

Thematic Investing

Covid-19 Investment Implications Series:
The World After Covid Primer

Thematic Investing

**This is a redacted version of the original Primer Report, published May 3, 2020
“The Day After Tomorrow”**

Covid-19 is one of those rare events in history – like the Great Depression and fall of the Berlin Wall that will completely reshape geopolitics, societies, and markets. It is likely to be a catalyst for further tectonic shifts in the US & China decoupling, peak globalisation of supply chains and central bank quantitative failure. The consequences could be far-reaching, ranging from social unrest to further instability in oil, new economic doctrines, and re-evaluation of the social contract in sovereign states.

Post-Covid: times they are a-changing in the world order

Data is being created at the fastest rate ever, already up 50% vs. pre-Covid in parts of the west. The effect is intensifying the tech war, with governments becoming bigger and more influential – the Fed printed US\$1mn every second at peak panic. Societies will be safer but less private, with more than 30 countries issuing citizen tracking orders.

5 themes and best/worst placed after the Great Isolation

Alongside a global survey of BofA analysts covering 3,000 companies and spanning 25 sectors, we outline 5 themes with US\$20tn market cap of enablers for the world post-Covid. Among the secular beneficiaries are healthcare, digital consumer, ESG, staples, industrial real estate, and technology. Some of the challenged sectors include: fossil energy, commercial real estate, autos, legacy consumer, and the sharing economy:

- 1. Geopolitics & Globalisation – the dragon vs the eagle, round II:** rising tensions clashing East/West doctrines. ‘Global to local’ on fast-forward. A third of BofA analysts now expect their companies to push for supply chain reshoring.
- 2. Tech War – the race for supremacy:** data is the new must need resource, meaning a resurfacing tech-war as the new geopolitical battleground. Half of our analysts expect higher IT spending than pre-Covid. We anticipate a wave of investment in new infrastructure, AI technologies and moonshot future tech.
- 3. Big Government – a new social contract:** the state has a new economic & social mandate. A third of analysts expect some erosion of shareholder rights = rise of stakeholders. Government ‘data fever’. Privacy will be the currency to buy safety.
- 4. Health – the new wealth and focus for ESG:** public health is the new national wealth. Stakeholders will increasingly focus on health-related ESG metrics; governments will come to appreciate health more as an economic resource.
- 5. The New Consumer – “OK, Zoomer”:** Gen Z is uniquely prepared for the new era of social distancing, the online world, and sustainability. Other generations will be slow to adapt. Millennials, the “double downgrade” generation, is most exposed to earning cuts as more US jobs have been wiped out this past month than have been created since the great financial crisis. EM middle class growth will stall.

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Refer to important disclosures on page 15 to 16.

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Table 1: Beneficiaries & challenged sectors in a post-Covid world

Sector	Beneficiaries/Challenged	Covid-19 Comments
Communication Services		
Telco Service Providers	Beneficiary	Work from home (WFH) after coronavirus will require better connectivity infrastructure, risk from 5G capex costs & cybersecurity bringing network down
New Media & Entertainment	Beneficiary	Gen Z will drive faster shift towards eSports, video & music streaming consumption, total reality will be nextgen media platform to enable this in the future
Big Tech Platforms	Beneficiary	Covid-19 showing connected importance of multi-vertical platforms (social media, messaging, online shopping), but beware of data privacy regulatory headwinds
Old Media & Entertainment	Challenged	Coronavirus will accelerate cord cutting of TV and switch to streaming, advertising agencies suffer further through lower consumer spend on top of digital marketing disruption
Consumer Discretionary		
eCommerce	Beneficiary	Online is king now with innovation in logistics (warehouse automation, same day/drone delivery), further growth in voice AI shopping to catalyse ecommerce
Homebuilders/Home Improvement	Beneficiary	Stay at home theme to be long lasting with peak urbanization in DMs where people look to move to rural suburbs, DIY home improvement should benefit
Autos	Challenged	Less commute demand, cut to consumer incomes, growing demand for sustainability, continued improved air quality. Consumer preference for private over shared mobility, longer term need for AVs could be positive.
General/Apparel Retail	Challenged	Peak stuff and shift to online eCommerce accelerated post-Covid growing the disruption, private label disruption, fast fashion sustainability concerns, global to local apparel/sourcing automation is costly
Consumer Durables & Luxury	Challenged	Potential addressable market to grow slower/shrink as bottom billions' move to middle class stalls, but limited long term impact on high income market from Covid may limit cut in existing demand
Consumer Services (Hotel/Travel)	Challenged	Lasting mistrust of consumers over safety concerns, less business travel as meetings migrate online, sustainability pressures
Consumer Staples		
Household & Personal Care	Beneficiary	Hygiene and health is the new wealth for consumers, but private label may disrupt incumbent "billionaire brands" with Millennials and Gen Z less brand loyal
Food Staples	Beneficiary	Lockdown necessity and essentials, DM rising focus on health & wellness, plant based alternatives, EM Consumer also structural driver for FMCG
Beverages / Alcohol	Beneficiary	Consumer turning to at home drinking, younger generation preferences for craft alcohol, marijuana/cannabis infused drinks innovation
Food Retail	Beneficiary	Lockdown necessity, online innovation (food delivery, meal kits), future contactless stores, logistics automation
Tobacco	Challenged	Coronavirus impact on respiratory disease could reduce smoking/ecigarettes/vaping, legalization of marijuana could be further disruption
Energy		
Oil & Gas – Majors & Refining	Challenged	Covid19 could be final nail in the coffin for sector with OPEC crisis: EVs impact on demand, growth of renewables & energy storage, plastic backlash/petchem risk
Financials		
Other/Diversified Financials/Wealth	Beneficiary	Even greater demand for wealth management by Boomers, Millennial demand for robo-advisors, growth of ESG investing to boost assets
Payments	Beneficiary	Cash is no longer king nor hygienic with the growth of mobile/eCommerce transaction volume, future implications of blockchain on sector
Banks	Challenged	Retail banking branches may have to close faster with online & fintechs disrupting traditional banking (FX transactions, digital, mobile), big data/open banking (PSD2)
Insurance	Challenged	Liabilities for sectors increasing from: extreme weather risks, longevity risk, pandemics/travel impact, autonomous/connected vehicles (telematics)
Real Estate		
Industrial, Storage, SF Rental, Logistics	Beneficiary	Higher demand long-term from eCommerce logistics and re-shoring manufacturing needs, Millennials likely can only afford to rent more rather than own property
Data Center, Telco Tower	Beneficiary	Work from home (WFH) to accelerate demand for data intensive services like streaming, online shopping, edtech, eSports, 5G etc
Rural, Multifamily	Beneficiary	Dwellers could increasingly move from urban to rural areas to avoid dense cities, higher demand long-term from social distancing needs
Offices	Challenged	Work from home trend to accelerate post Covid, decreases demand for office in dense cities although companies may need more square feet, less co-working
Commercial/Shopping Malls/Lodging	Challenged	Decrease in demand for commercial real estate, reduction in corporate travel to dent hotel demand, death of the mall with more online shopping
Health Care		
BioPharma & Biotech	Beneficiary	Healthcare sector reweighting to become ESG story, innovation in AI driven drug discovery and helping to cure other disease (malaria, cancer Alzheimer's, Parkinson's)
Life Sciences Tools/Diagnostics	Beneficiary	Disease surveillance as arms dealer of healthcare by enabling nextgen human DNA genome sequencing, personalised medicine, biomarkers
MedTech / HealthTech	Beneficiary	Covid 19 to drive revolution in digital health, telemedicine, electronic healthcare records (EHR), patient data analytics, growth in robo-surgery
Healthcare Distributors & Services	Beneficiary	Retail pharmacies could be beneficiaries of more point of care diagnostics, but facing increasing Big Tech disruption (Amazon Pillpack) on distributors, PBMs
Health REIT/Facilities/Hospitals	Challenged	Pressure on hospitals, senior living, skilled nursing facilities, retirement homes, shift from volume-to-value based healthcare + rise of private startups to disrupt further
Industrials		
Capital Goods	Beneficiary	Reshoring of manufacturing likely to drive growth in domestic industrial automation driven by IIoT, sensors, big data, industrial software, renewable equipment
Defence	Beneficiary	Increasing geopolitical tensions to spur spending on homeland security, tech war likely to increase focus on sector
Business Services	Beneficiary	Multiple beneficiaries include safety & security, pest control, data analytics, educational content, waste management
Aerospace / Transport	Challenged	Air travel likely to remain muted in medium term, trade war also likely to decrease global shipping but need for automated logistics could benefit sector
Materials		
Metals & Mining	Beneficiary	Coronavirus to accelerate climate change decarbonization which is positive for metals e.g. EV demand for lithium, cobalt, nickel, gold, copper
Construction Materials	Beneficiary	China One Belt One Road and Blue Dot Project to boost new infrastructure spend to benefit cement/concrete, climate-resilient buildings, energy efficiency (insulation)
Paper & Packaging	Beneficiary	eCommerce is the leading sector driver, growth in parcels deliveries, plastic sustainability, better packaging to reduce food waste, forest tree carbon sinks
Chemicals	Challenged	Increasing ESG risk from PFAS, plastic backlash/petrochemical risk, ag chems fertilizers risk but could also benefit from EV battery an future food ingredients
Information Technology		
Semiconductors	Beneficiary	The biggest beneficiary of coronavirus with Moore's Law as the key enabler of the connected world (IoT, sensors, chips, driverless cars),
Cloud, Software and Services	Beneficiary	Shift to cloud computing is another key pillar of the connected world, shift away from hardware to software, cybersecurity boom
Tech Hardware	Beneficiary	WFH requires demand for smarter devices (smartphones, wearables, AR/VR headsets), 5G telco equipment capex cycle
Utilities		
Integrated Utilities / IPPs	Beneficiary	Utilities can grow by pivoting towards renewables despite modest volumes & pricing impact. Utilities offer some defensive attributes & can benefit from low yields.
Renewables, Grids & Water	Beneficiary	Covid-19 to accelerate shift towards clean energy, energy storage, EV charging and smart grids. Some water utilities offer defensive attributes.
Waste	Challenged	Waste volumes could remain lower for longer as recovery from economic shock takes time and focus on sustainability increases.

Source: BofA Global Research



Did You Know? The world B.C. and A.C. (Before Corona and After Corona)

- All G20 countries have implemented some sort of shelter-in-place order, equivalent to 80% of global GDP under lockdown¹
- Global carbon emissions could fall by 8% this year, equivalent to what India emits per year which would be the biggest drop ever recorded²
- The fall in greenhouse gases this year alone could be greater than all the recessions of the past 50 years combined²
- The Fed was buying more than US\$1 million in financial assets every second during the peak panic phase of the crisis³
- It took airlines 64 years to reach 50 million users, Netflix 7 years, but Disney+ achieved this in just 5 months with the kids under lockdown (Gen Z bonus stat: it took the HouseParty app just 1 month!)⁴
- At 4 billion people, more citizens are now under lockdown than those who have access to internet broadband, social media or even safe toilet sanitation⁴
- The US\$20tn market cap of thematic enablers identified in the post-Covid era is bigger than the GDP of the US, Europe or even China + India⁴
- c90% of painkillers and antibiotics (ibuprofen, penicillin, etc) on average have active drug ingredients imported from China⁴
- For the first time in history, China is outspending the US on R&D (US\$501bn vs. US\$493bn)⁴
- The number of unemployed Americans now exceeds the population of Australia⁴
- More US jobs have been wiped out in the last month than were created in the past 10 years since the Great Recession⁵
- Sir Isaac Newton discovered gravity during the Great Plague of 1666 when he had to practise social distancing and work from home⁶
- Zoom daily active users jumped 30x in just four months from 10 million in December to 300 million in April 2020⁷
- Zoom's terms & conditions are longer than the US Constitution⁷
- Fortnite is now more popular than football by Google searches⁸
- If you were to stack up the US\$2 trillion US fiscal stimulus package in 1 dollar bills, they would be 6x higher than the International Space Station (c. 2,400km)...
- ... if you were to put them side by side, they would stretch from Earth to Mars...and halfway back again!⁴

Source: ¹Bond Capital, ²IEA, BofA Research, Guardian, Carbon Brief, ³BofA Research, FT, ⁴BofA Research, ⁵New York Times, ⁶Bloomberg, ⁷Zoom, ⁸Google Trends

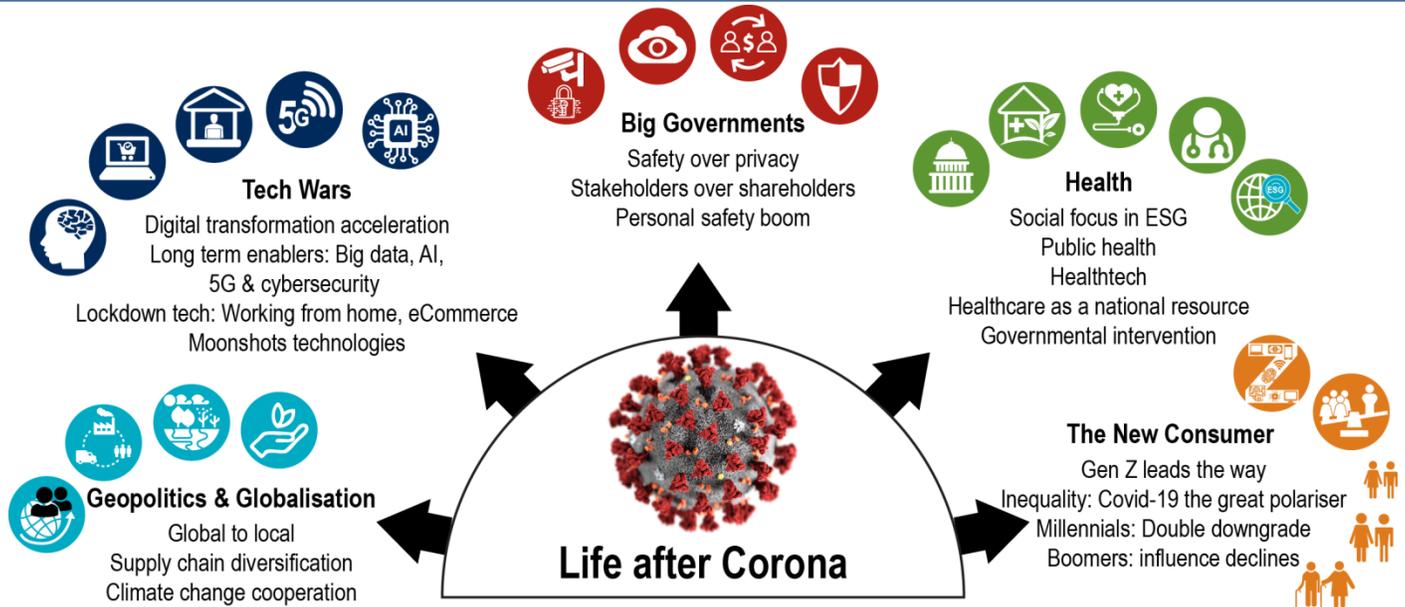


Exec summary: the year the earth stood still

Similar to other historical global crises, Covid-19's influence will extend beyond the current lockdown peak. We expect this pandemic to accelerate many macro trends that would have taken five or more years to play out before, from peak globalisation, to renewed tech wars and a reappraisal of healthcare systems and government influence. In this primer, we highlight five top trends that will define the aftermath of Covid-19. Our survey of BofA fundamental analysts helps us to better assess the implications of these trends for sectors and markets and to quantify the effect.

1. Geopolitics & Globalization
2. Tech Wars
3. Big Governments
4. Health
5. The New Consumer

Exhibit 1: Life after Corona 5 themes



Source: BofA Global Research

The investment universe: US\$20tn market cap of enablers

We identify sub-segments across our big 5 themes that are well placed to benefit in the Post Covid-19 World, with the total market capitalisation of c.\$20tn (see Table 2).

Table 2: Investment opportunities for the Post COVID-19 World across various sub-segments totalling c.\$20tn in market capitalisation

Geopolitics & Globalisation		Tech War		Big Government		Health		The New Consumer	
Sub-segments	\$bn Mcap	Sub-segments	\$bn Mcap	Sub-segments	\$bn Mcap	Sub-segments	\$bn Mcap	Sub-segments	\$bn Mcap
Total	2,114	Total	10,344	Total	603	Total	4,425	Total	2,891
Industrial Automation	554	High Tech	6,613	Homeland	411	BioPharma	2,513	Food	1,288
Global to Local	442	Processing Power	1,120	Internet of Things	132	HealthTech	722	Digital Entertainment	572
Clean Energy	326	Data Analytics	771	TIC	60	Managed Care	486	eCommerce	489
Electric Vehicles	273	Telecom Tech	559			Life Sciences	412	DIY (Do it Yourself)	301
Future Food	187	Payments	330			Healthcare Digitalisation	157	Video Games	159
Energy Efficiency	165	Telecom Infra	267			Biotech	136	Learning	82
Environmental Services	125	Connectivity Software	260						
Sustainable Packaging	44	Cybersecurity	259						
		Data Infra	165						

Source: BofA Global Research



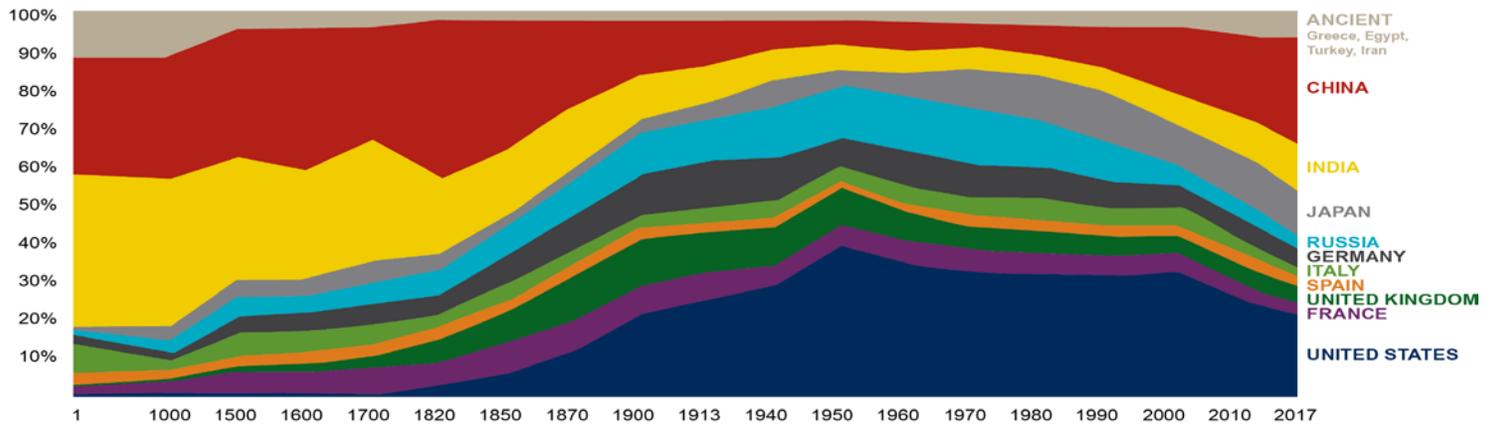
1. Geopolitics & Globalization: enter the dragon, cometh the eagle

The ascent of China and the decline of US and European manufacturing since 1990 led to a rise in anti-globalisation sentiment even before Covid-19, boiling over with the US-China trade wars. This pandemic could significantly ramp up geopolitical tensions relating to manufacturing jobs, security of supply, technology and privacy risks and import over-dependence in critical areas (e.g. tech, pharma), particularly on China. The most significant legacy of Covid-19 could be a reshaping of the world order in manufacturing, sourcing, trade, tariffs, sanctions and technology, driven by geopolitics. It is likely to drive a much faster-than-expected shift in manufacturing away from China. Increased focus on sustainability, social impact and climate change should also accelerate de-globalisation. *Beneficiaries: Automation, Industrial Software, Cleantech; Challenged: Shipping, Materials, Fast Fashion, Fossil Energy*

Exhibit 2: The past 2,000 years of economic history

Share of GDP by country over time

SHARE OF GDP (WORLD POWERS)

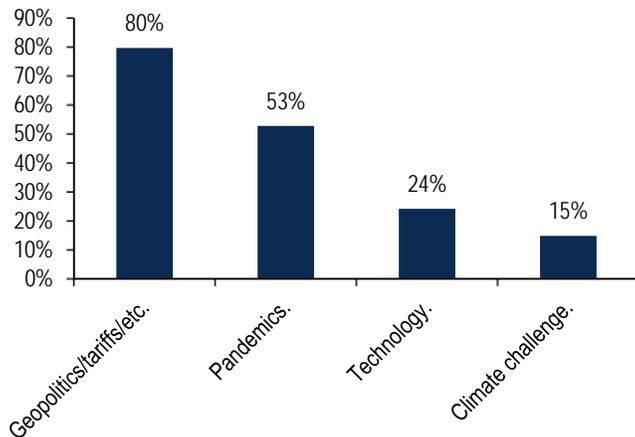


Source: Visual Capitalist

Our survey tells us that 80% of our analysts see geopolitics/tariffs as the key de-globalisation driver (pandemics 53%, technology 24%). Over a third of analysts have seen or are expecting reshoring or diversification in supply chains while half of analysts expect climate-friendly investments to increase post Covid-19

Chart 1: Geopolitics most impactful in globalisation trend

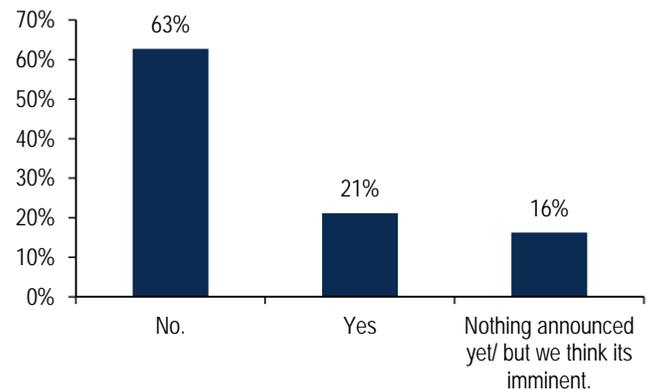
What will be the key driver(s) for decline in globalisation?*



Source: BofA Global Research *Analysts were able to select more than one response

Chart 2: 37% of analysts have seen or expect supply chain plans to be affected by Covid

Has the Covid-19 pandemic affected plans for re-shoring supply chains for companies in your coverage group?



Source: BofA Global Research



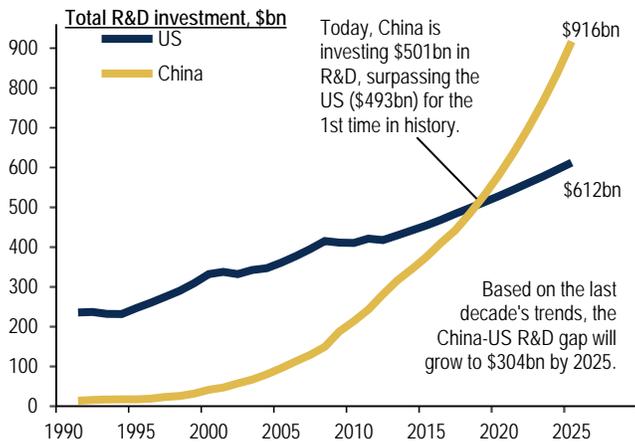
2. Tech Wars: The race for supremacy to spark a new wave of investments

Covid-19 has accelerated structural shifts in consumption and working, and our use and deployment of technology. The lasting legacy of this will be a combination of new communication infrastructure, data generation, cloud computing power, and bandwidth. Underlying infrastructure may differ regionally, though, due to on-going trade tensions, which technology is at the heart of. This could pull forward commercialisation of Moonshot technologies such as autonomous vehicles, quantum computing, and vertical farming, as nations look to get an edge in the race for tech supremacy, and shifting industrial and political priorities. Nearer-term, trends like working from home, eCommerce, and stay-at-home activities (such as streaming and eSports) could see increasing long-term adoption. However, there are several short-term challenges.

Economic uncertainty may constrain overall demand and funding. Concerns over social distancing may negatively affect sharing economy platforms. Increased data tracking and personal monitoring raise privacy and ethical concerns that will vary internationally.

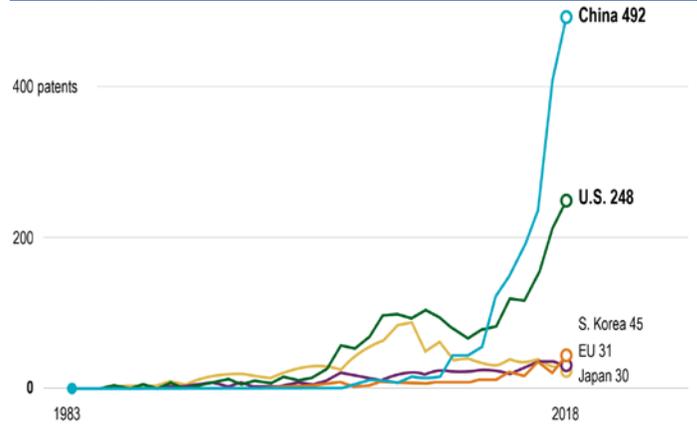
Beneficiaries: Cloud, 5G, Processing Power, Robotics; Autonomous Vehicles. Challenged: Privacy, Old Media, Bricks & Mortar, Sharing Economy.

Chart 3: China overtaken US in R&D spending



Source: BofA Research Investment Committee, OECD

Exhibit 3: Quantum Computing patent filings by country. China 2x US, 13x Europe...

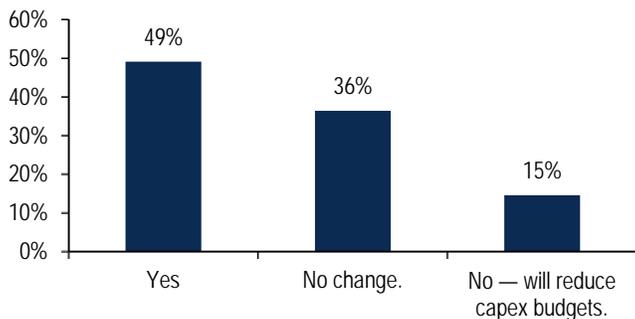


Source: Patinformatics

Our survey tells us that half of sector analysts expect technology investments in their sectors to increase, with 44% expecting more robots & automation.

Chart 4: Tech remains a spending priority for almost all

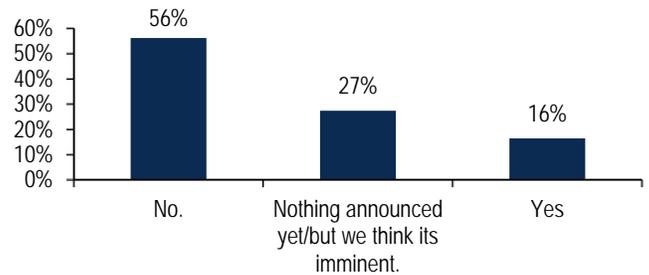
Are your companies planning to increase capex spending on tech?



Source: BofA Global Research

Chart 5: 43% of analysts have seen or expect robotic/automation plans to be affected by Covid

Has the Covid-19 pandemic affected plans for deploying robotics or automated processes for companies in your coverage group?



Source: BofA Global Research



3. Big Government: a new social contract

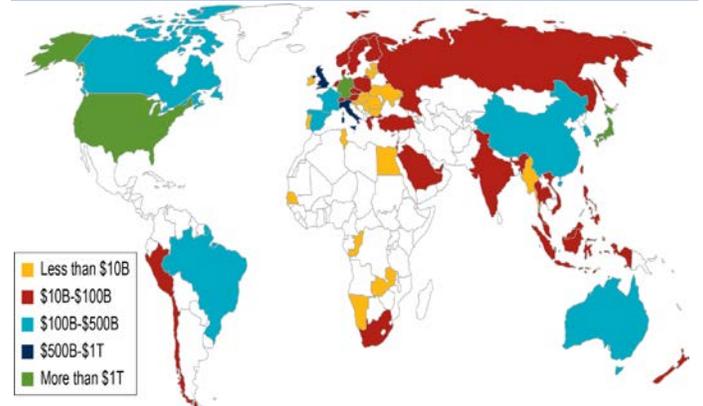
Growing surveillance, inequality and the current inadequacy of some healthcare systems versus others highlighted by the current crisis will act as a catalyst for change in politics, furthering populism trends and increasing the risk of social unrest. Covid-19 has handed governments a new social mandate to protect their citizens. Governments will exert greater influence on businesses with shareholder supremacy potentially eroding in favour of stakeholders. Further, this crisis has made the technology industry useful – if not vital – for implementing government power. We think this is unlikely to reverse, resulting in a renewed debate about the rights of the individual and privacy but including the role of government in this conversation too. Finally, similar to funding post defence-related and other crises, government spending on personal safety will remain elevated compared with pre-Covid levels for years to come. *Beneficiaries: Stakeholders, Tech, Safety, ESG; Challenged: Privacy, Debt, Shareholders*

Exhibit 4: Over 30 countries have openly implemented tracking techniques on their citizens



Source: OneZero, Medium

Exhibit 5: Surging stimulus - Governments worldwide pledge more than \$8 trillion in fiscal support

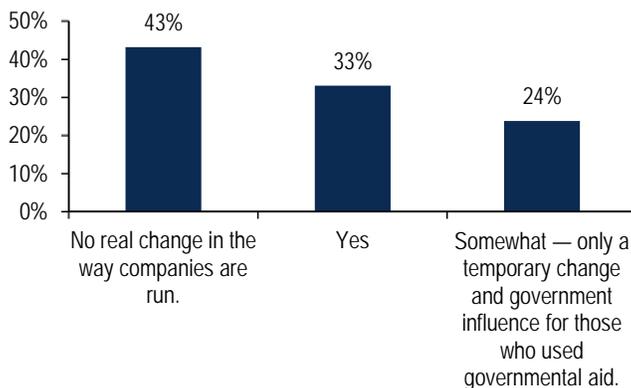


Source: Government data, Bloomberg, updated April 22, 2020

Our survey tells us that 33% of BofA analysts expect shareholder rights to be eroded either through government intervention or changing priorities within companies beyond temporary erosion from companies taking government aid.

Chart 6: A third of analysts expect permanent change to shareholder rights

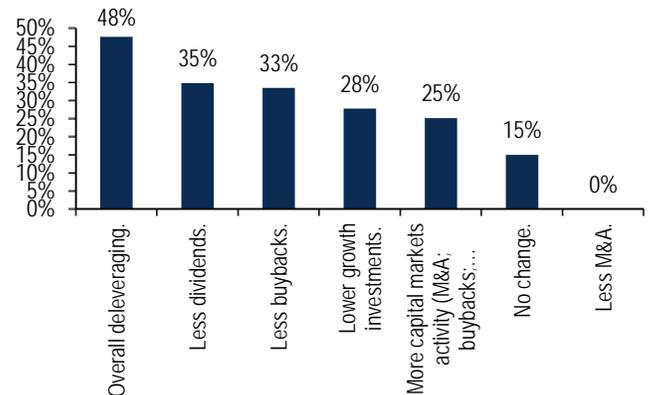
Are shareholder rights/voice being eroded?



Source: BofA Global Research

Chart 7: Half expect deleveraging for the next 2-5 years

In the next 2-5 years, how do you expect the current crisis to impact capital structure?*



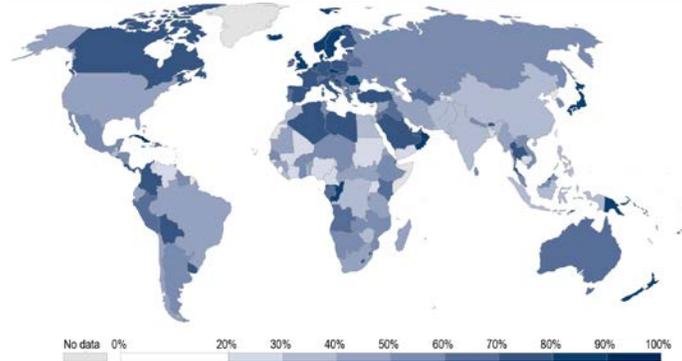
Source: BofA Global Research *Analysts were able to select more than one response



4. Health: the new wealth and focus for ESG

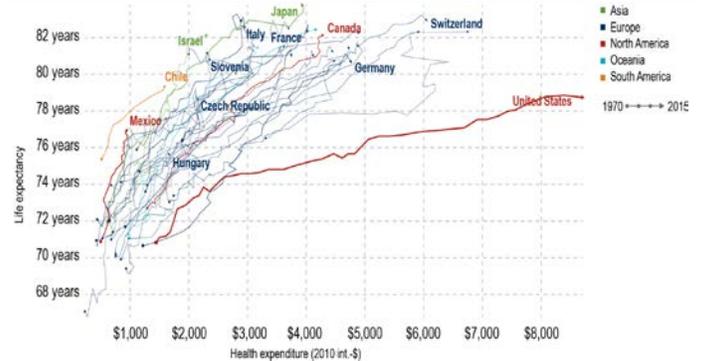
Our societal welfare, economic or otherwise, is built on having a healthy and thus productive population. Public health systems haven't always been uppermost in investors' minds when it comes to ESG issues. However, Covid-19 will amplify the importance of healthcare and its social role and accelerate other pressing global public health issues such as drug pricing, antibiotics resistance, future pandemics prevention, universal vaccines for all, etc. The debate around universal healthcare coverage will intensify: the US is the only developed country that doesn't have such a system. Overall, roughly 10% of GDP is spent on healthcare globally yet 20-40% of this is wasted. A more efficient system that focuses on value-based outcomes, preventive care and greater use of technology (big data, AI, telehealth, wearables etc) will be important in securing a healthier world population post-coronavirus. *Beneficiaries: Social in ESG, HealthTech; Challenged: Traditional Healthcare Model, Data Privacy.*

Exhibit 6: Public expenditure as % of total healthcare expenditure



Source: World Bank + WDI, Our World in Data

Exhibit 7: Life expectancy vs. health expenditure, 1970 to 2015



Source: Our World in Data

Our survey tells us that 2/3rds of analysts surveyed flag that employee healthcare was already or will become more of an important ESG factor for their company coverage.

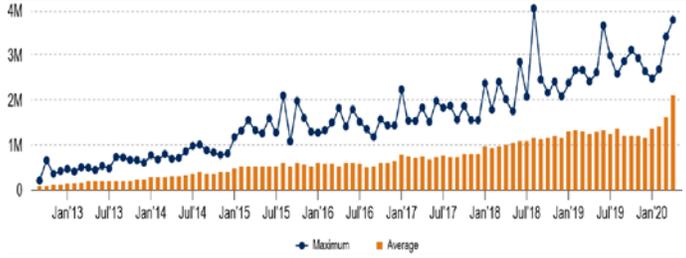
5. The New Consumer: “OK, Zoomer”

Gen Z may be uniquely prepared for the new era of interactions following the coronavirus crisis – other generations will need quickly to learn from them and change their consumer habits, enlarging the addressable markets for technology products such as streaming, social media, eCommerce, etc. On the flipside, this generation – alongside Millennials – is the most exposed to reduced earning potential over the long term. Further, this global pandemic could result in a slowdown or reversal of the decades-long march to pull billions out of poverty – just a 20% fall in income could push over half a billion people into poverty. Finally, following a fall in births nine months after the crisis, there could be a baby boom, as seen after many famines, earthquakes, and disease outbreaks. *Beneficiaries: Gen Z, New Media, Payments, ESG; Challenged: Millennials, Bottom Billions, Traditional Consumer*



Exhibit 8: Number of concurrent viewer for Amazon’s Twitch gaming platform doubles in 4 months

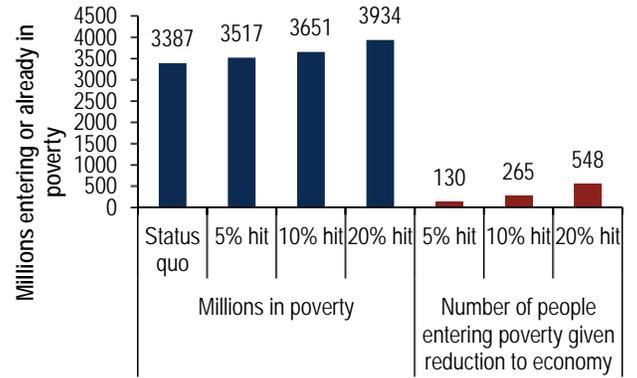
Concurrent viewers in Twitch aggregated by month



Source: Twitch

Chart 8: Over half a billion people could enter poverty if incomes contract by 20%

Number of people below the US\$5.50/day poverty line given 5%, 10% , 20% cut to economy (millions)



Source: Sumner et al UNU-Wider 2020

Our survey tells us that half of relevant analysts expect social distancing to have a lasting impact on their sector coverage.



Covid-19: once-in-a-generation crisis – and transformation

‘When written in Chinese the word *crisis* is composed of two characters – one represents danger, the other represents opportunity’ - **John F Kennedy**

‘There are decades where nothing happens, and there are weeks where decades happen’ – **Vladimir Lenin**

‘Never let a good crisis go to waste’ – **Winston Churchill**

Covid-19: Not just a temporary crisis, a permanent disruptor

Historic global crises like wars, revolutions, pandemics, etc often feel like they put history on fast-forward. Processes that normally take decades or longer to play out unfold in a couple of weeks. Coronavirus is the political, economic, and psychological event of our lifetimes that will drive disruption and transformation for years to come. It will bring a radical transformation of the kind that occurs only once in a generation.

The crashes of the 20th century – World War I/II, The Great Depression – were hard to understand at the time because their main causes were set in motion decades before. The backdrop to Covid-19 has been no different. In the past few decades, globalisation, air travel, and international supply chains have made human beings more physically connected than ever before. We believe a key legacy of coronavirus is that countries could seek greater self-sufficiency in their supply chains.

Every crisis leaves its innovative legacy

The Black Death, which killed as much as a third of Europe’s population during the 14th century, led to severe labour scarcity. Resultantly higher wages eroded feudalism, encouraged innovation in agriculture technology and accumulation of capital, and ultimately spurred on the Industrial Revolution. The Great Depression created a ‘waste not, want not’ attitude that defined consumer patterns for decades. The 1970s oil supply shock led to the first efforts on energy conservation, efficiency and independence. And more recently the 2003 SARS epidemic helped jumpstart China’s nascent eCommerce sector and ushered in the era of mobile payments in the country. The moral of the story is that humanity always innovates after crisis.

‘Every pandemic in history has changed the world. Pandemics are like rivers. They alter national boundaries. They interrupt national alliances. They restructure internal political systems. There’s something about each one though that is unique, and it goes way beyond the number of death and casualties...’

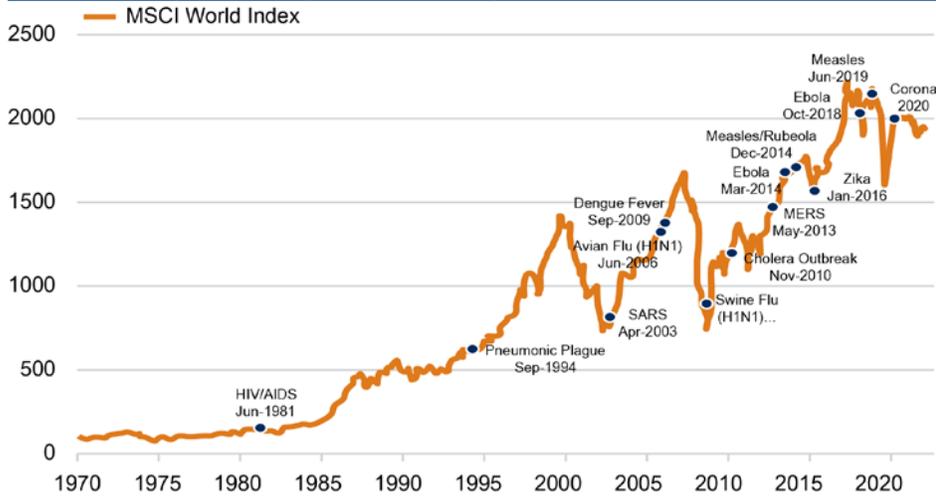
Dr. Larry Brilliant – Chair of Skoll Foundation: Ending Pandemics fund

Looking beyond the peak: a legacy of huge data creation

What will Covid-19 leave? Unlike other crises, Covid-19 will leave the legacy of massive data and knowledge creation in the medical, technological, and social fields, among others. While global knowledge typically doubles every 2-3 years, we can assume Covid-19 will be a major data accelerator, speeding up thematic disruption from decades away to only years away for certain themes.



Exhibit 9: World epidemics and global stock market performance



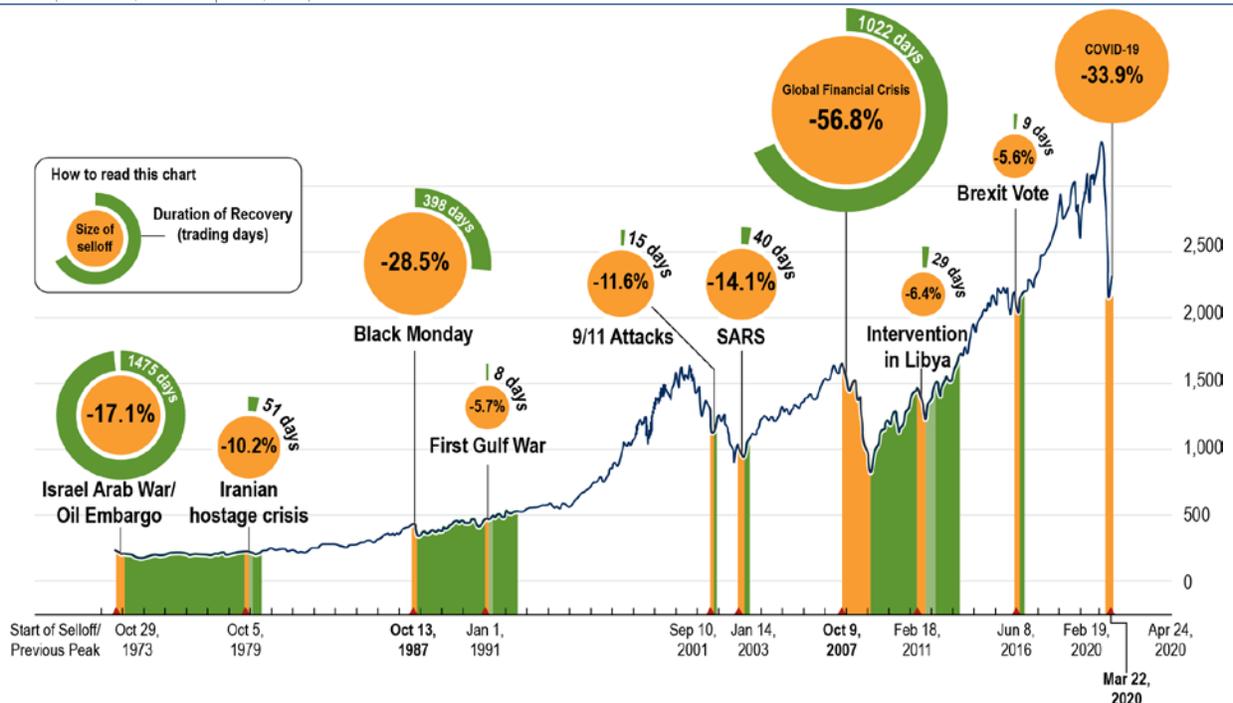
Source: BofA Global Research, Charles Schwab, Bloomberg

Furthermore, we think one should not fear expansion of Big Government post coronavirus. For it was from the World Wars that the modern-day social contract across healthcare, pensions, and public services emerged. Governments who were trying to restore economic and living conditions and fight off mass unemployment intervened more in the economy and accelerated their building of social insurance systems and public services in health, education, and housing. We believe coronavirus will spur a re-imagination of the social contract that reduces inequality.

And, finally, in many ways preventing Pandemics is similar to preventing Terrorism. We know roughly where it can originate and what's responsible, but we don't know exactly when the next will happen. Hence, the approach to tackling them can be similar – by improving preparation and funding of safety measures before the next crisis to protect civilians to the best of government's abilities.

Exhibit 10: Black Swan events: Short-term crisis, Long-term opportunity

S&P 500 Performance (October 1, 1973 to April 24, 2020)



Source: Visual Capitalist, Bloomberg



The post-Covid investing framework

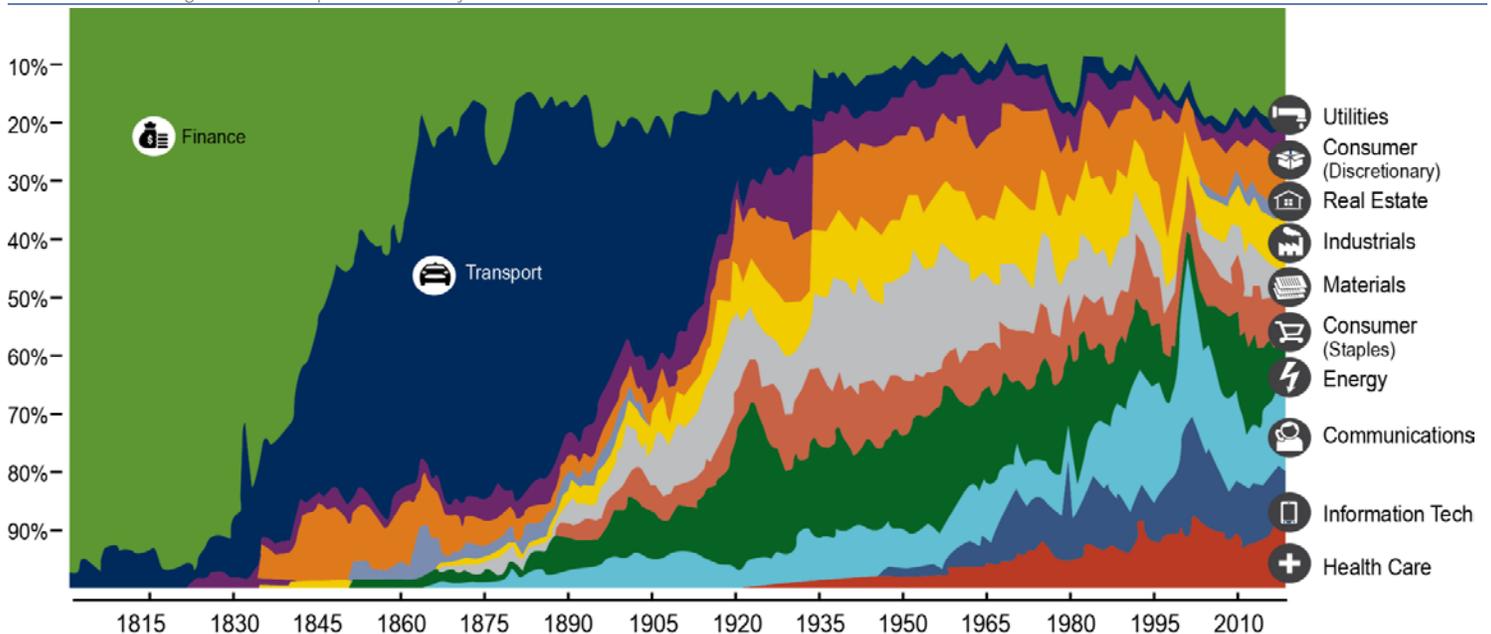
We are now truly witnessing a Transforming World. We believe this crisis is a call to action for a new framework which is more important and relevant than ever in the current climate. The megatrends mentioned in our Decade Ahead: 2020s report - will happen at a more intense pace than originally predicted and offer important solutions for tackling the greatest challenge of our time. We see themes further driving and disrupting asset markets in the 2020s. Looking forward, we believe that thematic investing can outperform in the brave new post-coronavirus world: People – on scarcer allocation of human resources; Innovation – on the faster disruptive role of technology; Markets – on greater allocation of scarce financial capital; Government – on a bigger role of state public policy; and finally Earth – for the cleaner allocation of natural resources.

New investment approach would suggest different weights vs. GICS

Our thematic approach to investing places more emphasis on the Healthcare, Technology, and Communication Services sectors, with less emphasis on Energy and Financials in a post-coronavirus world.

Exhibit 11: Visualizing 200 years of US Stock Market History

How sectors have changed in relative importance over the years



Source: Visual Capitalist, BofA Global Research

The Great Acceleration: the coronavirus turbocharger

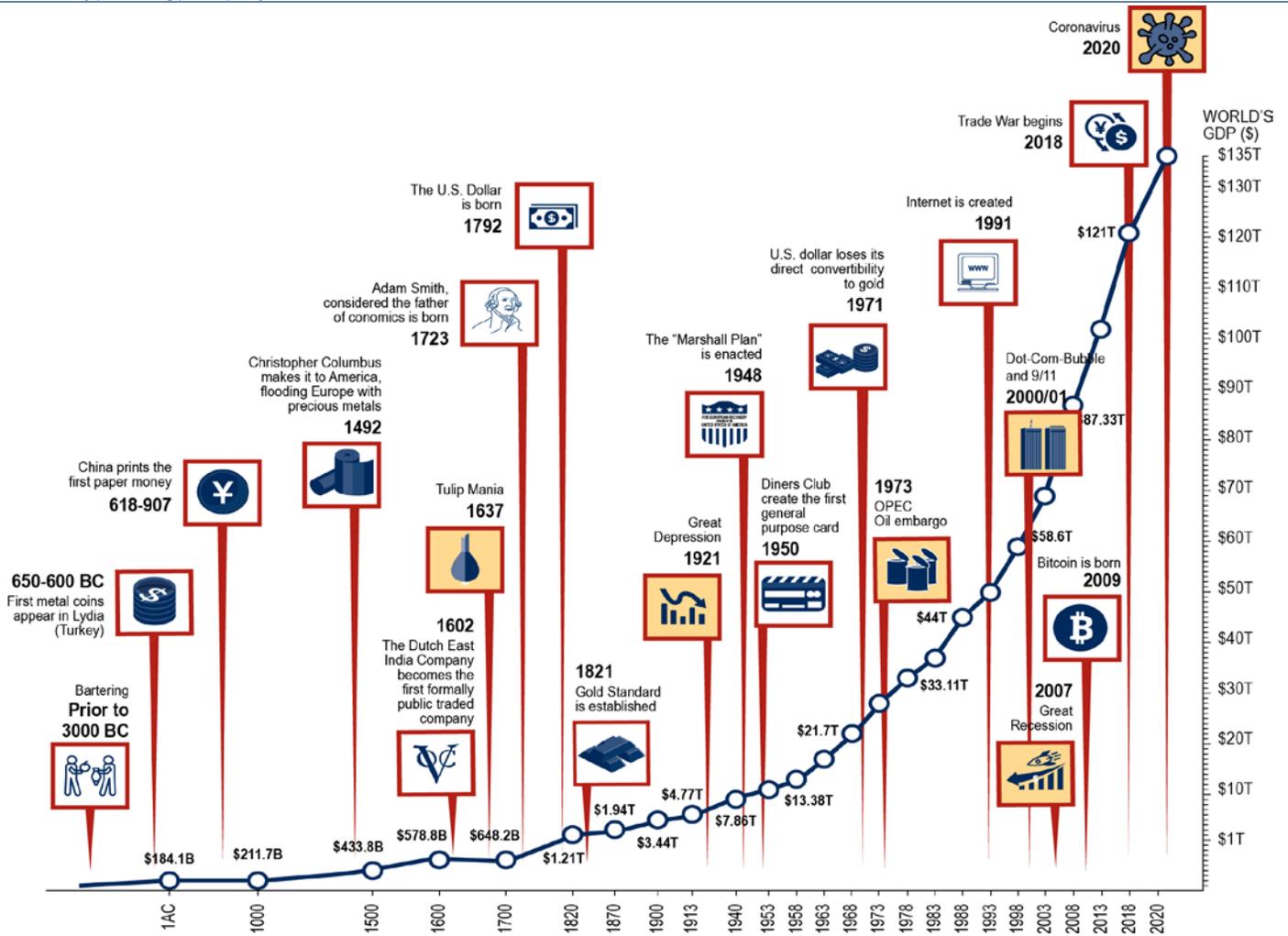
We believe coronavirus has turbocharged many of the thematic megatrends. The Great Moderation was the reduction in the volatility of business cycle fluctuations in developed countries that started in the mid-1980s, compared with the decades before, and arguably could be extrapolated to the 2010s post the Great Financial Crisis, up until the onset of Covid-19. Conversely, The Great Acceleration is the concept of accelerating change in tech. It refers to the dramatic continual and roughly simultaneous surge in growth rates across a large range of measures of human activity, first recorded in the mid-20th century and continuing to this day. This will be further accelerated by Covid-19 where we see a moonshot technology revolution rather than evolution.

Shifts in global power accelerated by Covid-19

Covid-19 is likely to further accelerate global influence being shared across more countries, including China. Peak globalisation, the Splinternet tech war and now the diverging responses of the US and China to Covid-19 have highlighted the growing split in governance opinions across the globe. Furthermore, combined with the declining influence of OPEC owing to the continued rise of renewables, this could result in some of the largest shifts in power ever seen in modern economic history.

Exhibit 12: Economic growth over the past 2000 years

Worldwide GDP by purchasing power parity (PPP)



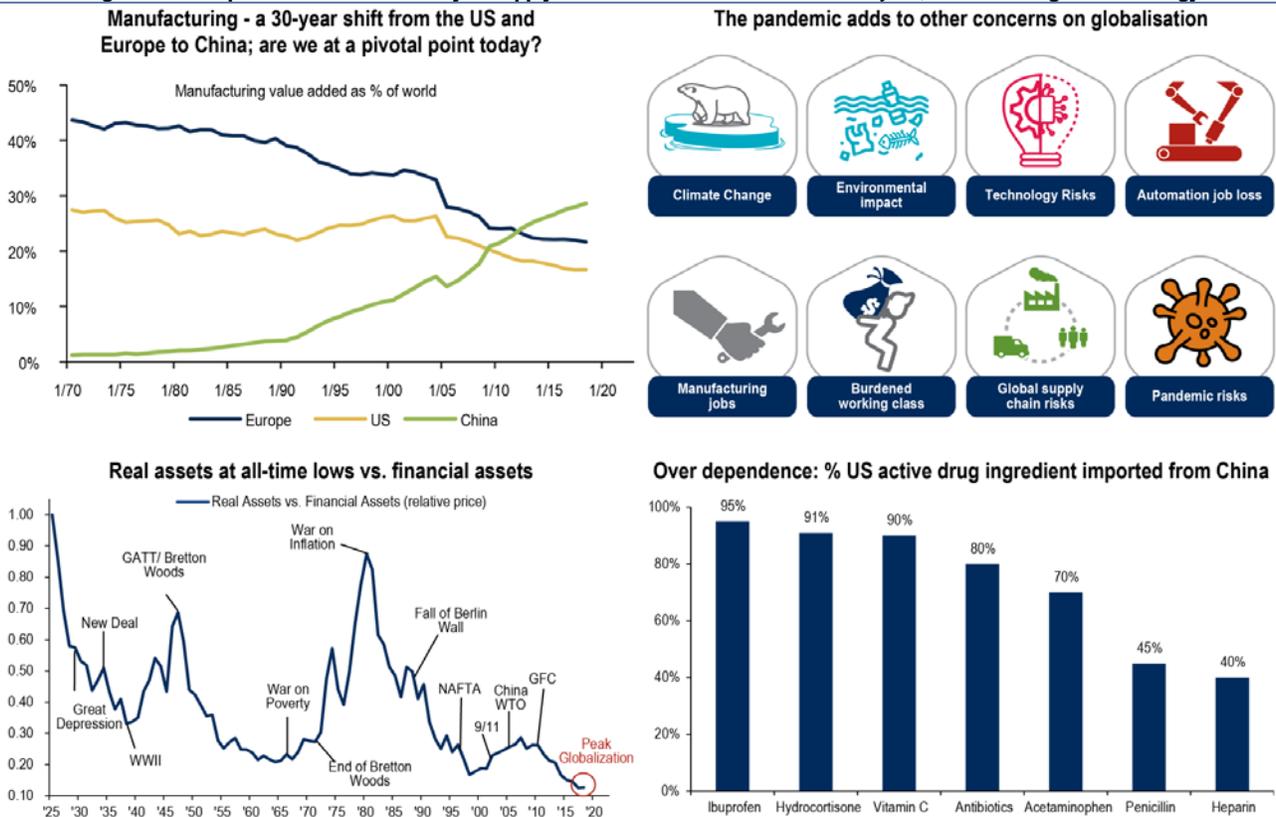
Source: HowMuch, BofA Global Research



Geopolitics and Globalization: virus adds fuel to the fire

- **Did you know?** China’s global share of manufacturing value has risen from 3% in 1990 to 25%, fuelling anti-globalisation and geopolitical tensions.
- **Key takeaway:** Faster shift from China as supply chain fears compound concerns over inequality, technology, privacy and climate change. But the biggest impact is likely to be rising geopolitical tensions between the US and China, the West vs. the East. Shift to DM (automation, critical areas, jobs) or other EM (diversification, labour).
- **Our survey tells us** that 80% of our analysts see geopolitics/tariffs as the key de-globalisation driver (pandemics 53%, technology 24%). Over a third of analysts have seen or are expecting reshoring or diversification in supply chains, while half expect climate-friendly investments to increase post Covid-19.

Exhibit 13: Faster de-globalisation post Covid-19 as security of supply fears added to other concerns like jobs, climate change & technology



Source: World Bank, US Commerce Department, US-China Economic and Security Review Commission, BofA Global Investment Strategy, BofA Thematic Investing Strategy

Exhibit 14: Peak Globalisation Trends & Strategies

TRENDS	WINNERS	LOSERS
Global to Local	Automation	Shipping
Supply Chain Diversification	Industrial Software	Global
Climate Change Cooperation	Security	Fast Fashion
	CleanTech	Fossil Energy
	Local	Privacy
		Air Travel

Source: BofA Global Research



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