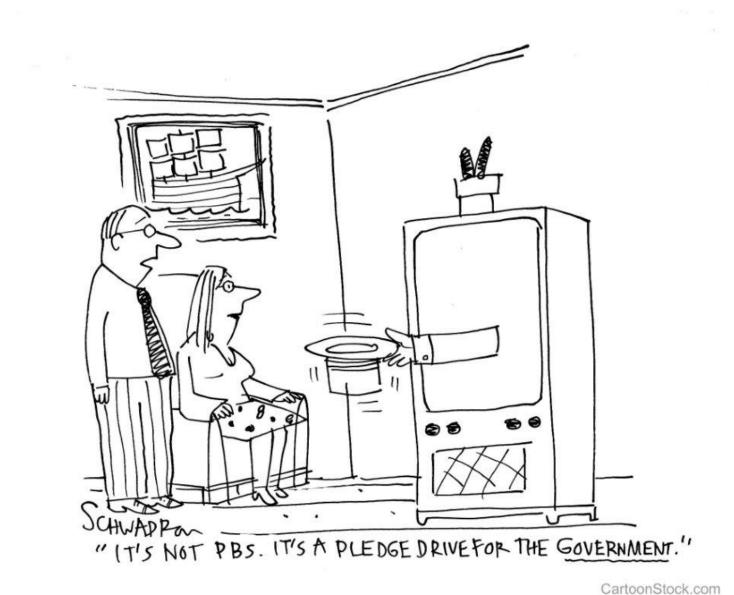
CHARTBOOK

OCTOBER 2020



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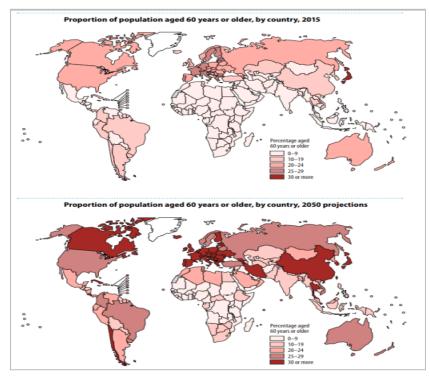
Diana Joseph, Senior Financial Advisor, Partner Direct: (312) 870-1902 • djoseph@telemus.com



CartoonStock.com

PRE-COVID: DEMOGRAPHICS WERE SLOWING GROWTH

Pre-Covid the aging of the developed world, and increasingly, the developing world, were moderating global growth. The darker the color, the higher the country's percentage of people 60+ years old 2015-2050.

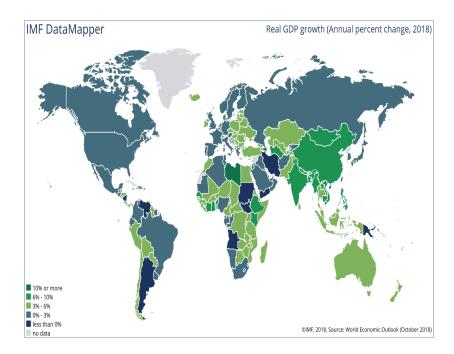


Source: World Report on Ageing and Health 2015.

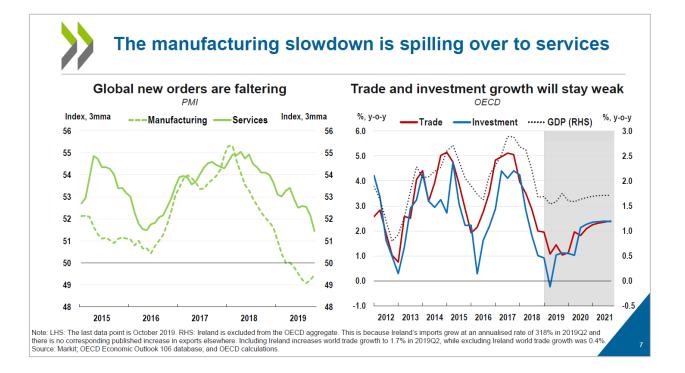
NOT SURPRISINGLY, GDP GROWTH FOLLOWS YOUTH

Green is the fastest growing. Blue is the slowest growing.

Countries with young & growing demographics will have the best growth.

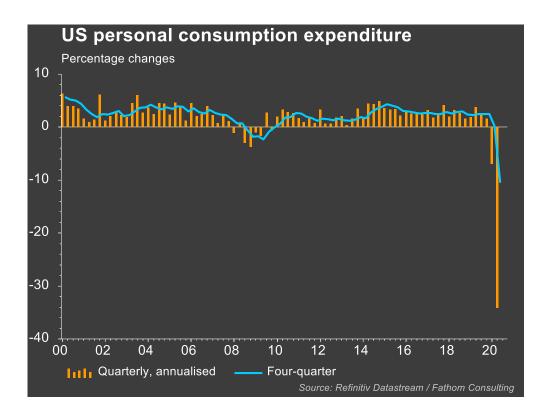


PRE-COVID, TARIFFS HAD STYMIED GLOBAL TRADE



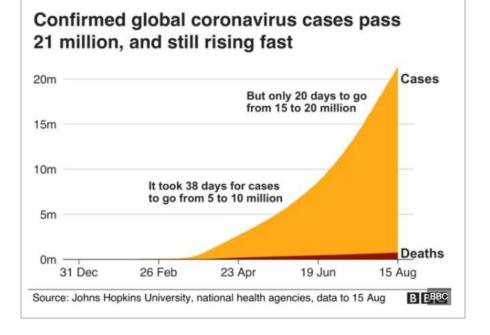
AND THEN CAME COVID

Coronavirus stopped the world in its tracks and ended the longest economic expansion in U.S. history.

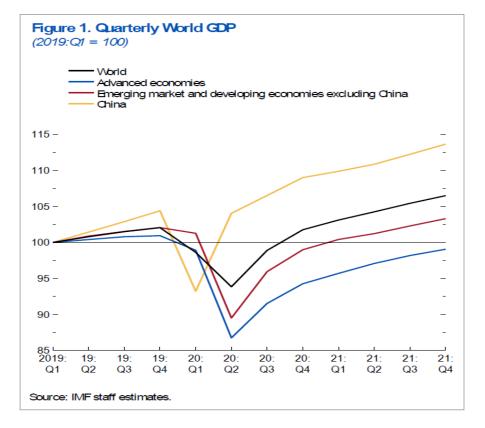


AS COVID PROLIFERATED WE PUT THE WORLD ECONOMY IN A COMA

COVID cases spiraled worldwide prompting draconian economic closures worldwid



The U.S. economy plummeted 9.5% from the 1st quarter, or 32.9% annualized and inflation adjusted. Consumer spending fell an annualized 34.6%. The IMF estimates a slow recovery, a sluggish 2021, and considerable uncertainty in its estimates.





Global Purchasing Managers' Index for services, quarterly

Source: Markit, J.P. Morgan Asset Management.

Heatmap colors are based on PMI relative to the 50 level, which indicates acceleration or deceleration of the sector, for the time period shown. Heatmap is based on quarterly averages, with the exception of the two most recent figures, which are single month readings. Data for the U.S. are back-tested and filled in from December 2007 to September 2008 due to lack of existing PMI figures. DM and EM represent developed markets and emerging markets, respectively. Past performance is not a reliable indicator of current and future results. *Guide to the Markets – U.S.* Data are as of June 30, 2020.



Global purchasing plummeted with COVID lockdown. China recovered in May and the countries with June data began to recover in that month.

Economic Outlook projections

| | | | le-hit nario | Doubl scen | | | | Sing scer | le-hit Iario | Double-hit scenario | | |
|----------------|------|-------|-----------------|---------------|------|--------------------|------|--------------|-----------------|------------------------|-----|--|
| | 2019 | 2020 | 2021 | 2020 | 2021 | | 2019 | 2020 | 2021 | 2020 | 202 | |
| World | 2.7 | -6.0 | 5.2 | -7.6 | 2.8 | G20 | 2.9 | -5.7 | 5.5 | -7.3 | 3.1 | |
| | | | | | | | | | | | | |
| Australia | 1.8 | -5.0 | 4.1 | -6.3 | 1.0 | Argentina | -2.2 | -8.3 | 4.1 | -10.1 | 1.7 | |
| Canada | 1.7 | -8.0 | 3.9 | -9.4 | 1.5 | Brazil | 1.1 | -7.4 | 4.2 | -9.1 | 2.4 | |
| Euro area | 1.3 | -9.1 | 6.5 | -11.5 | 3.5 | China | 6.1 | -2.6 | 6.8 | -3.7 | 4.5 | |
| Germany | 0.6 | -6.6 | 5.8 | -8.8 | 1.7 | India ¹ | 4.2 | -3.7 | 7.9 | -7.3 | 8.1 | |
| France | 1.5 | -11.4 | 7.7 | -14.1 | 5.2 | Indonesia | 5.0 | -2.8 | 5.2 | -3.9 | 2.6 | |
| Italy | 0.3 | -11.3 | 7.7 | -14.0 | 5.3 | Mexico | -0.1 | -7.5 | 3.0 | -8.6 | 2.0 | |
| Japan | 0.7 | -6.0 | 2.1 | -7.3 | -0.5 | Russia | 1.4 | -8.0 | 6.0 | -10.0 | 4.9 | |
| Korea | 2.0 | -1.2 | 3.1 | -2.5 | 1.4 | Saudi Arabia | 0.4 | -6.6 | 3.8 | -8.3 | 1.5 | |
| United Kingdom | 1.4 | -11.5 | 9.0 | -14.0 | 5.0 | South Africa | 0.2 | -7.5 | 2.5 | -8.2 | 0.6 | |
| United States | 2.3 | -7.3 | 4.1 | -8.5 | 1.9 | Turkey | 0.9 | -4.8 | 4.3 | -8.1 | 2.0 | |

G20 GDP growth % year-on-year

Economic Outlook projections

GDP growth

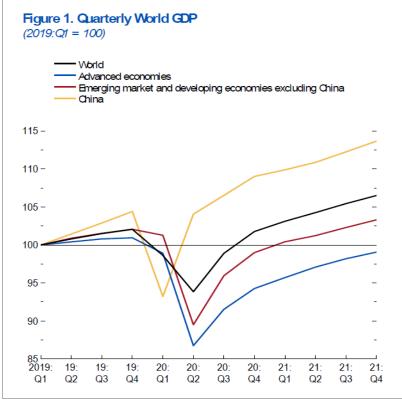
% year-on-year

| | | | igle-hit enario | | ole-hit nario |
|----------------|------|------|--------------------|-------|------------------|
| | 2019 | 2020 | 2021 | 2020 | 2021 |
| Austria | 1.5 | -6.2 | 4.0 | -7.5 | 3.2 |
| Belgium | 1.4 | -8.9 | 6.4 | -11.2 | 3.4 |
| Chile | 1.0 | -5.6 | 3.4 | -7.1 | 1.9 |
| Colombia | 3.3 | -6.1 | 4.3 | -7.9 | 2.8 |
| Costa Rica | 2.1 | -4.1 | 2.7 | -4.9 | 1.5 |
| Czech Republic | 2.5 | -9.6 | 7.1 | -13.2 | 1.7 |
| Denmark | 2.4 | -5.8 | 3.7 | -7.1 | 0.9 |
| Estonia | 4.4 | -8.4 | 4.3 | -10.0 | 1.6 |
| Finland | 0.9 | -7.9 | 3.7 | -9.2 | 2.4 |
| Greece | 1.9 | -8.0 | 4.5 | -9.8 | 2.3 |
| Hungary | 4.9 | -8.0 | 4.6 | -10.0 | 1.5 |
| Iceland | 1.9 | -9.9 | 4.6 | -11.2 | 3.0 |
| Ireland | 5.5 | -6.8 | 4.8 | -8.7 | -0.2 |
| Israel | 3.5 | -6.2 | 5.7 | -8.3 | 2.6 |

| | | | le-hit nario | Double scena | |
|-----------------|------|-------|-----------------|-----------------|------|
| | 2019 | 2020 | 2021 | 2020 | 2021 |
| Latvia | 2.2 | -8.1 | 6.3 | -10.2 | 2.0 |
| Lithuania | 3.9 | -8.1 | 6.4 | -10.4 | 3.4 |
| Luxembourg | 2.3 | -6.5 | 3.9 | -7.7 | 0.2 |
| Netherlands | 1.8 | -8.0 | 6.6 | -10.0 | 3.4 |
| New Zealand | 2.2 | -8.9 | 6.6 | -10.0 | 3.6 |
| Norway | 1.2 | -6.0 | 4.7 | -7.5 | 1.3 |
| Poland | 4.1 | -7.4 | 4.8 | -9.5 | 2.4 |
| Portugal | 2.2 | -9.4 | 6.3 | -11.3 | 4.8 |
| Slovak Republic | 2.4 | -9.3 | 6.4 | -11.1 | 2.1 |
| Slovenia | 2.4 | -7.8 | 4.5 | -9.1 | 1.5 |
| Spain | 2.0 | -11.1 | 7.5 | -14.4 | 5.0 |
| Sweden | 1.2 | -6.7 | 1.7 | -7.8 | 0.4 |
| Switzerland | 1.0 | -7.7 | 5.7 | -10.0 | 2.3 |

Source: OECD Economic Outlook 107 database

The IMF projects the global economy to slightly exceed its 2019 performance but cites "pervasive uncertainty" around this forecast.



Source: IMF staff estimates International Monetary Fund World Economic Outlook June 2020

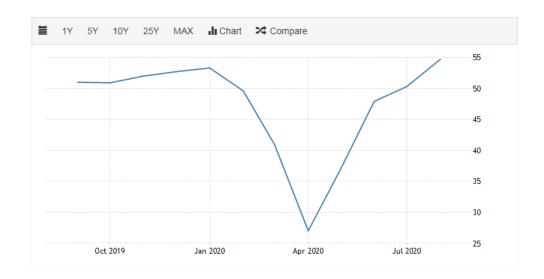
US employment during & after recessions Index, 100 = beginning of recession 102 100 98 96 94 92 90 88 86 0 10M 20M 30M 40M 50M 60M 70M 1953 1957 1960 1969 1974 1980 1981 1990 2001 2007 2020 Source: Refinitiv Datastream / Fathom Consulting

The current plunge in employment looks nothing like other 'recessions' but does look more like the Depression – not shown here.

The trajectory will hinge upon whether 'temporary' layoffs and closings become permanent, whether PPP & stimulus continue for enough time for the 'normal' economy to resume. We are skeptical.

BUSINESS PURCHSING OPTIMISTIC – CONSUMER SENTIMENT HOLDS NEW NORMAL

The IHS Markit Composite Purchasing Manager's Index jumped again with service sector activity expanding the most in 17 months and goods being manufactured at the fastest pace since January 2019!



| Actual | Previous | Highest | Lowest | Dates | Unit | Frequency | |
|--------|----------|---------|--------|-------------|--------|-----------|----|
| 54.70 | 50.30 | 61.00 | 27.00 | 2013 - 2020 | points | Monthly | SA |

Source: https://tradingeconomics.com/united-states/consumer-confidence

Consumer sentiment plunged initially but is trying to stabilize at new, lower levels. Concerns about the future and current conditions lessened slightly.



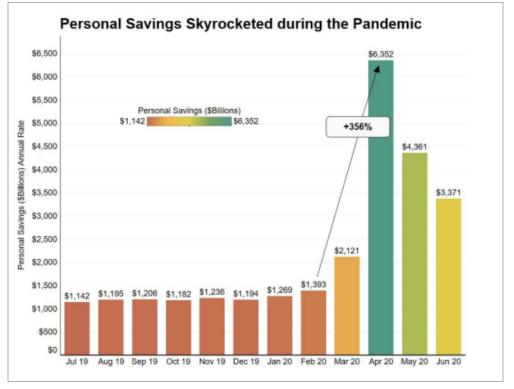
| Actual | Previous | Highest | Lowest | Dates | Unit | Frequency | | |
|--------|----------|---------|--------|-------------|--------|-----------|---------------------|------|
| 74.10 | 72.50 | 111.40 | 51.70 | 1952 - 2020 | points | Monthly | Volume, 1966=100 | NSA, |

Source: https://tradingeconomics.com/united-states/consumer-confidence

Ultra low mortgage rates, scarce supply and a desire for more space drove huge gains for housing in July. New home sales jumped 13.9%, the highest rate since <u>December</u>, 2006, while sales of previously owned homes made a new record.

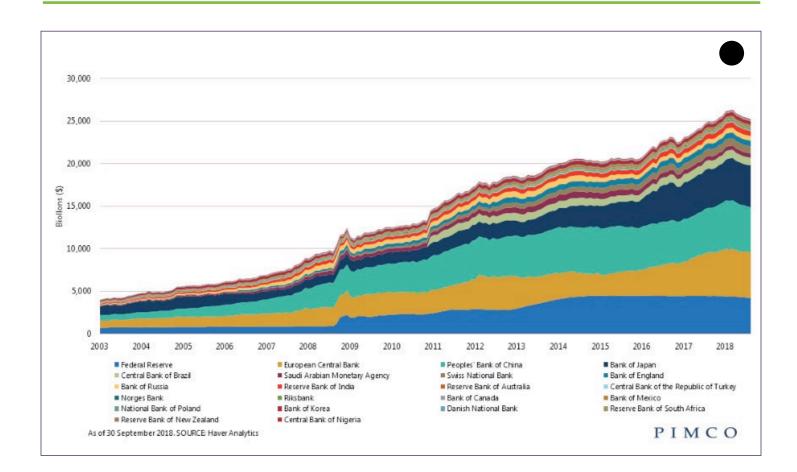
Savings increased more than 350% from February to 6.3 trillion in April. Savings have remained elevated as there is so much less to spend money on and government checks were received. Savings could fuel a stronger rebound unless savings behavior has been permanently altered.





Source: Olney, M.D. Chamber of Commerce

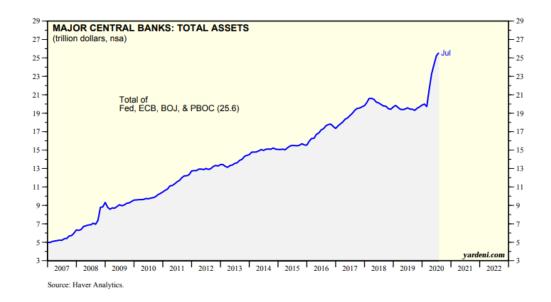
HOW MUCH CAN THE WORLD PRINT, AND FOR HOW MUCH LONGER? THE 22 LARGEST CENBANKS WERE PRINTING WAY BEFORE COVID



The printing peak of the 22 biggest CenBank printers reached 26 trillion in 2017. Current estimates have these central banks printing an additional 10 trillion before mid-2021, or to where the black dot appears near the top right of the page.

CENTRAL BANK BALANCE SHEETS SPIKE TO MEET WORLD SLOWDOWN THREAT

The COVID response of the 4 major cen banks is far greater than the 2008 response – and faster. Almost 6 trillion new dollars in a few months.



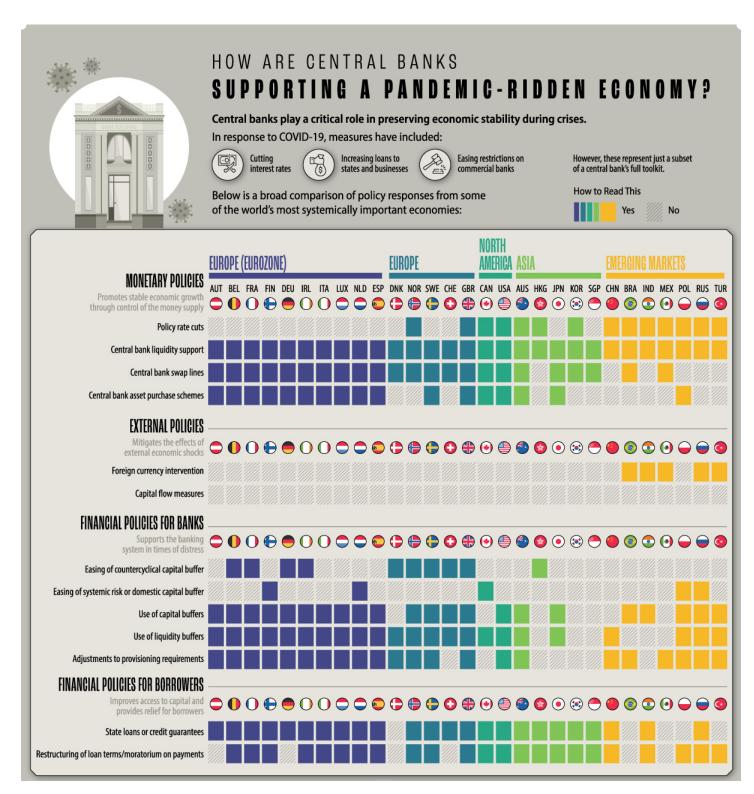
The U.S. Federal Reserve's balance sheet has increased by almost 3 trillion in a few months and is forecast to continue climbing.

The Federal Reserve balance sheet USD trillions Forecast **\$**9 Balance sheet expansion under rounds of quantitative easing (QE), USD billions \$8 Announced Terminated MBS Balance sheet Length (m) Treasuries Loans QE1 11/25/2008 3/31/2010 \$1.074 \$1,403 16 \$300 \$397 \$7 11/3/2010 6/29/2012 19 QE2 \$829 -\$196 \$76 \$568 9/13/2012 10/29/2014 QE3 25 \$822 \$874 \$4 \$1.674 QE4*** 3/23/2020 Ongoing \$2.924 3 \$1.723 \$572 \$211 \$6 \$5 Other \$4 MBS \$3 \$2 \$1 \$0 '05 '06 '10 '11 '13 20 '02 '03 '04 '07 '08 '09 '12 '14 '15 '16 '17 '18 '19

Source: FactSet, Federal Reserve, J.P. Morgan Investment Bank, J.P. Morgan Asset Management. Currently, the balance sheet contains 54.2 million in Treasuries and 51.9 million in MBS. The end balance forecast is \$4.7 million in Treasuries and \$2.2 million in MBS by December 2020. "Balance sheet forecast assumes the Federal Reserve maintains its current pace of purchases of Treasuries and MBS through December 2020. "Balance sheet forecast assumes the Federal Reserve maintains its current pace of purchases of Treasuries and MBS through December 2020. "Balance well in the June 2020 FOMC meeting. "Loans include pimary, secondary and seasonal loans, maiden lane securities and bans extended through newly established corporate credit facilities. Loan figures shown are max usage over the OE period referenced and are not growth of loan portfolio over the period. ***QE4 is ongoing and the expansion figures are as of the most recent Wednesday close as reported by the Federal Reserve. *Guide to the Marketa – U.S.* Data are as of June 30, 2020.

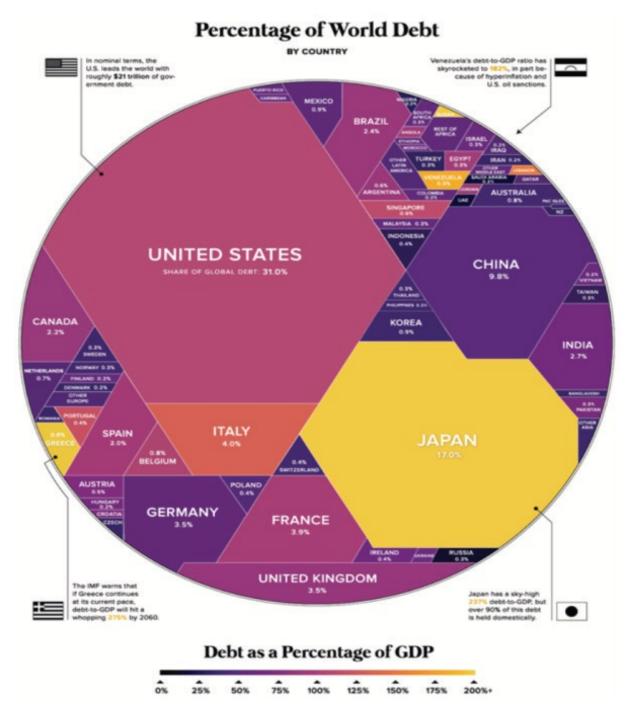
J.P.Morgan Asset Management

GLOBAL CENTRAL BANKS: USING THE WHOLE TOOLKIT



Source: Visual Capitalist: International Monetary Fund (May 2020) European Central Bank (May 2020)

UNITED NATIONS OF DEBT



Pre-Covid, we were concerned that growing debt levels relative to what is produced, would ultimately result in a future global crisis. Given the increases in 'Covid' related debt; we are more concerned.

Annex Table 1. General Government Fiscal Balance and Gross Debt, 2018-21: Overall Balance and Gross Debt (Persent of CDP)

| (Percent of GDP) | | | Over | all Fiscal | Balance | | | | G | iross Dek | ot | |
|---------------------------------|------|------|-------------|------------|--------------------|----------|-------|-------|--------------|-----------|-----------------|-----------|
| | | | Curr | ent | Difference from Ap | oril WEO | | | Curre | ent | Difference from | April WEO |
| | | | Projections | | Projections | | | | Project | | Project | |
| | 2018 | 2019 | 2020 | 2021 | 2020 | 2021 | 2018 | 2019 | 2020 | 2021 | 2020 | 2021 |
| World | -3.1 | -3.9 | -13.9 | -8.2 | -4.0 | -2.0 | 81.2 | 82.8 | 101.5 | 103.2 | 5.1 | 6.6 |
| Group of Twenty (G20) | -3.7 | -4.5 | -15.4 | -9.1 | -4.6 | -2.2 | 88.6 | 90.4 | 111.2 | 113.3 | 5.7 | 7.5 |
| Advanced Economies | -2.7 | -3.3 | -16.6 | -8.3 | -6.0 | -2.8 | 104.0 | 105.2 | 131.2 | 132.3 | 8.8 | 10.4 |
| Advanced G20 | -3.3 | -4.0 | -18.0 | -9.1 | -6.5 | -3.0 | 111.6 | 113.2 | 141.4 | 142.9 | 9.6 | 11.5 |
| United States ^{1, 3} | -5.8 | -6.3 | -23.8 | -12.4 | -8.4 | -3.7 | 106.9 | 108.7 | 141.4 | 146.1 | 10.4 | 14.2 |
| Euro Area | -0.5 | -0.6 | -11.7 | -5.3 | -4.2 | -1.7 | 85.8 | 84.1 | 105.1 | 103.0 | 7.7 | 7.4 |
| Germany | 1.9 | 1.5 | -10.7 | -3.1 | -5.2 | -1.9 | 61.9 | 59.8 | 77.2 | 75.0 | 8.6 | 9.3 |
| France | -2.3 | -3.0 | -13.6 | -7.1 | -4.5 | -0.8 | 98.1 | 98.1 | 125.7 | 123.8 | 10.2 | 7.4 |
| Italy | -2.2 | -1.6 | -12.7 | -7.0 | -4.4 | -3.5 | 134.8 | 134.8 | 166.1 | 161.9 | 10.6 | 11.4 |
| Spain ² | -2.5 | -2.8 | -13.9 | -8.3 | -4.4 | -1.6 | 97.6 | 95.5 | 123.8 | 124.1 | 10.4 | 9.5 |
| Japan | -2.5 | -3.3 | -14.7 | -6.1 | -7.6 | -4.1 | 236.6 | 238.0 | 268.0 | 265.4 | 16.0 | 17.8 |
| United Kingdom | -2.2 | -2.1 | -12.7 | -6.7 | -4.4 | -1.3 | 85.7 | 85.4 | 101.6 | 100.5 | 5.9 | 4.7 |
| Canada ³ | -0.4 | -0.3 | -12.6 | -5.8 | -0.8 | -1.9 | 89.7 | 88.6 | 109.3 | 108.8 | -0.3 | 0.3 |
| Australia | -1.2 | -3.9 | -8.6 | -8.4 | 1.1 | -1.0 | 41.5 | 45.0 | 56.8 | 64.3 | -2.5 | 0.3 |
| Korea | 2.6 | 0.4 | -3.6 | -2.4 | -1.7 | -0.8 | 40.0 | 41.9 | 49.5 | 53.4 | 3.2 | 4.3 |
| Emerging Market Economies | -3.8 | -4.9 | -10.6 | -8.5 | -1.5 | -1.0 | 48.9 | 52.4 | 63.1 | 66.7 | 1.1 | 2.1 |
| Excluding MENAP Oil Producers | -4.0 | -5.0 | -10.6 | -8.5 | -1.6 | -1.1 | 50.4 | 53.9 | 64.4 | 68.1 | 0.9 | 2.0 |
| Emerging G20 | -4.3 | -5.4 | -11.3 | -9.1 | -1.6 | -1.0 | 49.4 | 53.0 | 64.1 | 68.3 | 0.8 | 1.8 |
| Asia | -4.5 | -6.0 | -11.4 | -9.8 | -1.5 | -1.3 | 49.3 | 53.5 | 64.9 | 70.3 | 0.8 | 2.3 |
| China | -4.7 | -6.3 | -12.1 | -10.7 | -0.9 | -1.1 | 47.0 | 52.0 | 64.1 | 70.7 | -0.8 | 0.6 |
| India | -6.3 | -7.9 | -12.1 | -9.4 | -4.6 | -2.1 | 69.6 | 72.2 | 84.0 | 85.7 | 9.6 | 11.9 |
| Indonesia | -1.8 | -2.2 | -6.3 | -5.0 | -1.3 | -1.0 | 30.1 | 30.5 | 37.7 | 40.3 | 0.8 | 2.8 |
| Europe | 0.4 | -0.6 | -6.9 | -4.8 | -0.7 | -0.6 | 29.3 | 29.0 | 36.4 | 37.1 | 0.0 | 0.8 |
| Russia | 2.9 | 1.9 | -5.5 | -3.9 | -0.6 | -0.9 | 13.5 | 13.9 | 18.5 | 18.8 | 0.6 | 1.7 |
| Turkey | -3.7 | -5.3 | -8.4 | -7.5 | -0.9 | -0.8 | 30.4 | 33.0 | 40.4 | 42.2 | 1.1 | 1.5 |
| Latin America | -5.2 | -4.0 | -10.3 | -4.8 | -3.6 | -0.9 | 66.6 | 70.6 | 81.5 | 79.7 | 3.6 | 3.6 |
| Brazil ⁴ | -7.2 | -6.0 | -16.0 | -5.9 | -6.6 | 0.2 | 87.1 | 89.5 | 102.3 | 100.6 | 4.1 | 2.4 |
| Mexico | -2.2 | -2.3 | -6.0 | -4.0 | -1.8 | -1.8 | 53.6 | 53.7 | 65.9 | 66.3 | 4.6 | 7.3 |
| MENAP | -2.9 | -3.9 | -9.8 | -7.8 | 0.0 | -0.1 | 40.1 | 44.7 | 55.2 | 56.4 | 4.0 | 3.6 |
| Saudi Arabia | -5.9 | -4.5 | -11.4 | -5.6 | 1.2 | 3.4 | 19.0 | 22.8 | 35.2 | 36.8 | 1.1 | -1.9 |
| South Africa | -4.1 | -6.3 | -14.8 | -11.0 | -1.5 | 1.6 | 56.7 | 62.2 | 79.9 | 84.6 | 2.5 | -1.0 |
| Low-Income Developing Countries | -3.8 | -0.5 | -6.1 | -5.1 | -0.4 | -0.2 | 42.9 | 43.1 | 48.2 | 49.0 | 0.8 | 1.3 |
| Nigeria | -3.0 | -5.0 | -7.3 | -5.7 | -0.4 | -0.2 | 27.7 | 29.1 | 36.5 | 36.8 | 1.2 | -0.1 |
| Oil Producers | -4.5 | -1.0 | -8.4 | -5.5 | -0.5 | -1.0 | 42.7 | 45.1 | 56.5 56.1 | 56.6 | 1.2 | 2.2 |
| Memorandum | | | | | | | - | | | | | |
| World Output (percent) | 3.6 | 2.9 | -4.9 | 5.4 | -1.9 | -0.3 | | | | | | |

Source: IMF staff estimates and projections.

Note: All country averages are weighted by nominal GDP converted to US dollars (adjusted by purchasing power parity only for world output) at average market exchange rates in the years indicated and based on data availability. Projections are based on IMF staff assessments of current policies. In many countries, 2020 data are still preliminary. For country-specific details, see "Data and Conventions" and Tables A, B, C, and D in the April 2020 Fiscal Monitor Methodological and Statistical Appendix. MENAP = Middle East, North Africa, and Pakistan; WEO = World Economic Outlook.

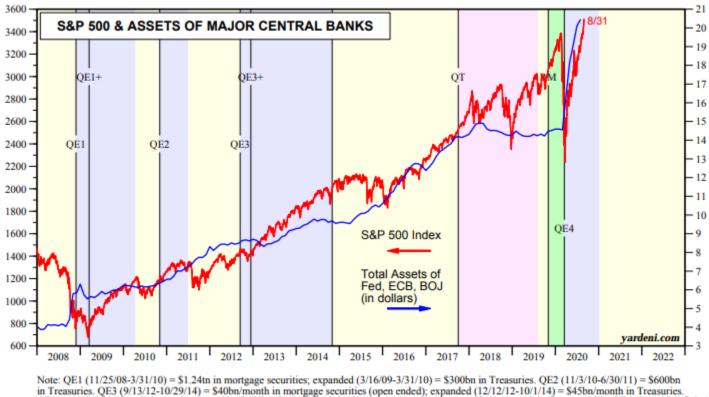
¹ For cross-country comparability, expenditure and fiscal balances of the United States are adjusted to exclude the imputed interest on unfunded pension liabilities and the imputed compensation of employees, which are counted as expenditures under the 2008 System of National Accounts (2008 SNA) adopted by the United States but not in countries that have not yet adopted the 2008 SNA. Data for the United States in this table may thus differ from data published by the US Bureau of Economic Analysis.

² Including financial sector support.

³ For cross-economy comparability, gross debt levels reported by national statistical agencies for countries that have adopted the 2008 System of National Accounts (Australia, Canada, Hong Kong SAR, United States) are adjusted to exclude unfunded pension liabilities of government employees' defined-benefit pension plans. ⁴ Gross debt refers to the nonfinancial public sector, excluding Eletrobras and Petrobras, and includes sovereign debt held by the central bank.

Debt as a percentage of GDP continues to balloon as governments try to offset the economic and financial deficits due to Covid-changed behavior. Note 2020 & 2021 debt-to-GDP levels under the black arrow versus prior years.

THE STOCK MARKET IS HIGHLY CORRELATED TO QE

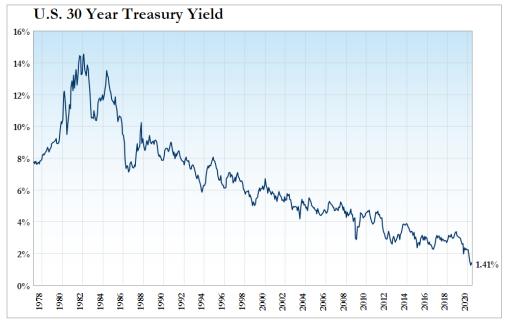


in Treasuries. QE3 (9/13/12-10/29/14) = \$40bn/month in mortgage securities (open ended); expanded (12/12/12-10/1/14) = \$45bn/month in Treasuries. QT (10/1/17-7/31/19) = balance sheet pared by \$675bn. RM (11/1/19-3/15/20) = reserve management, \$60bn/month in Treasury bills. QE4 (3/16/20-infinity). Source: Federal Reserve Board, Standard & Poor's and Haver Analytics.

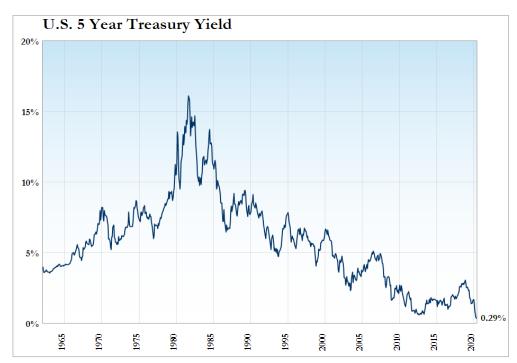
QE caused Wall Street action to diverge from Main Street reality post 2008. QE for Covid reversed the stock market's sharp drop and will likely continue to prop up the stock market, all things equal, while Main Street continues to struggle. QE is highly correlated to rising asset prices.

RATES WILL REMAIN IN HISTORICAL RANGE BAND UNTIL DECISIVE BREAKOUT

We have been saying that the band will hold until broken and we have been right. So far each attempt to rise has failed.



Through June 30, 2030; collected from Eikon on 7/14/2020

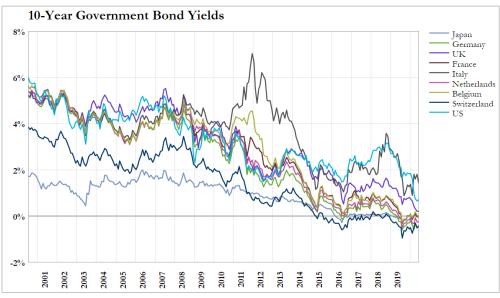


Through June 30, 2030; collected from Eikon on 7/14/2020

This applies to all U.S. Treasury rates. We do, however, see a time in the future that U.S. creditors could demand higher rates to buy U.S. bonds as our debt mushrooms.

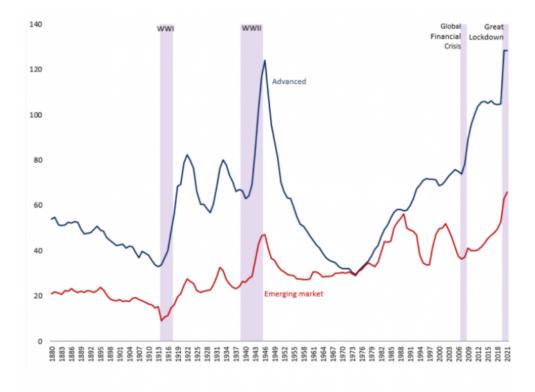
INTEREST RATES HAVE BEEN LOW & FALLING GLOBALLY

Low rates mean lower interest payments. Should rates rise, many countries would be severely challenged to come up with the extra interest money. Would they cut defense, social services or public works?



Through June 30, 2030; collected from Eikon on 7/14/2020

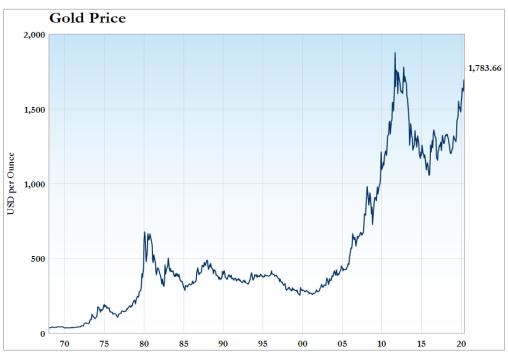
Debt to GDP has just jumped to over 120% in the developed world and 60% for emerging market economies.



Sources: Historical Public Debt Database, IMF WEO, Maddison Database Project; and IMF staff calculations. Note: The aggregate public debt-to-GDP series for advanced and emerging market economies is based on debt-to-GDP data for a constant sample of 25 countries and 27 countries, respectively. The averages are calculated using weights derived from GDP in PPP terms.

GOLD PRICE

Gold has remained elevated for some time. As a finite resource it may become even more valuable as money – printing debases the world's currencies.



Through June 30, 2030; collected from Eikon on 7/14/2020

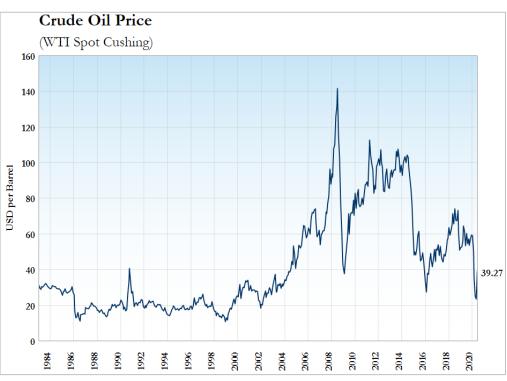
DOLLAR PRICE

Watch the dollar (and the yen) for signs that our debt and money printing will start detracting from the perceived safety of our currency. Japan is more indebted than the U.S.!



Through June 30, 2030; collected from Eikon on 7/14/2020

Crude oil is unlikely to languish at these levels once the irresponsible players have been winnowed out.



Through June 30, 2030; collected from Eikon on 7/14/2020



Through June 30, 2030; collected from Eikon on 7/14/2020

Stocks, especially large cap growth names continue to ride the tide of central bank liquidity.

TWENTY YEAR VIEW OF ASSET CLASS RETURNS

Annual Returns of Key Indices (2000-2019) Ranked in Order of Performance (Best to Worst)

| -22,43% | Growth | Small Cap | -22.08% | Growth | Large Cap | -14.17% | | Int'l | -9.11% | Core | Large Cap | 6.08% | Vslue | Large Cap | 11.63% | Income | Pixed | 22.83% | Value | Small Cap | 24.21% | | Cmdty | 31.04% | Estate | Real | 2000 |
|--------------------|--------|-----------|---------|--------|-----------|----------|--------|-----------|---------|--------|-----------|---------|---------|-----------|---------|--------|--------------------|---------|--------|--------------------|---------|--------|-------------------------------|--------|--------|-----------|------|
| -22.32% | | Cmdty | -21.44% | | Int'l | -12.73% | Growth | Large Cap | -11.88% | Core | Large Cap | -11.71% | Value | Large Cap | -9.23% | Growth | Small Cap | 8.44% | Income | Fixed | 12.35% | Estate | Real | 14.03% | Value | Small Cap | 2001 |
| -30.26% | Growth | Small Cap | -23.59% | Growth | Large Cap | -2210% | Core | Large Cap | -20.85% | Vslue | Large Cap | -15,94% | | Int'l | -11.43% | Value | Small Cap | 3.38% | Estate | Real | 10.26% | Income | Pixed | 23.86% | | Cmdty | 2002 |
| 4.11% | Income | Fixed | 22.66% | | Cmdty | 25.65% | Growth | Large Cap | 28.67% | Core | Large Cap | 31.77% | Value | Large Cap | 36.18% | Estate | Real | 39.17% | | Int'l | 46.02% | Value | Small Cap | 48.53% | Growth | Small Cap | 2003 |
| 4.33% | Income | Fixed | 6.1.3% | Growth | Large Cap | 7.64% | | Omdty | 10.88% | Core | Large Cap | 1431% | Growth | Small Cap | 15.71% | Value | Large Cap | 20.69% | | Int'l | 22.25% | Value | Small Cap | 33.16% | Estate | Real | 2004 |
| 243% | Income | Fixed | 415% | Growth | Small Cap | 4.71% | Value | Small Cap | 4.88% | Core | Large Cap | 5.26% | Growth | Large Cap | 7.10% | Value | Large Cap | 13.50% | | Int'l | 13.82% | Estate | Real | 17.54% | | Omdty | 2005 |
| -2.71% | | Omdty | 4.33% | Income | Fixed | 9.07% | Growth | Large Cap | 13.35% | Growth | Small Cap | 15.77% | Core | Large Cap | 22.24% | Value | Large Cap | 23.47% | | Inť1 | 23.48% | Value | Small Cap | 43.72% | Estate | Real | 2006 |
| -9.78% | Value | Small Cap | -4.65% | Estate | Real | -0.17% | Wahre | Large Cap | 5.48% | Core | Large Cap | 6.97% | Income | Fixed | 7.03% | Growth | Small Cap | 8.62% | | Int'l | 11.09% | | Cmdty | 11.51% | Growth | Large Cap | 2007 |
| -48.90% | Estate | Real | -43.38% | | Int'l | -38.54% | Growth | Small Cap | -38.44% | Growth | Large Cap | -37.03% | Core | Large Cap | -36.85% | Value | Large Cap | -36.61% | | Cmdty | -28.92% | Value | Small Cap | 5.24% | Income | Fixed | 2008 |
| 5.93% | Income | Fixed | 18.72% | | Cmdty | 19.69% | Value | Large Cap | 20.58% | Value | Small Cap | 26.50% | Core | Large Cap | 27.75% | | Int'l | 24.47% | Growth | Small Cap | 37.21% | Growth | Large Cap | 41.25% | Estate | Real | 2009 |
| 4.90% | | Int'l | 6.54% | Income | Fixed | 15.06% | Core | Large Cap | 1551% | Value | Large Cap | 16.67% | | Cmdty | 16.71% | Growth | Large Cap | 20.03% | Estate | Real | 2450% | Value | Small Cap | 29.09% | Growth | Small Cap | 2010 |
| -14.82% | | Int'l | -13.37% | | Cmdty | -8.14% | Estate | Real | -5.50% | Value | Small Cap | -291% | Growth | Small Cap | 0.39% | Value | Large Cap | 211% | Core | Large Cap | 2.64% | Growth | Large Cap | 7.84% | Income | Fixed | 2011 |
| -1.1.4% | | Omdty | 4.2.2% | Income | Fixed | 13.55% | | Int'l | 14.59% | Growth | Small Cap | 15.26% | Growth | Large Cap | 16.00% | Core | Large Cap | 17.51% | Value | Large Cap | 18.05% | Value | Small Cap | 29.85% | Estate | Real | 2012 |
| %85' 6' | | Omdty | -2.03% | Income | Fixed | 2.23% | Estate | Real | 22.78% | | Int'l | 32.39% | Core | Large Cap | 32.53% | Value | arge Cap Large Cap | 33.48% | Growth | arge Cap Large Cap | 34.52% | Value | mall Cap Small Cap | 43.30% | Growth | Small Cap | 2013 |
| -17.04% | | Omdry | -4,90% | | Ind'l | 4.22% | Value | Small Cap | 5,60% | Growth | Small Cap | 5.97% | Income | Pixed | 13.03% | Growth | Large Cap | 13,43% | Value | Large Cap | 13.69% | Core | Large Cap | 14.73% | Estate | Real | 2014 |
| -24.70% | | Cmdty | -7,48% | Value | Small Cap | -3.83% | Value | Læge Cap | -1.38% | Growth | Small Cap | -0.81% | Without | Imt'l | -0(41% | Estate | Real | 0.55% | Income | Fixed | 1.38% | Care | Large Cap Large Cap Large Cap | 5,67% | Growth | Large Cap | 2015 |
| 1.00% | | Im'l | 2.65% | Income | Fixed | 4.52% | Estate | Real | 7.07% | Growth | Large Cap | 11.31% | Growth | Small Cap | 11.77% | | Cmdty | 11.96% | Core | Large Cap | 17.34% | Value | Large Cap | 31.74% | Value | Small Cap | 2016 |
| 1.70% | | Cmdty | 3.54% | Income | Fixed | 7.84% | Value | Small Cap | 13.66% | Value | Large Cap | 15.01% | Estate | Real | 21.83% | Core | Large Cap | 2217% | Growth | Small Cap | 25.03% | | Int'l | 30.21% | Growth | Large Cap | 2017 |
| -13.79% | | Int'l | -12.86% | Value | Small Cap | -11.2.9% | | Omdty | -9.31% | Growth | Small Cap | -8.27% | Value | Large Cap | -5.50% | Estate | Real | -4.38% | Core | Large Cap | -1.52% | Growth | Large Cap | 1.68% | Income | Fixed | 2018 |
| 7.69% | | Omdty | 8.72% | Income | Fixed | 22.01% | | Ind'l | 22.40% | Value | Small Cap | 23.60% | Estate | Real | 26.54% | Value | Large Cap | 28.36% | Growth | Small Cap | 31.49% | Core | Large Cap | 36.39% | Growth | Large Cap | 2019 |

As of 1105, the Russell 1000 Growth and the Russell 1000 Value replaced the SdP/Bara Growth and the SdP/Bara Value, respectively. As of 1106, the FTSE EPR A/NAR EII index replaced the Wilhhie US. REII index. Through 2004 on this chart, the SdP/Bara indices were used for Large Cap Growth and Large Cap Value. Through 2004 on this chart, the SdP/Bara indices were used for Large Cap Growth and Large Cap Value. Through 2004 on this chart, the Wilhhime US. REII index. Through 2004 on this chart, the SdP/Bara indices were used for Real Estate. The FTSEEPRA/NAREII Global Real Estate Index is designed to represent general trends in efigible realestate equilities worldwide.

Association, and investment-gade (rated BBB or better) corporate bonds, all of which will mature within 30 years . securities is sued by the Government National Mortgage Association, the Federal Home Loan Mortgage Corporation, or the Federal National Mortgage The Barchys US Aggregate B and Indexis an unmanaged market-weighted index that consists of US. Government and agencys ecurities, morigage-backed

The Russell 2000 Value index consists of small-cap companies that have lower price-to-book ratios and to wer forecasted growth values.

The Russell 2000 Growth Index consits of small-cap companies that have high exprice-to-book ratios and high erfore casted growth values.

o 5500 large-capitafration companies, within various industrials ectors, most of which are fated on the New York Stock Exchange.

The S&P 500 Indexis an unmanaged index that consists of the common stocks

values.*

futures prices of 22 physical commodities. (Cmdty)

The B b o mberg CommodityIndex reflects the return of underlying

values.*

The Russell 1000 Growth Index consists of large-cap companies that have higher price-to-book ratios and higher forecasted growth

The Russell 10000 Value Indexconsists of large-cap companies that have lowerprice to book ratios and b wer forecasted growth

markets in Europe, Asia, and the Far East.

unmortgaged indexthat measures the total returns of developed foreign stock The Morgan StanleyCapital International (MSCI)EAFE Indexis an



Enrich your life. Enjoy your wealth.

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