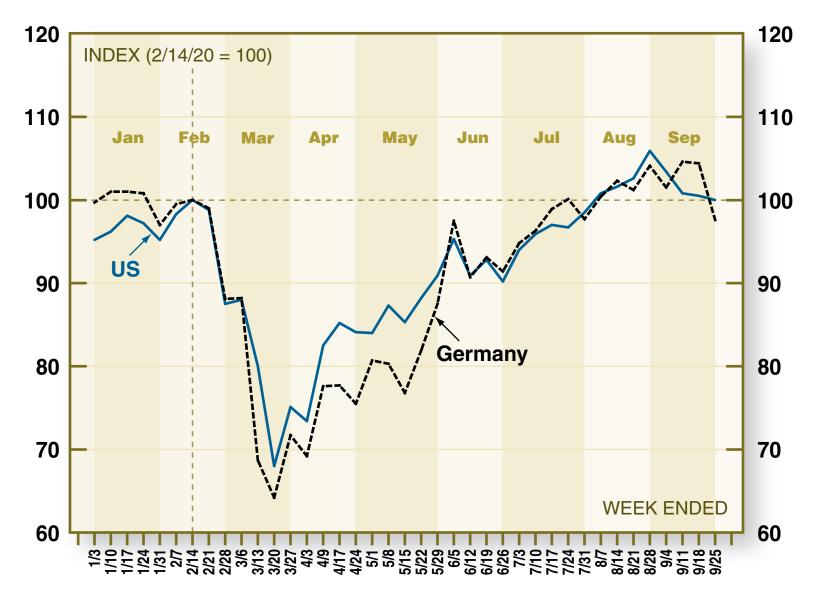
(1) Canada, weekly data from the beginning of 2020

US and Foreign Stock-Market Vulnerability and Resilience



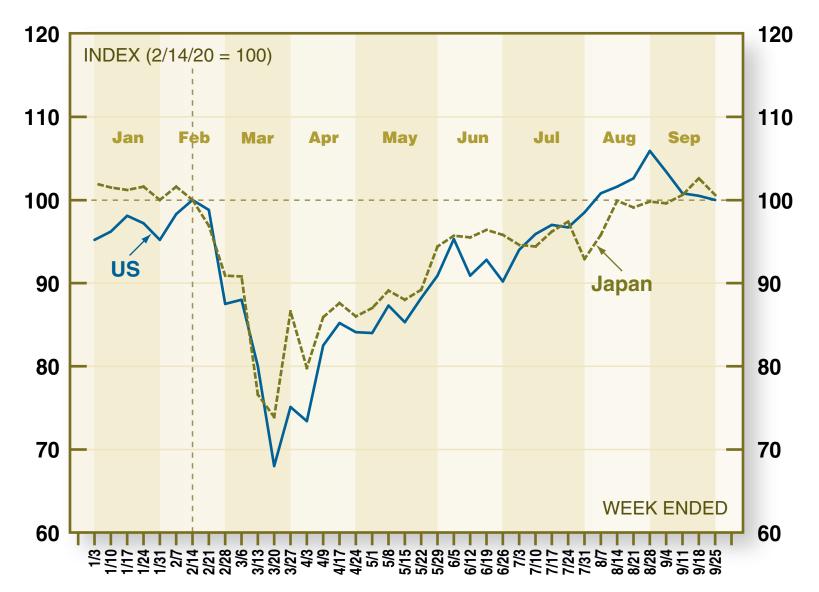
(2) China, weekly data from the beginning of 2020

US and Foreign Stock-Market Vulnerability and Resilience



(3) Germany, weekly data from the beginning of 2020

US and Foreign Stock-Market Vulnerability and Resilience



(4) Japan, weekly data from the beginning of 2020



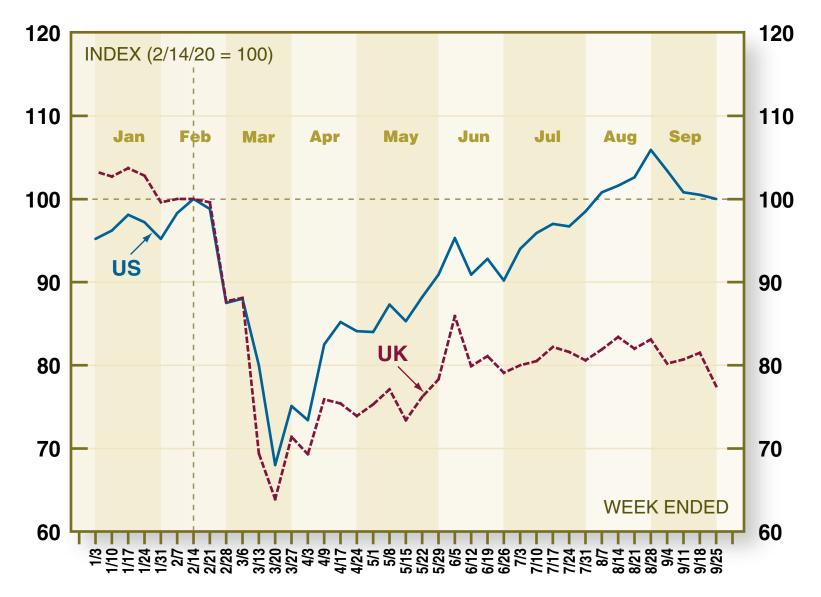
US and Foreign Stock-Market Vulnerability and Resilience



(5) Switzerland, weekly data from the beginning of 2020

US and Foreign Stock-Market Vulnerability and Resilience

(6) United Kingdom, weekly data from the beginning of 2020



Effects of Currency Performance on Economic Resilience

first half of 2020		
MSCI market index	percentage of market's lost ground regained (%)	cumulative currency change in USD (%)
Switzerland	93	2.1
Japan	80	0.7
Sweden	92	0.5
France	67	0.2
Germany	90	0.2
United States	87	0
EAFE	72	-0.9
China	160	-1.3
Australia	67	-1.6
Canada	69	-4.3
Emerging markets	82	-4.5
United Kingdom	55	-6.5

Additional Conclusions

- Stock-market experience tells us much about economic resilience
- Most countries have shown less resilience than the US
- Economic resilience in China has proved vastly greater than elsewhere in the world
- Ex China, emerging countries have shown somewhat less economic resilience than developed countries
- Other resilient economies include Switzerland and Japan
- But currency performance is a factor in the degree of stockmarket recovery
- One of the weakest recoveries is for Britain, but this may be partly attributable to the decline in the value of sterling



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