

Epoch's Quarterly Capital Markets Outlook



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Thursday, June 25, 2020 | The webinar replay is available on our website: www.eipny.com

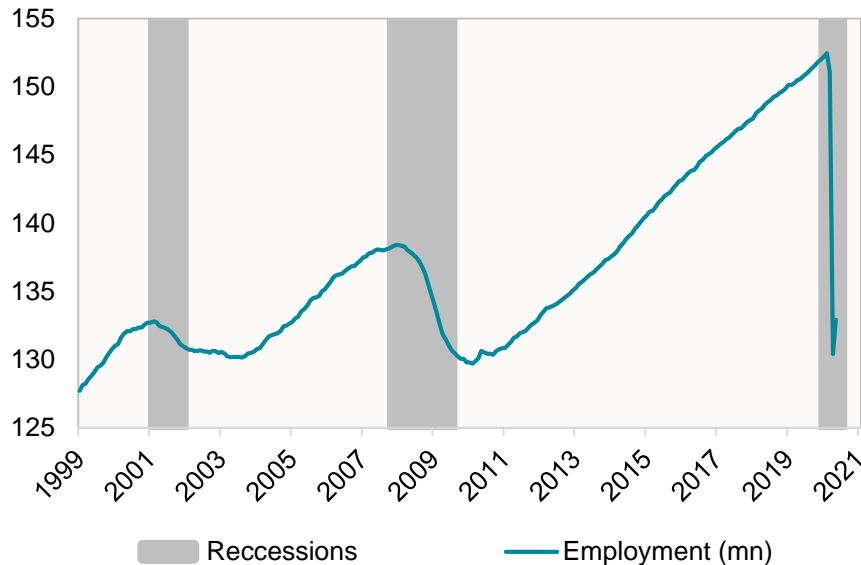
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The 90% Economy: The Long Road Back to Normal

In many things 90% is just fine; for an economy it is miserable

- Bankruptcies and the fear of a second wave
- Life will be hard—at least until a vaccine or a treatment is found

10 years of jobs growth wiped out in 2 months



Source: BLS, NBER, Bloomberg, Epoch Investment Partners

Which industries hit the hardest?

- Leisure & hospitality (7.5 mn)
 - Accommodation & food services
 - Arts, entertainment & recreation
- Retail trade (2.3 mn)
 - Especially clothing & furniture

Less affected than during GFC

- Manufacturing (1.3 mn vs 2.2 mn)
- Construction (1.0 mn vs 2.1 mn)

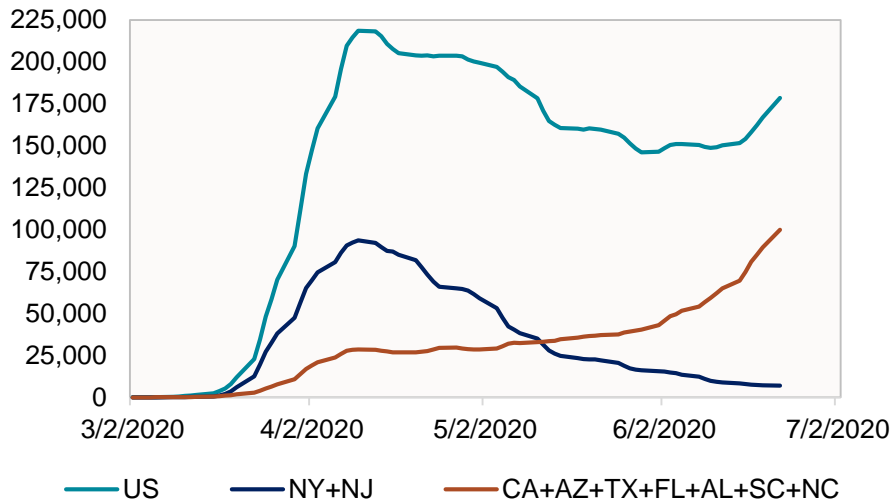
“There will be well into the millions of people who don’t get to go back to their old job. In fact, there may not be a job in that industry for them for some time.”

– Jerome Powell, Jun 10

The 90% Economy: Until the Coronavirus is Contained

- The bad news: Cases increasing in three of four most populous states
- The good news: Deaths are down 70% from mid-Apr peak

New cases over last week: Mixed picture



Source: Bloomberg, Epoch Investment Partners

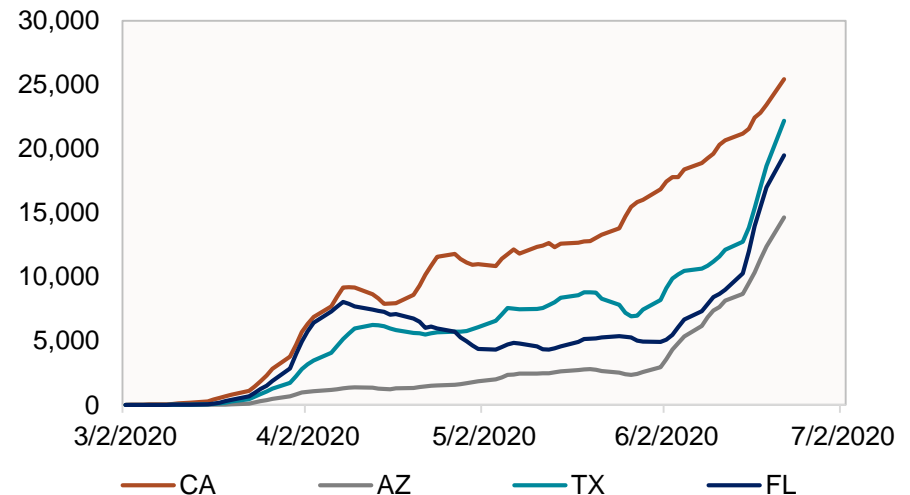
“All you need to do is look at the data, the facts, to see that the pandemic is not over by any means. The numbers speak for themselves.”

– Anthony Fauci, Jun 16

Slow grind back to 100%

- Restaurants, bars, cafes and hotels
- Trains, planes and buses
- Schools, houses of worship
- Retail and sports events
- Factories and offices

New cases over last week: Worrisome trend



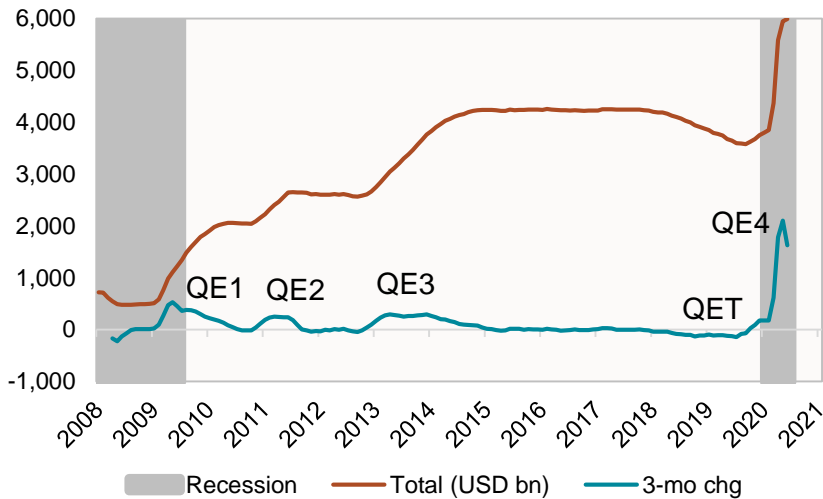
Source: Bloomberg, Epoch Investment Partners

The Age of Magic Money

Fed isn't "even thinking about thinking about raising rates" (until 2023)

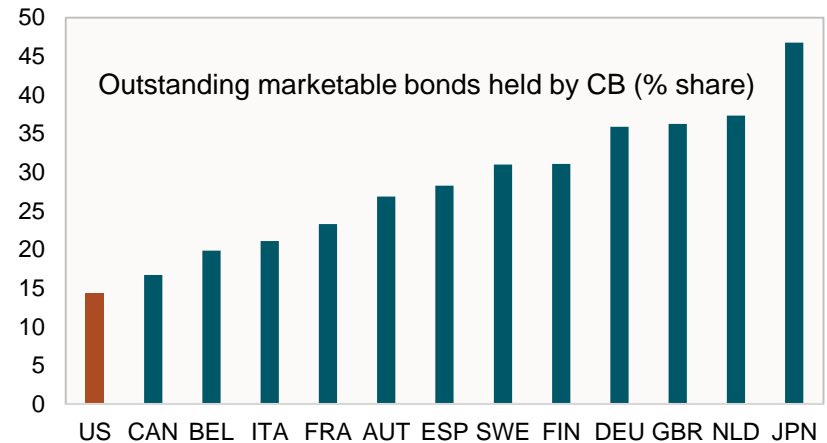
- FOMC: unemployment rate still at 5.5% two years from now
- Big output gap (5 – 6% of GDP): Keeps core PCE < 2%
- Yield Curve Control: Next step

QE4: Much more aggressive than previous stages



Source: FOMC, NBER, Bloomberg, Epoch Investment Partners

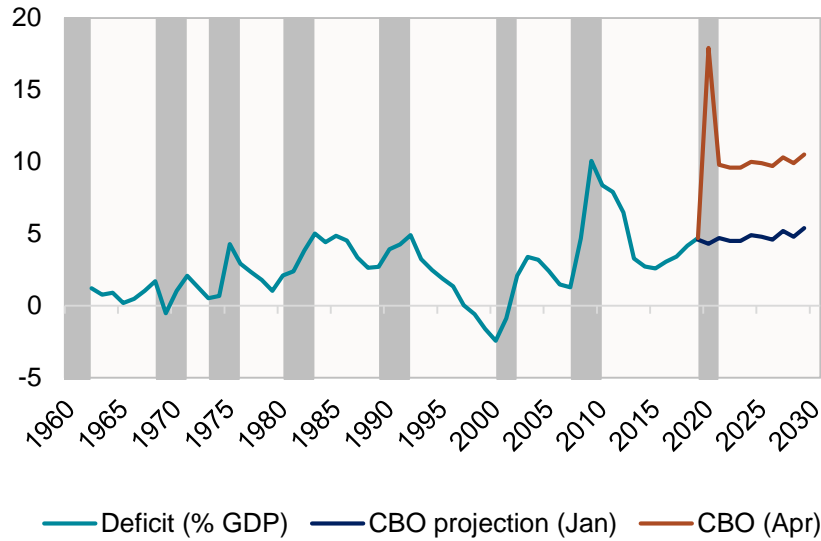
And the Fed's just getting started



Source: OECD

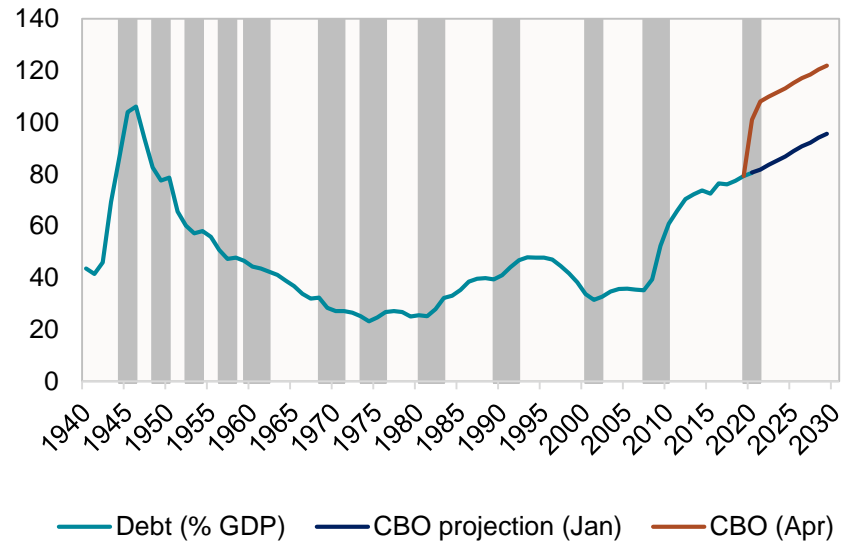
Fiscal Dominance: Treasury Policy Drives the Fed

Largest peacetime deficit in US history



Source: CBO, NBER, Bloomberg, Epoch Investment Partners

Highest federal debt (% GDP) ever



Source: CBO, NBER, Bloomberg, Epoch Investment Partners

The Hand of God: The Waning Power of Central Banks

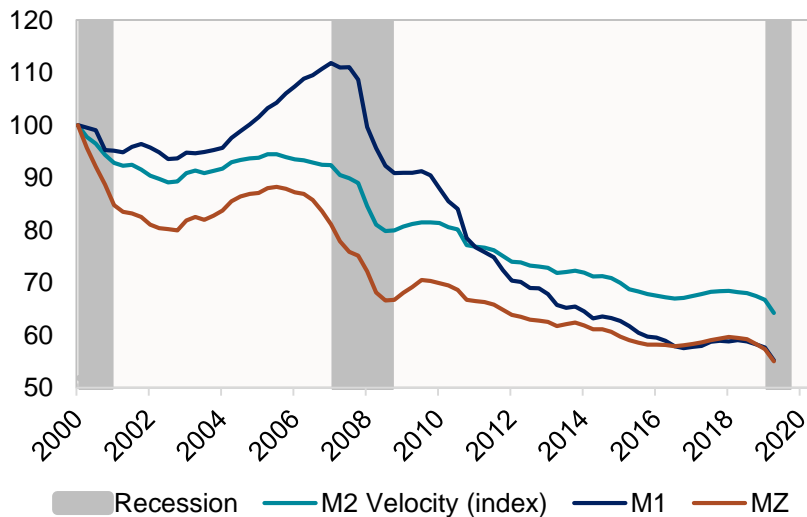
Returns on credit: Diminishing for decades

- Velocity of money: Downward trajectory for two decades
- Global incremental debt output ratio: Measures growth generated by each unit of debt
 - The pandemic has driven both measures into freefall
 - Worrying given the addiction the financial system has developed to credit

Absent inflationary pressure, the central bank has effective *carte blanche*

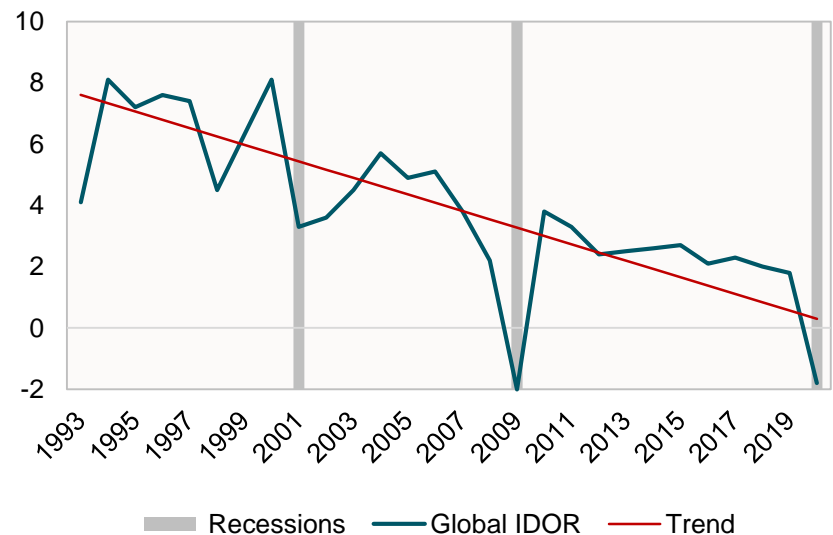
- This is the monetary trickle-down we're all now supposed to believe in
- Evidence from Japan and Europe suggests this hinders rather than boosts growth

Declining velocity of money: $MV = PT$



Source: Fed, NBER, Bloomberg, Epoch

Declining impact of debt on growth



Source: Independent Strategy

Zombification of the Economy: Crowding out Growth

Creative destruction: Obstructed by zombies

- Lower margins: For all incumbents
- Blocks new entrants: Reducing innovation and growth

Soaring corporate debt

- Increases fragility of corporate sector
- Places a hard ceiling on interest rates

Yield Curve: Historical mean is now the ceiling

- With so much debt, a steeper yield curve would crush the economy, causing recession



Source: NBER, Bloomberg, Epoch Investment Partners

COVID-19 as an Accelerant: Deglobalization

“There are good reasons to welcome the end of 1990s-style hyper-globalization. But we should not kid ourselves that there is any obvious alternative on offer.”

– Adam Tooze, Columbia University, Jun 2

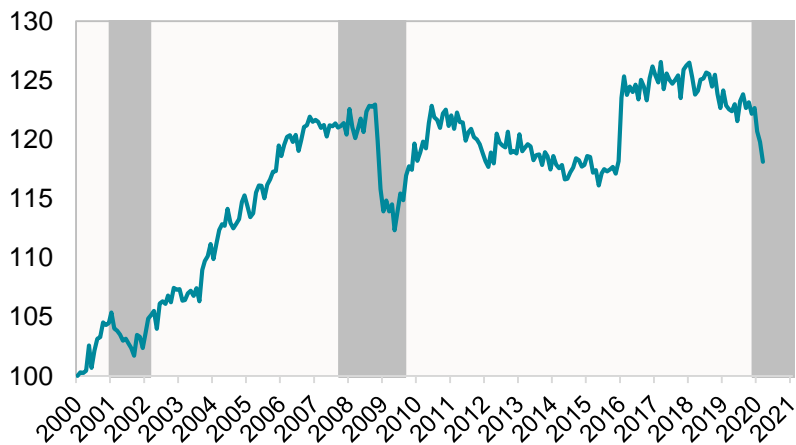
“Only an economist could argue that we should make F-35 fighter jets in China because it’s cheaper.”

– Senator Marco Rubio, May 4

“Economic thinking has privileged efficiency over resilience. We have done too much management of globalization for the benefit of those in Davos, and too little for the benefit of those in Detroit. The kind of thinking behind the Strategic Petroleum Reserve should probably be applied to a much wider range of goods. ... I am no fan of industrial policy generally, but somebody should have done something that assured that there was a serious American competitor in the 5G space.”

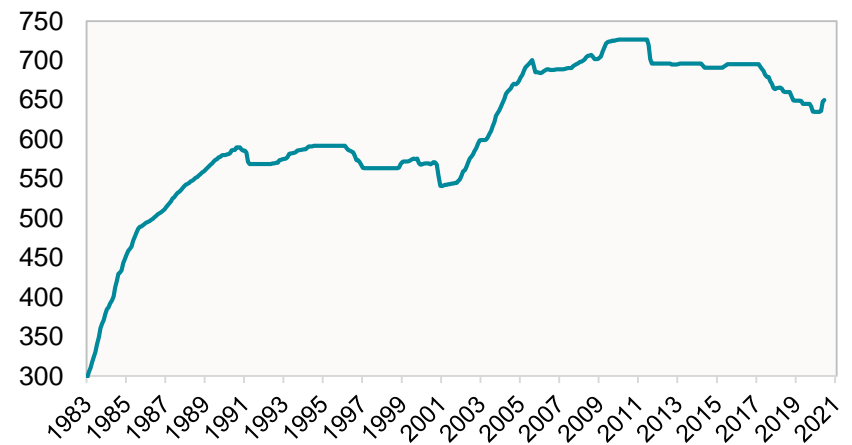
– Larry Summers, May 22

World Trade/IP: Peak is now behind us



Source: NBER, Bloomberg, Epoch Investment Partners

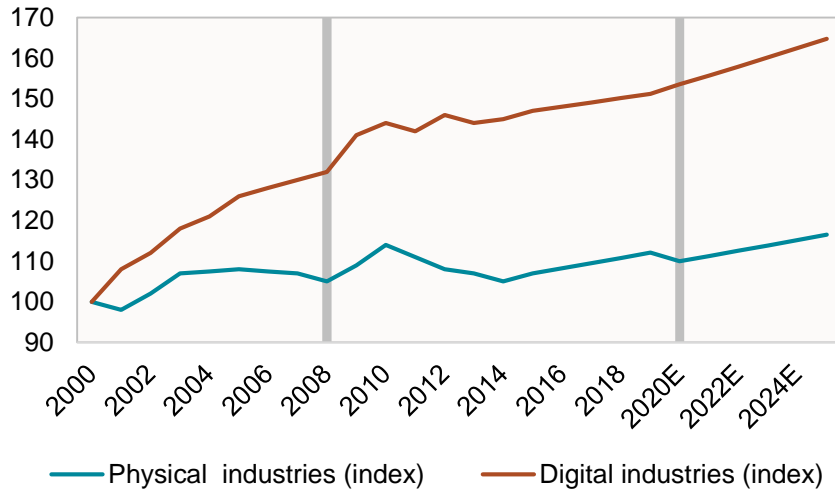
Strategic Petroleum Reserves (mn barrels)



Source: Bloomberg

COVID-19 as an Accelerant: Tech

Productivity of digital vs physical industries



Source: The Coming Productivity Boom, Epoch Investment Partners

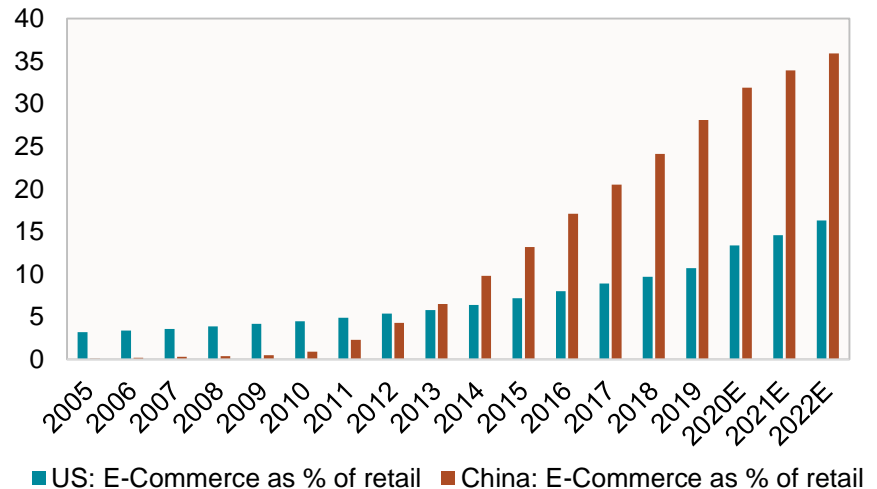
“As Covid-19 impacts every aspect of our work and life, we've seen two years' worth of digital transformation in two months.”

— Microsoft CEO, Satya Nadella, Apr 29

“If you're a shareowner in Amazon, you may want to take a seat, because we're not thinking small.”

- Jeff Bezos, Amazon, April 29

E-Commerce: Plenty of runway left



Source: BoA, Bernstein, Bloomberg

Technology Will Lead to Higher Payout Ratios

Capital Light Models are Great for Dividends (and buybacks)

$$\text{ROE} = \text{Profit Margin} \times \text{Asset Utilization} \times \text{Leverage}$$

$$\text{ROE} = \left[\frac{\text{Profits}}{\text{Sales}} \right] \times \left[\frac{\text{Sales}}{\text{Assets}} \right] \times \left[\frac{\text{Assets}}{\text{Equity}} \right]$$

$$\text{ROE} = \frac{\text{Profits}}{\text{Equity}}$$

↓
Payout ratios to rise with less need for equity to support decreasing asset base requirement

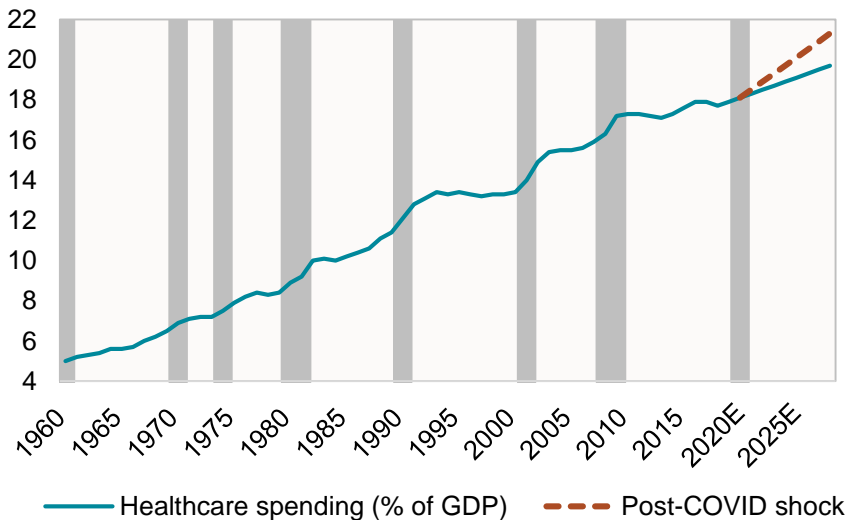
Lower labor cost increases margins and profits for distribution. Lower capital needs increase utilization and reduce the amount of debt and equity needed.

COVID-19 as an Accelerant: Healthcare

The pandemic has prompted a reckoning throughout the country's health care infrastructure

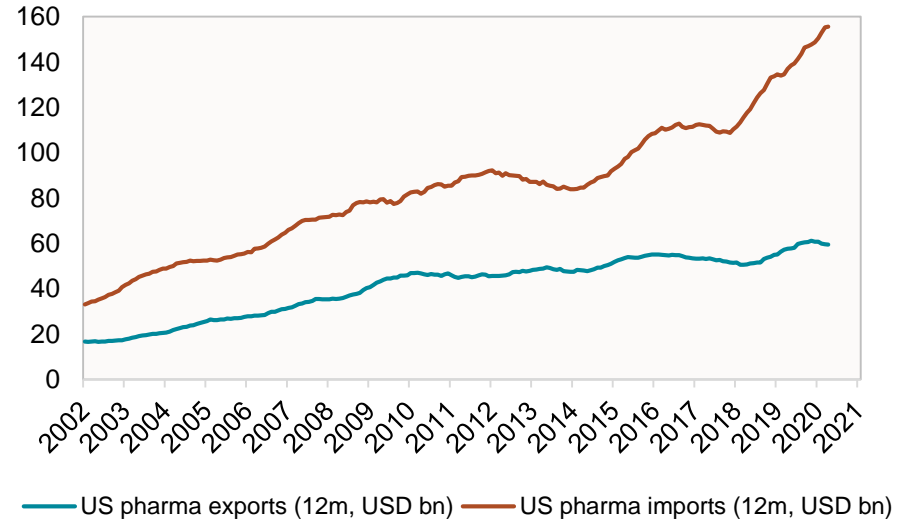
- New era of health care preparedness: Need a dramatic scaling up of the country's disaster readiness
- Supply-chains being domesticated: Especially diagnostic equipment, therapeutics, and PPE
- Big Tech in HC: Healthcare industry is undergoing systematic changes driven by an aging demographic, explosion in healthcare data, and increasingly complex administrative infrastructure.
 - The Covid-19 outbreak has made these challenges even more urgent.
 - 1/3 of the world's data resides in the healthcare industry – Ponemon Institute
 - Covid-19 has accelerated telemedicine 'by a decade'
- Biotech and medical devices: Have especially benefited from the pandemic

U.S. Healthcare Spending (% of GDP)



Source: National Health Statistics, NBER, Epoch Investment Partners

U.S. pharmaceutical imports have soared

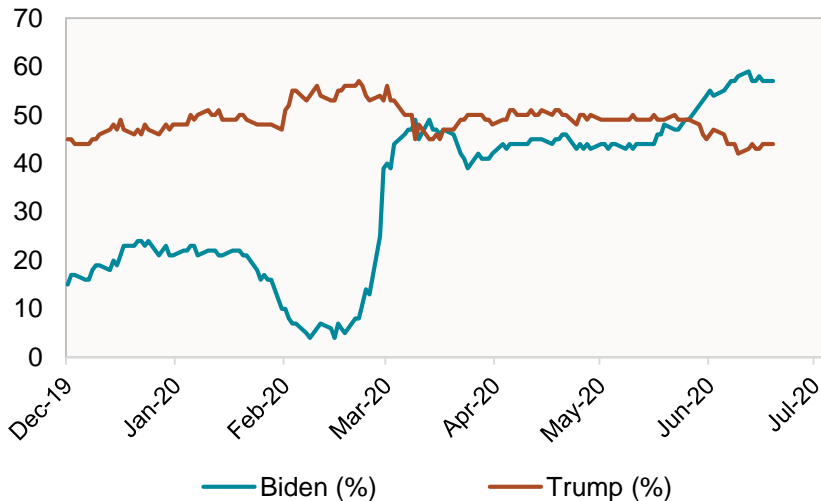


Source: U.S. Census Bureau, CFR, Bloomberg

November Election: Yet Another Source of Uncertainty and Volatility

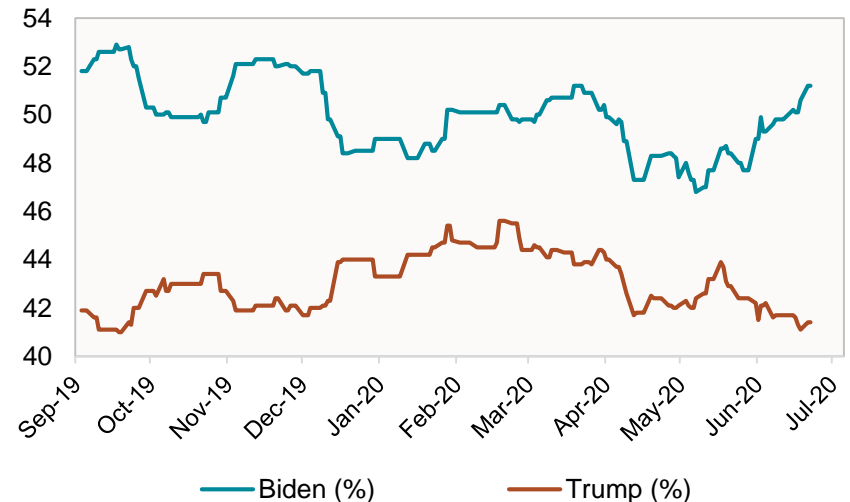
- Taxes: Biden proposed reversing half of Trump tax cut, taking statutory rate to 28%
 - Would increase effective rate by 4-5%, shaving \$9 off 2021 EPS
 - Might also increase payroll tax, and individual taxes for wealthy
- Energy: Roll back energy deregulation. Biden is serious about climate change
- Pharma pricing: Allow Medicare to negotiate drug pricing directly
 - With Covid, more bipartisan that drug prices need to come down
- Accelerate tech anti-trust: Already gaining bipartisan momentum
- Relationship with China: Will continue to deteriorate regardless of election outcome
 - See our 12/2019 paper, “Cold War 2.0: The Platform, the Players, and the Stakes”

Betting sites: Biden has a 13 ppt lead



Source: PredictIt.org, Bloomberg

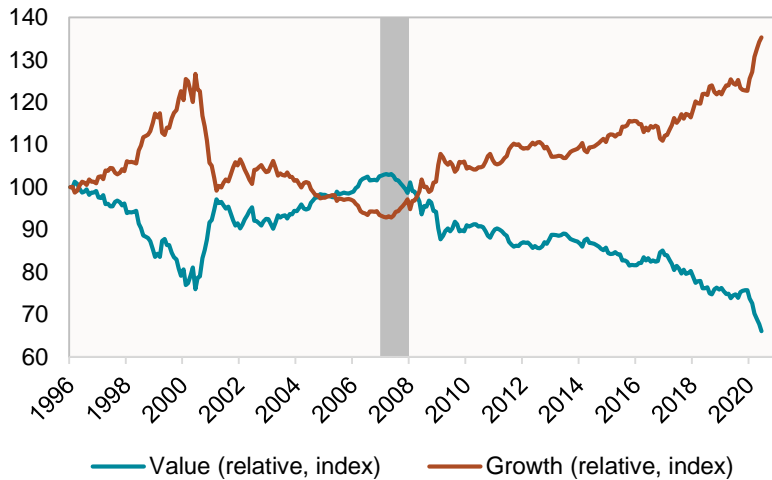
National poll average: Biden ahead 10 ppts



Source: Real Clear Politics, Bloomberg

Growth has Outperformed Since 2007: What's Special about that Year?

Growth's outperformance: A 13-year run



Source: Bloomberg, Epoch Investment Partners

2007: Tech boom took the world by storm

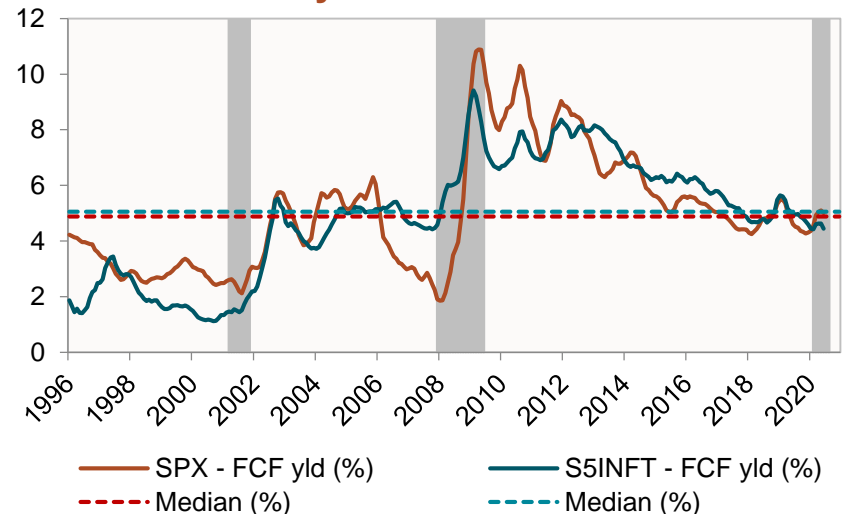
- As emphasized by Thomas Friedman in “The World is Flat”
- Apple launched the iPhone; Facebook and Twitter went global; Kindle and Android were released; Airbnb was founded; Google bought YouTube; IBM created Watson; GitHub and Hadoop emerged; ...

It was a key technological inflection point

Growth's outperformance coincides with the rise of bits vs atoms

- A trend accelerated by COVID-19
- Digitization of economy: Still in early phase, so growth/tech's best days remain ahead
- But in the short-term is it due for a pullback?

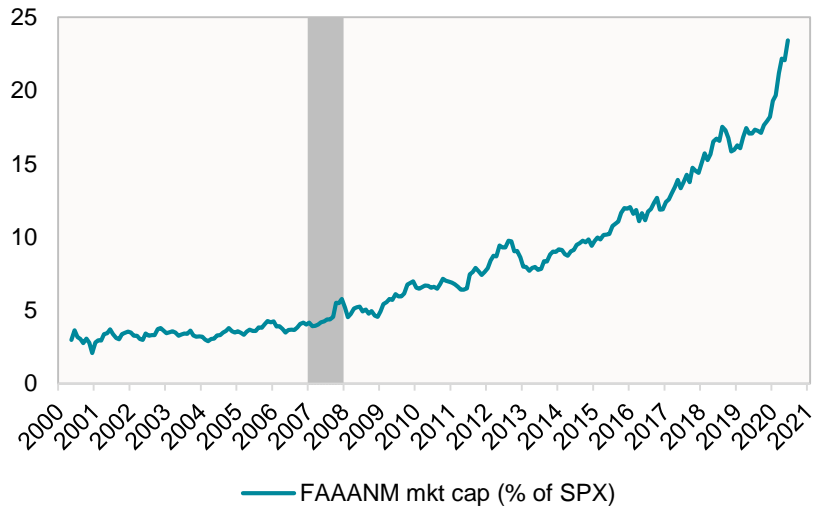
Tech's FCF yield: Similar to market's



Source: Bloomberg, Epoch Investment Partners

Rise of the Platforms: Economies of Scale and Network Effects

Platforms: An ever bigger cut of the market



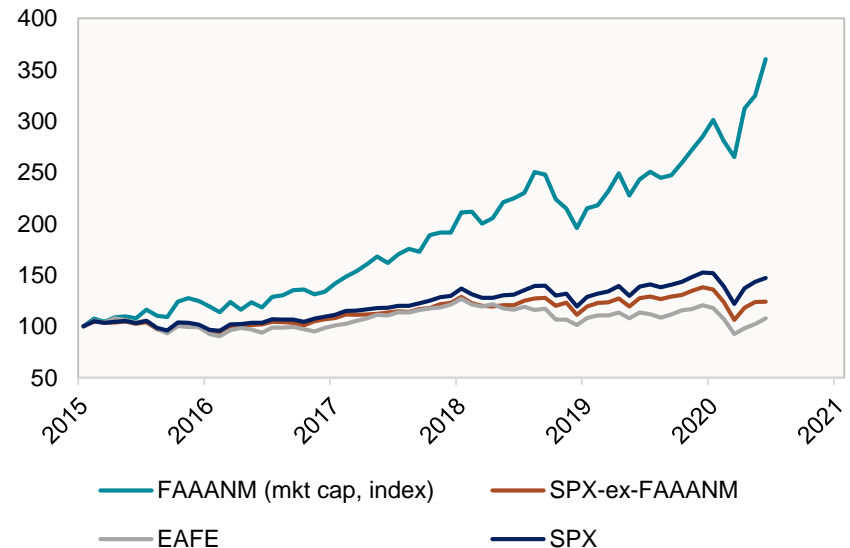
Source: Bloomberg, Epoch Investment Partners, NBER, Minack
 FAAANM: Facebook, Apple, Alphabet, Amazon, Netflix, Microsoft

The digitization of the economy

Please see our insights on this topic

- When “bits” meet “atoms” (Jan 2018)
- Tech is the new macro (Jun & Aug 2017)
- Blitzscale and hope (Jun 2019)

Ex-Platforms: Markets look tame



Source: Bloomberg, Epoch Investment Partners, Minack

Lower for Longer: A World of Yield Starvation

Question: Is the Fed worried that a potential asset price bubble is forming?

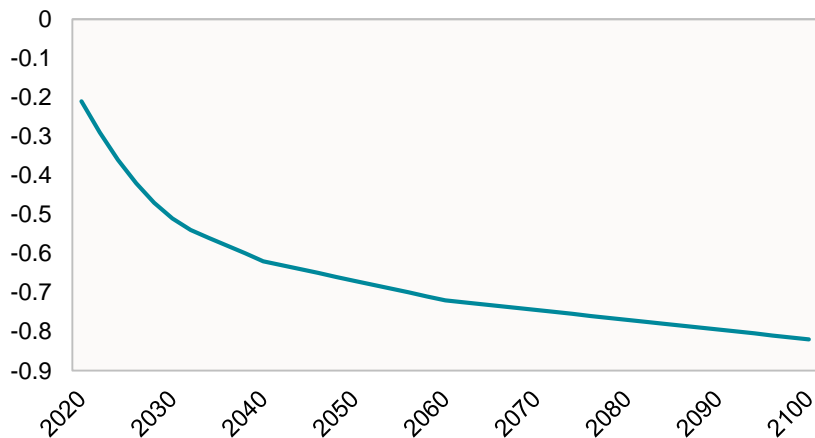
Answer: “Our principal focus is on the state of the labor market and inflation. Inflation of course is low, and very likely to remain low for some time. Then it’s really about getting the labor market back into shape and that’s been our major focus. Now if we were to hold back because we think asset prices are too high, even though others might not think so, what would happen to the people that we’re actually, legally supposed to be serving? We’re supposed to be pursuing maximum employment and stable prices, and that’s what we’re pursuing.”

– Jay Powell, Jun 10

Bond yields: Driven lower by demographic challenges, excessive leverage & hyper-aggressive CBs

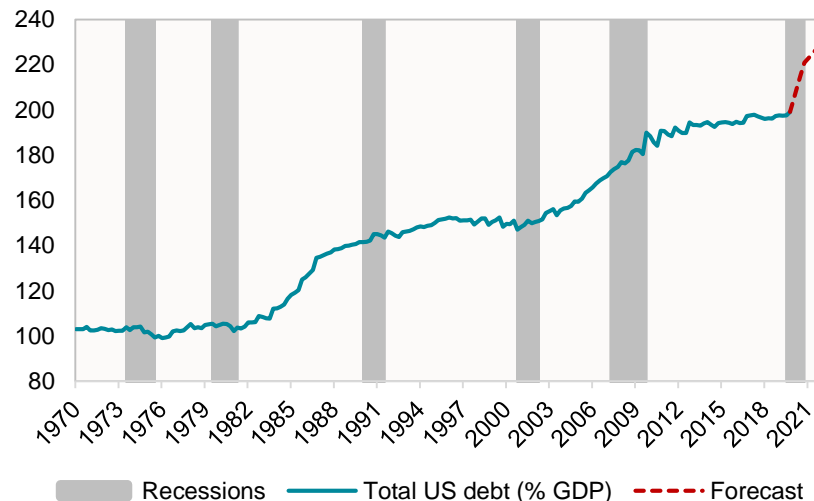
- Further, historically pandemics depressed real rates for years, even after they have been contained

Est. rate decline (ppts) due to demographics



Source: Empirical Research. Decline relative to 2016 baseline year.

Debt destroys demand: Lowers rates

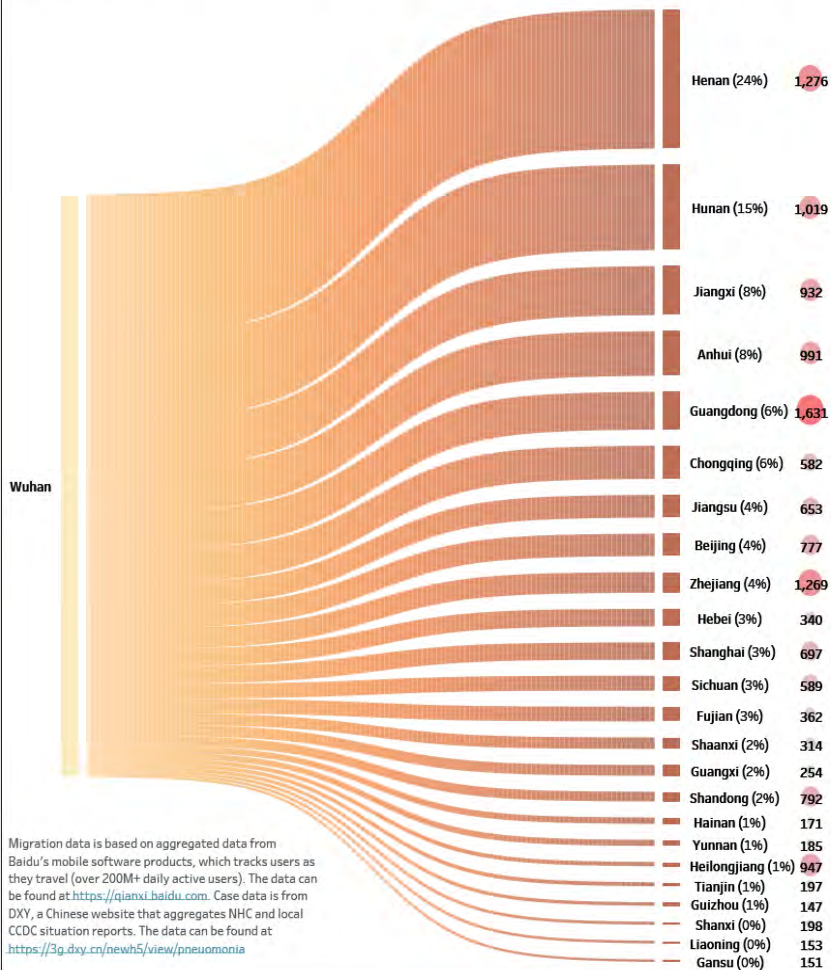


Source: Bloomberg, Epoch Investment Partners
Total debt: Gov't + corporates + households

Research Question in Late January – Will Novel Coronavirus Spread in China? What's the Impact?

COVID-19 Confirmed Cases Based on Migration From Wuhan (2020-01-14 to 2020-01-24)

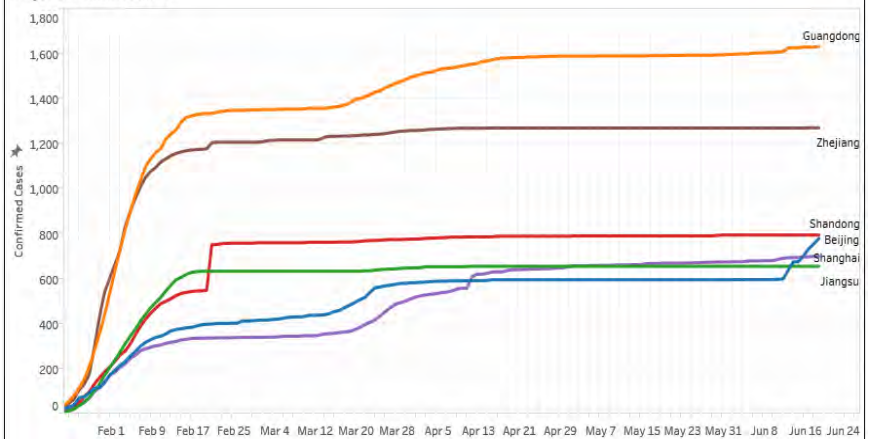
Last Updated: 2020-06-19



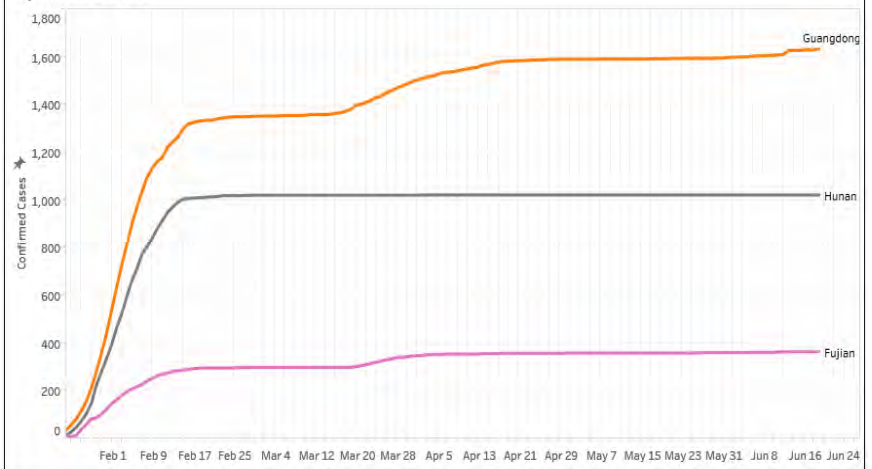
China - Trended COVID-19 Confirmed Cases By Select Provinces

Last Updated: 2020-06-19

Major Economic Areas



Top Macau Visitors

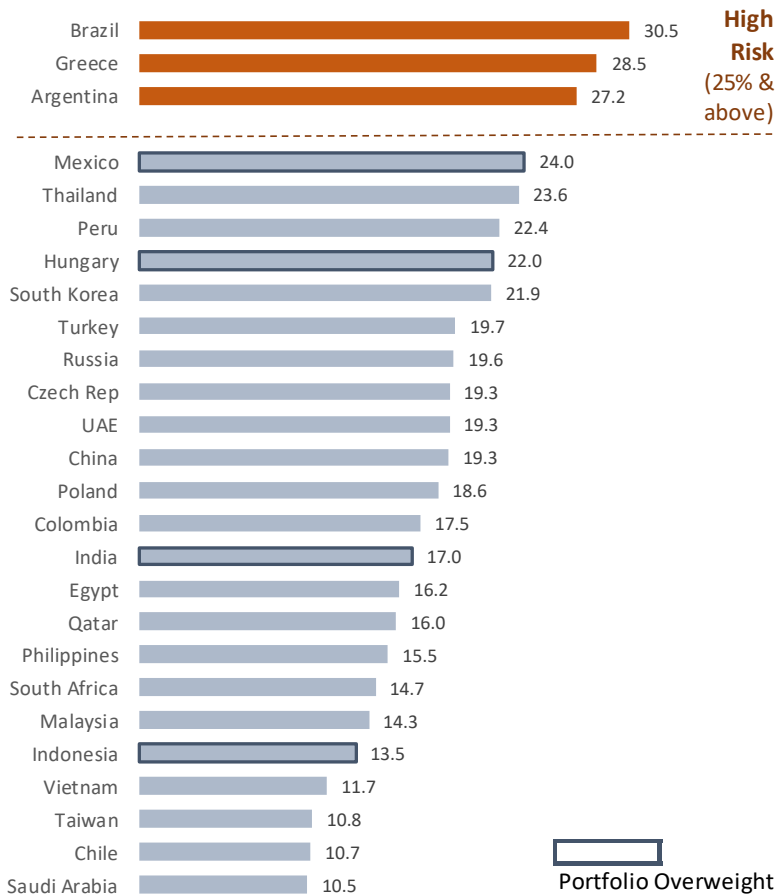


Source: DXY (Note: this is a Chinese data aggregator that collects local media and govt reports), Baidu Qianxi, Johns Hopkins University COVID-19 Data Repository.

Research Question in March – Which Countries Are Most Vulnerable To A Global Pandemic?

Expected Downside Volatility in Next 3 Months (%)

EM Country Risk Model, Annualized, As of 3/13/2020



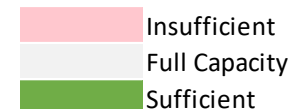
EM: Projected Healthcare System Capacity to Manage COVID

As of 3/18/2020

Country	Cases Per Million	Est. Days for Cases to Double*	Stress Test: 150 Cases/1M**		
			Acute Care Beds	ICU Beds	Physicians & Nurses
South Korea	161.8	1,335	Sufficient	Sufficient	Sufficient
China	58.1	915	Sufficient	Sufficient	Sufficient
Czech Republic	47.5	65	Insufficient	Insufficient	Sufficient
Greece	38.0	205	Sufficient	Insufficient	Sufficient
Malaysia	24.7	65	Insufficient	Insufficient	Sufficient
Chile	10.6	25	Insufficient	Insufficient	Insufficient
Poland	6.3	25	Insufficient	Insufficient	Insufficient
Thailand	3.1	90	Insufficient	Insufficient	Insufficient
Turkey	2.3	25	Insufficient	Insufficient	Insufficient
Philippines	1.9	40	Insufficient	Insufficient	Insufficient
Brazil	1.4	15	Insufficient	Insufficient	Insufficient
Russia	1.0	10	Insufficient	Insufficient	Insufficient
Indonesia	0.8	25	Insufficient	Insufficient	Insufficient
Mexico	0.7	15	Insufficient	Insufficient	Insufficient
India	0.1	15	Insufficient	Insufficient	Insufficient

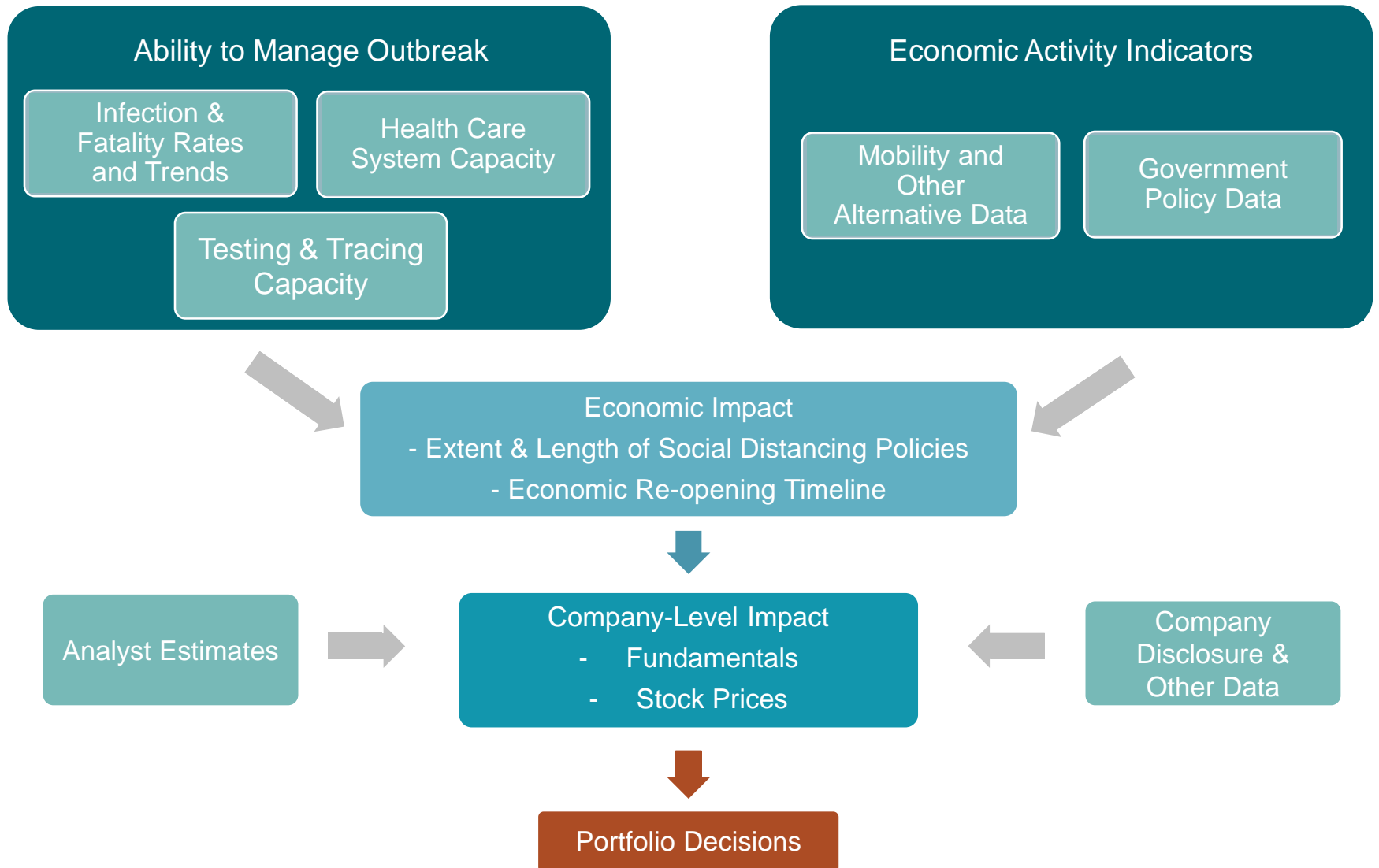
* Based on growth of cases in recent days

** Average cases/1M in developed countries



Source: Bloomberg, Johns Hopkins University COVID-19 Data Repository, Worldometer, Organization for Economic Cooperation and Development (OECD), World Health Organization (WHO), World Bank Open Data.

Our Framework - From Data to Analysis to Decisions

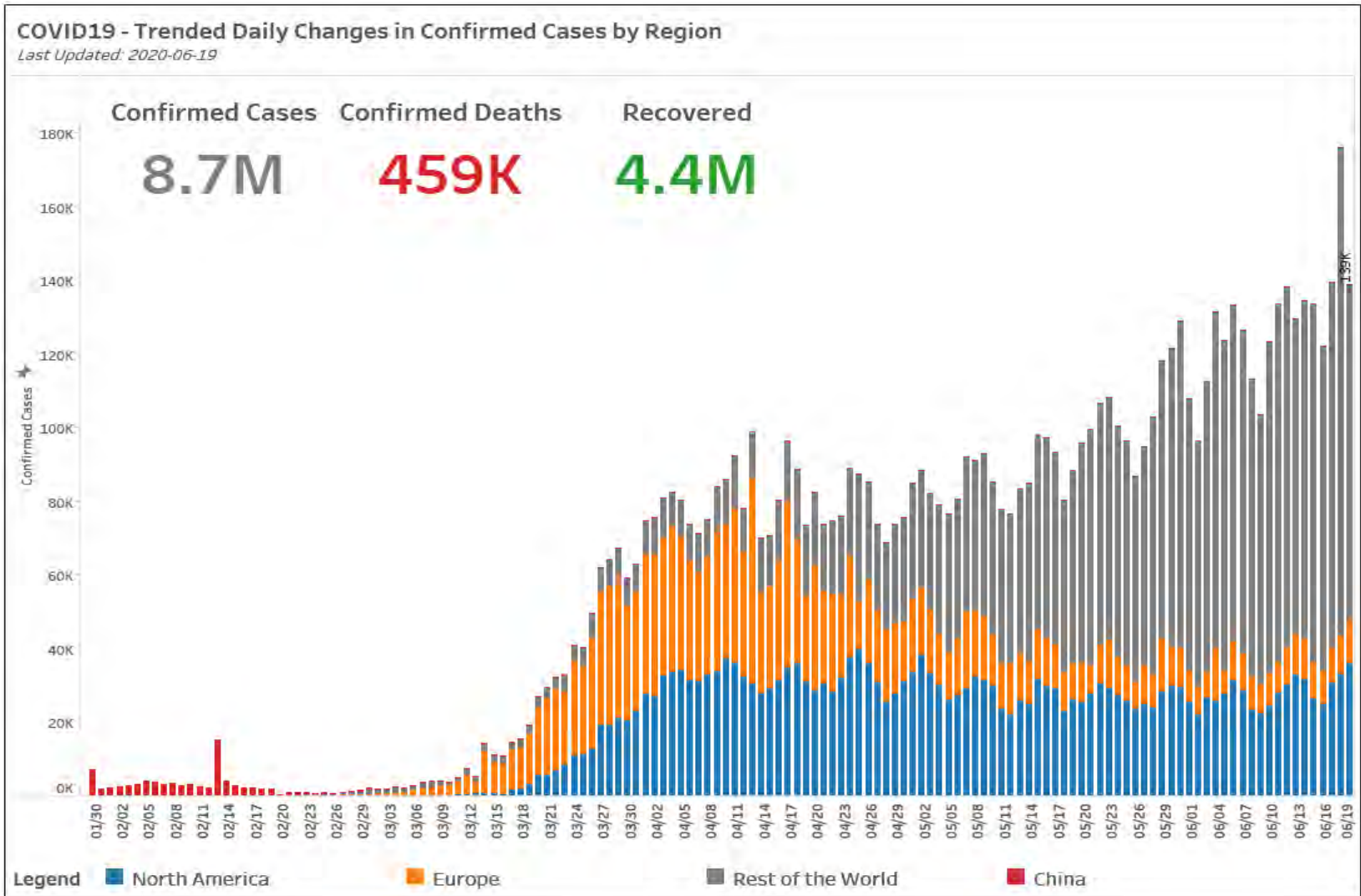


Research Question Since Early April – How Do We Identify High-Risk Countries?

COVID19 - Global Current Situation Scorecard														
Last Updated: 2020-06-19														
	Rate of Infection			Public Health System Capacity				Health Care System Capacity						
	New Cases (7-Day Avg.)	New Cases/1M (7-Day Avg.)	New Cases Z-score (14-Day)	Total Tests/1M	Daily New Tests/1M (7-Day Avg.)	Positive Test Rate	Positive Test Rate Z-score (7-Day)	Acute Care Beds	ICU Bed	Medical Personnel	Infection Fatality Rate	Infection Fatality Rate Z-score (7-Day)	Recovery-to-Death Ratio	Recovery-to-Death Ratio (7-Day)
Brazil	25,387	119.5	-0.13	11,032	659	41.9%	-2.22				4.9%	-1.05	10.9	1.41
USA	24,838	75.1	0.10	80,755	1,573	8.5%	-1.23				5.3%	-1.40	7.7	1.22
India	11,952	8.7	0.66	4,659	110	5.9%	1.31				3.3%	0.95	16.3	-0.70
Russia	8,234	56.4	-0.65	111,846	2,059	3.5%	-1.78				1.4%	1.48	41.4	1.72
South Africa	3,617	61.0	0.78	20,716	481	6.8%	1.32				2.1%	-1.32	25.9	-0.19
Turkey	1,430	17.0	0.90	33,477	544	6.5%	-1.45				2.7%	-1.22	32.0	1.43
UK	1,294	19.1	-0.21	106,956	2,143	4.1%	-1.34				14.1%	-0.66	-	-
Sweden	1,108	109.7	0.20	38,195	858	14.5%	-1.74				9.0%	-1.42	-	-
Indonesia	1,057	3.9	0.09	2,199	64	7.3%	-1.54				5.4%	-1.49	7.3	1.16
Germany	485	5.8	0.24	60,038	572	3.8%	-1.45				4.7%	-1.04	19.4	0.14
France	440	6.7	-0.02	21,214	-	11.5%	1.48				18.7%	-1.40	2.5	1.59
Canada	384	10.2	-0.66	60,837	1,009	4.4%	-1.39				8.3%	1.53	7.5	1.05
Spain	366	7.8	0.31	103,232	1,104	6.1%	-0.51				9.3%	-1.62	-	-
Portugal	311	30.5	-0.08	101,227	1,096	3.7%	-1.44				4.0%	-1.61	15.8	1.66
Italy	288	4.8	-0.09	79,908	916	4.9%	-1.48				14.5%	0.84	5.2	1.26
Singapore	252	43.1	-0.59	98,514	2,137	7.2%	-1.01				0.1%	-0.91	1,258.2	1.49
Israel	220	24.0	0.38	87,495	1,194	2.5%	0.03				1.5%	-1.60	51.2	1.12
Netherlands	123	7.2	-0.44	29,496	494	9.8%	-1.62				12.3%	-1.11	-	-
Belgium	94	8.1	-0.39	93,836	1,116	5.6%	-1.49				16.0%	-1.24	1.7	1.11
Japan	54	0.4	0.50	3,134	76	4.5%	-2.23				5.3%	-0.21	17.0	1.24
Denmark	44	7.6	0.22	148,408	2,713	1.4%	-1.17				4.9%	-1.32	18.7	1.37
S. Korea	43	0.8	-0.26	22,588	213	1.1%	-1.44				2.3%	-1.66	38.7	0.59
China	37	0.0	0.81	-	-	-	-				5.6%	-1.25	16.9	1.53
Austria	34	3.8	0.15	61,316	563	3.1%	-1.54				4.0%	0.62	23.5	-0.82
Switzerland	22	2.5	0.17	57,075	762	6.3%	-1.45				6.3%	0.88	14.8	-1.02
Malaysia	19	0.6	-0.01	20,851	248	1.3%	-1.04				1.4%	-0.90	66.7	1.22
Australia	17	0.7	0.72	77,063	1,218	0.4%	-1.63				1.4%	-1.40	67.4	1.04
Ireland	17	3.4	0.15	79,707	741	6.4%	-1.42				6.8%	1.73	13.2	-1.84
Norway	14	2.6	-0.04	55,061	672	2.9%	-1.29				2.8%	-0.13	33.4	-1.46
Finland	9	1.5	-0.59	40,502	247	3.2%	-0.75				4.6%	-1.73	19.0	-0.59
Hong Kong	3	0.4	0.35	40,175	1,126	0.4%	-1.35				0.4%	-1.64	268.5	1.22
Thailand	2	0.0	-0.26	6,708	-	0.7%	1.94				1.8%	-1.94	51.9	1.87
Taiwan	0	0.0	0.37	3,137	06	0.6%	-0.60				1.6%	-1.02	62.0	0.85
New Zealand	0	0.1	0.37	65,465	646	0.5%	-1.76				1.5%	-1.12	67.4	-

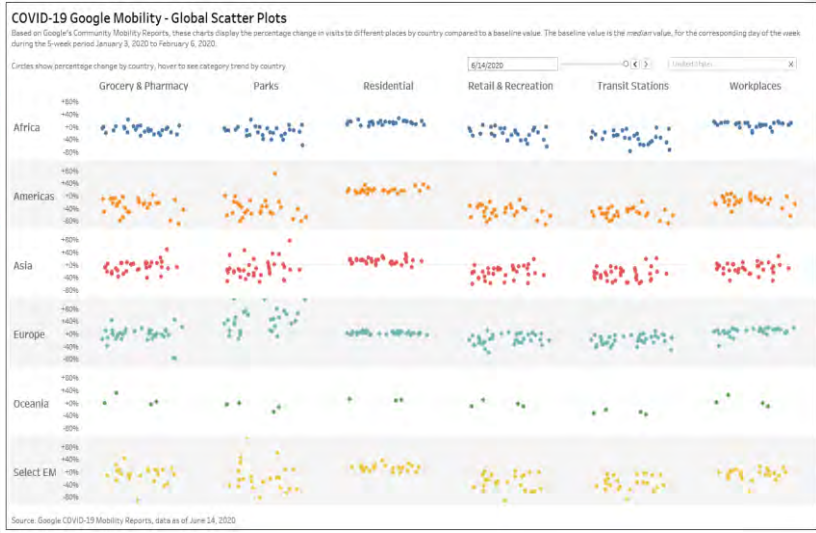
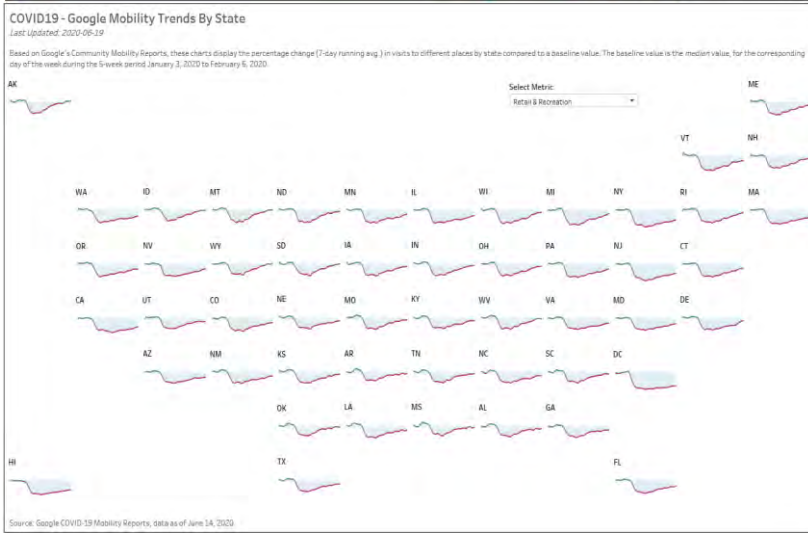
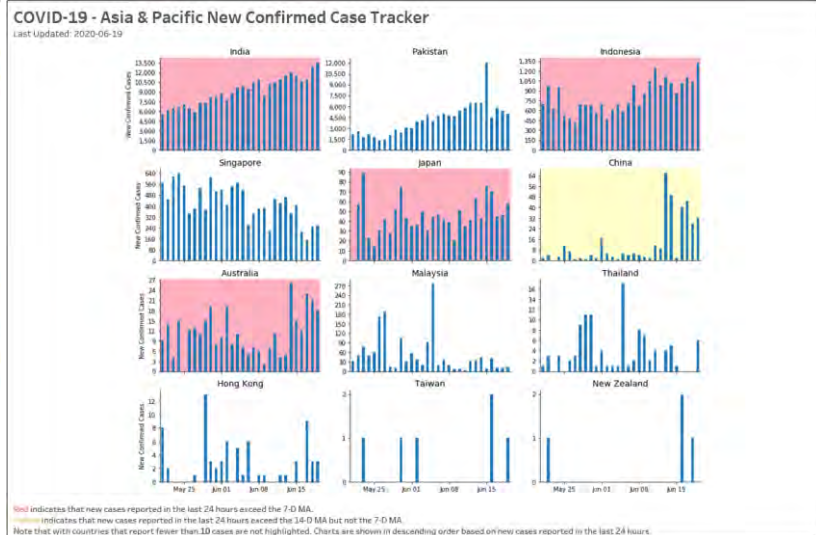
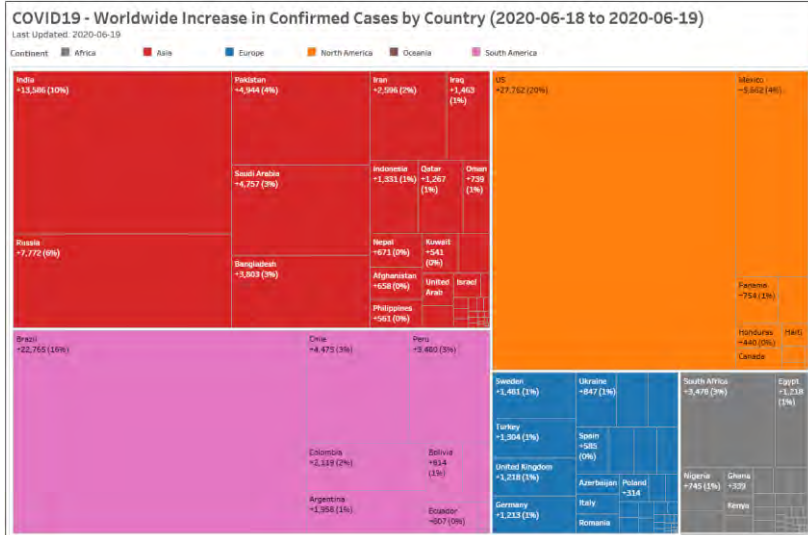
Sources: Johns Hopkins University COVID-19 Data Repository, Worldometer, Organization for Economic Cooperation and Development (OECD), World Health Organization (WHO), World Bank Open Data.

COVID-19 Tracker – Daily Changes in Confirmed Cases by Region



Sources: Johns Hopkins University COVID-19 Data Repository, Worldometer

Reopening Tracker – New Cases and Google Mobility Trends



Sources: Johns Hopkins University COVID-19 Data Repository, Worldometer, Google COVID-19 Community Mobility Reports

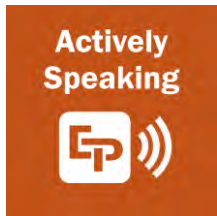
Investment Conclusions

1. The 90% Economy: The Long Road Back to Normal
 - The last 10 to 20% will be a tough, slow grind
2. The Age of Magic Money: Who Will Pay the Bill?
 - Fed isn't "even thinking about thinking about raising rates"
 - Fiscal dominance: Treasury policy driving the Fed, a dangerous experiment
3. COVID as an Accelerant: Deglobalization, Healthcare and Tech
 - Tech: We've seen years' worth of digital transformation in a matter of months
4. November Election: Yet Another Source of Uncertainty
 - Policy matters: Taxes, energy, finance, anti-trust, pharma pricing, deregulation
5. A World of Yield Starvation: For Years to Come
 - Bond yields driven lower by demographic challenges, excessive leverage, hyper-aggressive central banks and, now, the pandemic
6. Valuations vs Liquidity: Tug of War
 - Equities appear moderately expensive
 - However, market is being driven by liquidity and Fed is not about to reverse course
7. As the COVID pandemic continues to evolve, it is critical for investors to be data-driven
 - Important to curate and analyze the right information
 - Be prepared to alter beliefs as facts change

As a result of the above points, we believe the best positioned companies are those that have a demonstrated ability to produce sustainable FCF and allocate that cash flow effectively between return of capital options and reinvestment/acquisition opportunities.

Epoch Thought Leadership

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The COVID-19 pandemic and its effect on the market has brought dividends to the top of many investor’s minds. Will dividend paying companies be able to sustain their payouts in the face of an economic slowdown? How will these pressures affect the outlook for dividends?



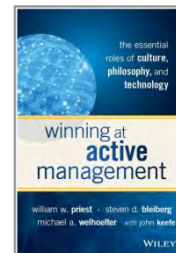
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“When ‘Bits’ Meet ‘Atoms’”

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