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MARKET PERSPECTIVES
REVIEW & OUTLOOK

FIRST
QUARTER
2020

FIRST QUARTER 2020 REVIEW & OUTLOOK

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FIRST QUARTER 2020 REVIEW & OUTLOOK
EXECUTIVE SUMMARY

08 April 2020

PORTFOLIO THEMES

- We continue to favour larger, high-quality companies, but our assessment of the market's future path will determine if we shift toward smaller cyclical firms.
- Unlike many past cycles where the bull market's leading category underperformed in the subsequent bear, large Technology equities have held up relatively well during this bear market. Consequently, we are not yet convinced the bounce out of this bear market will be a conventional new bull led by small value.

MARKET OUTLOOK

- **The Duration of the Shutdowns Matter More than the Size:** The historic speed of this downturn reflects the economic impact and uncertainty arising from the unprecedented institutional response to the coronavirus.
- **Equities Likely Lead the Economic Recovery:** Equities should start recovering well before COVID-19 is gone, restrictions are removed, or the economy recovers.
- **The Eventual Recovery Should be Swift:** Sharp drops are usually followed by swift recoveries creating a "V" pattern—investors should prepare for the positive side of the "V".

Global equities fell sharply in Q1 dropping -21.4%, going from all-time highs in January to a bear market with record-breaking speed.[i] The sudden fall, combined with society's understandable worries about COVID-19's impact on their health, their loved ones and their community, has spread fear to every corner of the world—and the marketplace. Separating these emotions from market analysis is difficult but vital. While we have empathy and sympathy for those most impacted by this virus, our analysis is focused on how markets likely respond looking forward.

Never before has a pandemic caused a bear market—but never before has society responded to a pandemic by voluntarily halting economic activity. History will judge the success of these measures from a public health perspective. Regardless, though, this is a global tragedy—the illness, its human and emotional toll, and the resulting institutionally induced economic fallout.

We take our responsibility to our clients extremely seriously and, as an essential business under national, regional and local guidelines, we are working hard to ensure our clients' needs are met during these challenging times. As an investment manager, we think it is critical to look forward—and to us, that requires separating our view of the illness and the economy, then further separating these views as we analyse capital markets. Many investors excessively entangle them, thinking all three are tightly correlated and prone to parallel movement. Equities anticipate future shifts few fathom—just as Q1's rapid fall preceded any economic fallout. We are confident markets will similarly anticipate brighter days far before any data—case counts, deaths or economic statistics—show they are coming. That is, for example, exactly how equities nearly always bottom and then surge before recessions end, often a long time before.

i Source: FactSet, as of 07/04/2020. MSCI All Country World Index return with net dividends, USD, 31/12/2019 – 31/03/2020.

This downturn's speed and severity are a painful shock. Significant down days heighten panic, with many investors overly fixating on real-time momentary developments. As we look forward, our analysis is focused with the understanding that markets look beyond the next few months toward a scenario further into the 3 – 30 month timeframe that equities generally anticipate. It isn't hard to envision a post-coronavirus world that looks relatively bright. The virus's endgame is a vaccine. That will come. It will be micro-studied and widely chronicled as it evolves. But equities should rebound long before a vaccine arrives in volume within the 3 – 30 month timeframe markets weigh most.

The coronavirus wasn't even known to researchers until mere months ago—and much about it remains unclear. Beyond this, will government mandated social distancing and COVID-19 containment guidelines expire soon, or will government's around the world extend them again? Will regional and local restrictions, which cover a large portion of economic activity, outlast centralised government policy? Will infection rates fall in Europe and allow normal life to resume, or will containment efforts there long endure? How will emerging markets (EM) be impacted relative to developed markets?

These questions can't be answered now, but all have resolutions. Yet equities should increase long before those resolutions emerge. While this bear's cause is unique, the market is functioning as it always has: as a leading economic indicator. The bear struck well before any data confirmed the institutionally induced economic contraction. It will likely end similarly fast, before data hint at an economic recovery.

With almost all bear markets that have an associated recession, the recession is necessary to correct the prior expansion's excesses. The classic example is 2000 – 2002. It takes time to correct and rectify those problems, building the base for the next economic expansion. This economic contraction isn't like that. There was no broad-based excess or froth. The economy was otherwise in strong shape and the bull market vibrant.

Emerging markets behaved much like developed markets in Q1 falling -23.6% during the quarter.[ii] While some EMs (like China and South Korea) appear past the worst of the virus, many others are far earlier in the fight and data have yet to even hint at the fallout. EM governments aren't waiting to enact policy responses to the likely economic impacts. Many have announced or implemented an array of monetary moves and fiscal measures designed to alleviate COVID-19-related economic pain. For example, China approved $170 billion in tax cuts and spending, South Korea passed several measures aimed at containing coronavirus and supporting impacted businesses and individuals and Brazil approved $29 billion in planned social spending. Monetary measures have also been enacted in China, South Korea, India, Brazil and other EM countries including cutting interest rates, relaxing banks' reserve requirements and loosening lending standards.

Since we believe this is an institutionally induced economic contraction, we hesitate to approach it as we would traditional recessions. If it is a long contraction, it may be beneficial to shift portfolios into the more cyclical categories that typically do best early in economic recoveries. But if it remains a sharper, shorter contraction—and equities keep behaving as they normally would in a massive correction (which they have) rather than a long bear—then we would expect the high-quality, growth-oriented companies that led before the downturn to continue leading in the recovery. That has been the case thus far, explaining why our strategies—which emphasise these traits—held up well versus their respective benchmarks to date. However, we are monitoring this closely.

The full Review & Outlook, available in the coming weeks, will detail all of this and much more—including political developments, economic data and earnings, the global fiscal and monetary response to the economic disruptions, oil prices, interest rates and COVID-19 itself.

Most importantly, remember: While the day-to-day situation changes, markets' functioning is timeless. Equities should price a recovery long before most investors can fathom it. Panics nearly always precede better returns 12 – 18 months into the future.

ii Source: FactSet, as of 07/04/2020. MSCI Emerging Markets Index return with net dividends, USD, 31/12/3019 – 31/03/2020.

GLOBAL UPDATE AND MARKET OUTLOOK

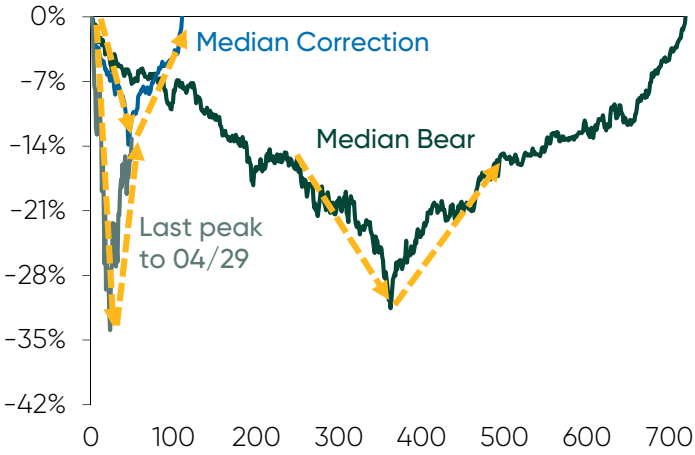
4 May 2020

Q1 MARKET RECAP

NAVIGATING HISTORY'S FASTEST BEAR MARKET

It is impossible to know when this bear market will end. Perhaps it has already or maybe another downdraft awaits. Even under normal circumstances, markets are unpredictable in the short term. The present circumstances are far from normal, and society's evolving reaction to Covid-19 defies prediction. However, and we can't stress this enough, it is critical to separate these unique events from our analysis of capital markets. Equities are still behaving like equities—acting as leading economic indicators. Accordingly, as hard as it may be with fear everywhere, we think this is a vital time to envision a rebound and look to the future. It is unknowable today, but perhaps this bear market's speed augurs a similarly far-swifter-than-average recovery. (Exhibit 1)

EXHIBIT 1: BEAR BY MAGNITUDE, CORRECTION-LIKE SPEED



Source: FactSet, as of 30/04/2020. Median S&P 500 price index correction and bear market returns, 01/01/1936 – 31/12/2019 versus 19/02/2020 – 29/04/2020.

HOW THIS BEAR MARKET IS – AND ISN'T – DIFFERENT

This bear market's speed and cause are unusual. No bear market ever developed this quickly, and no prior global pandemic caused one. Even 1918 – 1919's Spanish flu, which researchers note infected over 500 million people globally and killed 5-6% of the world's population, didn't cause a bear market. That era's S&P 500 data are imprecise and consolidated developed market data outside the US at this time is largely non-existent, but they don't show a bear developing.[iii] While the Dow Jones Industrial Average is a price-weighted index, its pricing dates to 1885, and it tends to correlate directionally with the S&P 500. It, too, shows no bear market during this stretch.[iv] Then again, never in modern market history has society responded to a virus by shutting down vast portions of the private economy, as with Covid-19. Reactions in 1918 – 1919 were local, occurring at staggered times to vastly varying degrees.

Yet despite these unique factors, markets are behaving as we would expect when facing a sharp economic contraction. Overall and on average, equities discount expected events over the next 3 – 30 months—sometimes a little sooner, sometimes a little later. This time, equities looked to the very short end of that range. When lockdowns began in the developed world, markets had to shift expectations from a fundamentally strong global economy to a sharp, externally driven economic contraction in just weeks.

The virus has been in and out of headlines since late December, when it erupted in the city of Wuhan in Hubei Province. Its spread throughout mainland China became apparent during January, and that naturally prompted speculation about the virus's potential to spread globally. Yet even as February began, the world's economy was robust outside China, which looked set for a brief-but-notable hit. Hence, the global economic discussion centred on its impact on Chinese output and supply chain disruptions stemming from containment efforts there. The idea other countries' governments, institutions and businesses would

iii Source: Global Financial Data, Inc., as of 14/04/2020. Statement based on analysis of weekly S&P 500 price returns, 31/12/1917 – 31/12/1919.

iv Source: FactSet and Global Financial Data, as of 14/04/2020. Statement based on analysis of daily Dow Jones Industrial Average price returns, 31/12/1917 – 31/12/1919.

respond similarly seemed far-fetched. Hence, equities continued shrugging off the bad news, climbing through mid-February.

But then the situation changed radically. One by one, European nations and the US stepped up containment efforts, with more and more businesses closing down. As these measures mounted in late February and early March, it forced equities to price in the resulting economic contraction.

Crucially, equities moved first, entering bear market territory before data confirmed the economic fallout. We anticipate markets behaving similarly at the end of this bear—whether that end has already happened or another downdraft occurs. At some point, within the next 30 months or so, we will likely have herd immunity, a vaccine or be well on the way to both. That vaccine's development will be chronicled and scrutinised endlessly, giving equities a gradually clearer view of the endgame. That will enable economic life to return to normal, rendering this bear market a distant memory. Markets, as a leading indicator, should fathom the end of this contraction well before that end becomes apparent.

THIS TIME ISN'T DIFFERENT

Because this bear market's speed and cause are unique, there is a lot of talk that "this time is different". Hard as it may be to see, markets are still working the way they normally function. The cycle is simply compressed.

As we mentioned in the Executive Summary, under "normal" bear market circumstances, when a bear market and recession strike, it marks the business cycle resetting. Typically, this reset, though painful, is necessary to shake out excess and redirect capital from unproductive investments. The bear market typically arrives first, as investors—having climbed atop the bull market's wall of worry—let euphoria and high expectations blind them to the possibility of recession. As equities move lower, investors overlook weakening leading indicators and cling to false hopes. Recession slowly becomes apparent in deteriorating economic data, but those data arrive with a lag. By the time they confirm recession is underway, equities are often several months or more into the bear—which usually ends before economic data improve. Meanwhile, sentiment drops lower from euphoria to deep pessimism.

This is not a typical recession. For one, it isn't clear yet whether output will shrink long enough to qualify as a recession—typically defined as two straight quarters of falling GDP, though the US National Bureau of Economic Research (NBER) uses several indicators when identifying recessions in progress. Two, this economic contraction isn't naturally occurring. The prior expansion hadn't yet reached excessive heights. Investors weren't spending capital indiscriminately. Had society not decided to shut down economic activity for a well-intended purpose, growth likely would have continued. Yet the bear market still preceded it. Global equities peaked on 12 February.[v] The S&P 500 peaked one week later.[vi] Lockdowns began shortly thereafter. The first pieces of data hinting at an economic contraction arrived on 24 March over a week after the bear market became official.

Some argue this time isn't different, but rather a simmering repeat of the Great Depression. The bear market that ran from 1929 – 1932 also began with a bang, rather than a whimper. With equities falling faster this time, and forecasters projecting such severe GDP contractions and unemployment, many think the parallel is easy to draw. However, this logic overlooks the key reason the bear market and recession were so persistent: After the crash, the US Federal Reserve (Fed) made repeated monetary errors, shrinking the money supply instead of boosting liquidity. This, in our view, is what spurred the three-year bear market and deep recession. Today, the Fed and central banks globally are doing the opposite. Their actions aren't perfect, as we will discuss later in this Review, but they aren't reducing broad money supply. Add to this the global spread of strict protectionism after the US enacted the Tariff Act of 1930—better known as Smoot-Hawley—and we think it is clear a long chain of large mistakes drove the early 1930s' vast contraction.

v Source: FactSet, as of 21/04/2020. MSCI AC World Index with net dividends, 31/12/2019 – 20/04/2020.

vi Ibid. S&P 500 Total Return Index level, 31/12/2019 – 13/04/2020.

PORTFOLIO POSITIONING AND REPOSITIONING

When markets were at all-time highs early in Q1, pundits frequently warned Tech and Tech-like giants were overvalued, citing their outsized returns and heavy index weightings. Conventional wisdom said they would get hit harder than most equities in the next downturn. Yet that hasn't happened. Instead, they have held up well relative to broad markets. Some have benefited from increased demand as people shelter-in-place. Others simply aren't as exposed to the lockdowns as other industries are, helping preserve their revenues and cushion the blow. We think they also benefit from their size, stability and long-term prospects.

Whether we decide to make significant portfolio shifts depends on how the situation evolves from here. So far, the market has behaved much more like a correction than a bear. The decline was sharp and fast—not the rolling top that typifies bear markets. Sentiment flipped to panic in a hurry, rather than gradually worsening. These features are much more typical of a correction and match our assessment of a bear preceding a sharp manufactured contraction rather than a gruelling recession.

If equities continue behaving as they would in a correction, and the economic contraction is short and sharp, that argues for maintaining our present sector weights and emphasis on larger, growth-oriented higher quality names. Usually, what leads heading into a correction leads during the recovery. Should this pain prove short and businesses begin reopening soon in much of the US and Europe, we would expect the biggest companies to continue leading.

However, if closures persist and we get a longer, more protracted economic contraction and bear market, equities may act more like they usually do at the end of a full market cycle. That would argue for repositioning into smaller and more value-oriented companies, which normally lead in a new bull. We implemented this approach in 2009 as the recovery from the Financial Crisis begun.

There is a third possibility: that investors' expectations for a swift recovery become too lofty while state and local governments reopen businesses slower than most anticipate. That could present a second leg down, extending and deepening the bear market. We can't know now whether this is the case, but we are continuously monitoring the situation.

OUR LONGER TERM OUTLOOK

We are optimistic about the medium to longer term, even as we acknowledge the possibility of another leg down. Bull markets usually begin when people least expect them. Equities turn higher before economic data do, making huge strides before there is any evidence of the recession's end and they typically see significant gains early in a bull market. (Exhibit 2)

EXHIBIT 2: BIG RETURNS COME EARLY

S&P 500				
Bear Market		Returns After Bottom		
Beginning	*End*	*6 Months*	*12 Months*	*18 Months*
07/09/1929	01/06/1932	53.0%	121.4%	125.2%
06/03/1937	28/04/1942	24.6%	53.7%	60.1%
29/05/1946	13/06/1949	22.8%	42.1%	45.2%
02/08/1956	22/10/1957	9.8%	31.0%	48.1%
12/12/1961	26/06/1962	20.5%	32.7%	42.0%
09/02/1966	07/10/1966	22.1%	32.9%	27.4%
29/11/1968	26/05/1970	22.8%	43.7%	32.2%
11/01/1973	03/10/1974	30.9%	38.0%	64.2%
28/11/1980	12/08/1982	44.1%	58.3%	52.6%
25/08/1987	04/12/1987	19.0%	21.4%	45.4%
16/07/1990	11/10/1990	27.8%	29.1%	36.8%
24/03/2000	09/10/2002	11.5%	33.7%	46.7%
09/10/2007	09/03/2009	52.7%	68.6%	63.2%
Average		**27.8%**	**46.7%**	**53.0%**

Source: Global Financial Data, Inc., as of 19/03/2020.

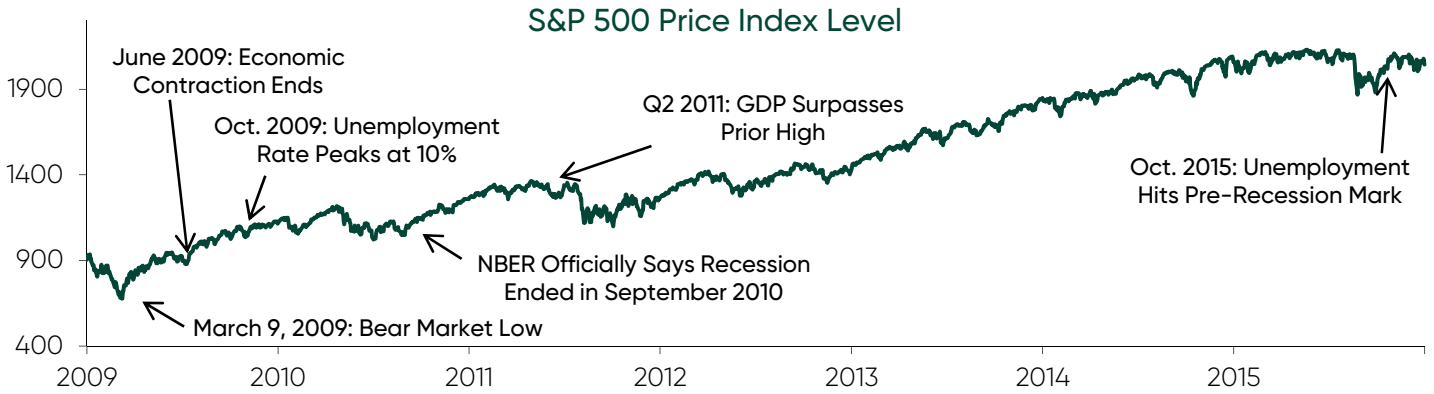
NO ALL-CLEAR SIGNAL

Even when the recovery arrives, few will believe it. Pundits will call it a bear market rally and try to explain why it has no fundamental support. Many will be waiting for another sharp drop and will be unprepared for the early stages of the next bull market cycle.

The last bear market ended on 9 March 2009. At that point, corporate earnings were still abysmal. The recession was still ongoing and didn't end until 30 June. Economic data didn't start hinting at that until later on, when figures for July and August became available. The unemployment rate peaked in October 2009, but companies continued cutting payrolls until February 2010.[vii] NBER didn't declare the recession over until 20 September 2010.[viii] By then, global equities had returned 81.2% since their low.[ix]

The bear market that accompanied the Tech Bubble also ended before reality had demonstrably improved. Global equities bottomed out in October 2002. The recession had ended nearly a year earlier, but employers were still cutting headcount. The WorldCom scandal was still playing out, and there was massive uncertainty over US involvement in Middle Eastern conflict. Equities would even retest their lows in March 2003, in the run-up to the US-led Iraq war. However, then the new bull got going in earnest, even though unemployment didn't peak until June. (Exhibit 3)

EXHIBIT 3: WAITING FOR CLARITY IS COSTLY



Source: FactSet, NBER and Federal Reserve Bank of St. Louis, as of 24/04/2020. S&P 500 price index level, 31/12/2008 – 31/12/2015.

vii Source: Federal Reserve of St. Louis, as of 09/04/2020.

viii Source: National Bureau of Economic Research, as of 09/04/2020.

ix Source: FactSet, as of 22/04/2020. MSCI AC World Index return with net dividends, 09/03/2009 – 20/09/2010.

ECONOMIC DATA WILL BE AWFUL

For the foreseeable future, economic data from the US and Europe will be terrible. PMIs for March, which measure the percentage of businesses reporting expanding activity, offer the first hint at the extent of the damage. PMI readings under 50 signal economic contraction. As Exhibit 4 shows, thus far, that contraction is severe—most PMIs logged record declines. The seemingly resilient manufacturing numbers were supported by rising supplier delivery times. This counts as positive because, under normal circumstances, it implies robust demand. But this time, it stemmed from the factory closures and severe supply chain disruptions—a glaring false positive.

April's figures thus far are understandably worse, as most shelter-in-place orders took effect later in March. April data will be the first to show the full extent of the impact. Similarly, while US GDP fell -4.8% annualised in Q1, analysts project far worse for Q2.[x]

Corporate earnings will be similarly bad. As we write, analysts' consensus expectations are for a -10% y/y decline and -20% in Q2.[xi] The latter figure could be better if closures end relatively soon. If they don't, it could be worse, with the pain extending into Q3 or beyond.

While these numbers are bad, the downturn's depth doesn't matter as much as its duration. How long will social distancing policies continue forcing an economic contraction? As infection curves flatten, will governments decide everyone can return to school and work? Or do they decide policies are working and must be extended? Will the virus fade as summer heats up? Most crucially, how will reality on all these fronts compare to expectations? This is where we are focusing our analysis as US states and European nations roll out timetables and health parameters for returning to work.

GLOBAL FISCAL AND MONETARY RESPONSE

As Covid-19 containment policies hurt the economy, policymakers globally announced huge fiscal and monetary measures aimed at aiding those most impacted. Politicians and pundits broadly call these plans "stimulus" and generally presume they will spur growth one way or another. However, to us, they look less like traditional stimulus and more like bailouts or financial aid. In the end, we think these well-intended measures deliver mixed results. Some moves, such as the Fed's quantitative easing (QE) restart, are counterproductive. Other moves, that help businesses and households weather a rough period, may be helpful. But they probably can't stem the economic contraction, as they can't offset the primary issue: businesses closures due to Covid-19-related restrictions. The solution for that isn't government assistance or stimulus. It is a return to normal life.

EXHIBIT 4: A FIRST LOOK AT THE DATA

Manufacturing PMI								
	US (Markit)	US (ISM)	UK	Eurozone	Germany	France	Spain	Italy
January	51.9	50.9	50.0	47.9	45.3	51.1	48.5	48.9
February	50.7	50.1	51.7	49.2	48.0	49.8	50.4	48.7
March	48.5	49.1	47.8	44.5	45.4	43.2	45.7	40.3
April (Prelim.)	*36.9*	*N/A*	*32.9*	*33.6*	*34.4*	*31.5*	*N/A*	*N/A*

Services PMI								
	US (Markit)	US (ISM)	UK	Eurozone	Germany	France	Spain	Italy
January	53.4	55.5	53.9	52.5	54.2	51.0	52.3	51.4
February	49.4	57.3	53.2	52.6	52.5	52.5	52.1	52.1
March	39.8	52.5	34.5	26.4	31.7	27.4	23.0	17.4
April (Prelim.)	*27.0*	*N/A*	*12.3*	*11.7*	*15.9*	*10.4*	*N/A*	*N/A*

Source: FactSet, as of 23/04/2020. April data shown are preliminary, which aren't available across all nations.

x Source: BEA, as of 29/04/2020.

xi Source: FactSet, as of 09/04/2020.

THE FED'S RESPONSE

Since mid-March, the Fed has announced various extraordinary actions to boost liquidity and support the economy. Some of the major items:

- **Two fed-funds target range cuts, from 1.5% – 1.75% to 0% – 0.25%**
- **Dropped the discount rate—the rate at which banks borrow from the Fed directly—to 0.25%**
- **Dropped reserve requirements to 0%**
- **Restarted and subsequently expanded QE to an unlimited dollar amount, running indefinitely**
- **Created several new programs to buy corporate and municipal debt or provide loans up to $2.3 trillion, which may rise if deemed necessary**
- **Coordinated action with other central banks to ensure US dollar liquidity for global financial markets, particularly in developing nations**

Headlines largely cheered the moves, seeing policymakers as acting decisively and creatively to support the economy. Our view is less charitable, as the Fed's moves may have sowed panic rather than engendered confidence. For example, instead of waiting three days for its regularly scheduled meeting and monetary announcement, the Fed announced emergency measures—including the second rate cut and QE restart—unexpectedly on Sunday, 15 March. While the Fed likely intended to instill confidence that the financial system would continue functioning, the S&P 500's plunge the following Monday suggests the move gave investors the impression the central bank knew something few others did—stoking fear.

Secondly, the Fed's measures aren't "stimulus" in the traditional sense of promoting a big increase in broad money supply. Rather, they inject liquidity into the market where the Fed thought necessary. Perhaps the measures targeting municipal and corporate securities assuage fears over refinancing, and backstops to this market may prove beneficial. Yet even if the Fed's new programs provide short-term liquidity benefits, other questions arise.

For one, why the complex variety of programs? It is possible complicated programs shore up investor confidence. However, they may also negatively affect sentiment by giving the impression extraordinary intervention is necessary.

Another consideration: The Fed's primary role historically is lender of last resort. That is, lender to solvent banks that need short-term cash and can't get it on the open market. This time, banks entered the crisis in very good shape from a balance sheet standpoint, with plenty of capital and no significant funding strains. But now, the Fed has vastly expanded its reach to a broader audience, including investmwent-grade and recently downgraded high-yield corporations, state and local governments, households and small businesses. This sets up potential debate over the Fed's role and boundaries. Typically, changes to the Fed's remit require an act of Congress, not edicts from appointed technocrats. In our view, all these decisions warrant scrutiny.

QE RETURNS TO THE US

QE is counterproductive, in our view. The program aims to flood banks with reserves, which seems unnecessary now given excess reserves were already elevated before the Fed took action. It also seeks to lower long-term interest rates to make borrowing more attractive—also seemingly unnecessary with long-term Treasury rates at historic lows.

When the Fed buys bonds, it puts pressure on long-term interest rates (rates and bond prices move inversely). Lowering long-term rates while short-term rates are pinned to the floor flattens the yield curve—discouraging banks from lending aggressively. Banks' primary business is to borrow short term to fund long-term loans. The spread between those rates represents new lending's profitability. QE narrows that spread, making lending less attractive for banks unless borrowers are extremely low-risk—weighing on both loan and money supply growth.

During the expansion that began in 2009, the US economy grew in spite of QE, not because of it. Still, the misguided program's return needn't prevent a recovery. It is counterproductive, but it is more of an incremental headwind than a serious roadblock to growth. QE slows

money supply growth—an error. But it isn't like the Great Depression, when Fed policy shrank money supply by a third.

WHAT ARE OTHER CENTRAL BANKS DOING?

Like the Fed, other major central banks have committed to similar programs—notably, more QE—to support their economies. In the UK, the Bank of England (BoE) cut interest rates twice, bringing the Bank rate to a historically low 0.1%, while committing to £200 billion in new QE (targeting government and corporate bonds).[xii] The BoE also reduced banks' capital requirements, started a new funding scheme to encourage banks to lend to smaller companies and expanded the Treasury's overdraft account. That last measure will allow the Treasury to bypass the bond market in order to fund its response in the very near term, but it must repay the overdrafts by year-end. So rather than being permanent monetary financing, it buys the Treasury more time to issue new debt gradually instead of flooding the market with hundreds of billions of pounds in new supply at once. A similar measure in 2008 didn't lead to runaway inflation.

The European Central Bank announced two increases—amounting to €870 billion—in asset purchases, resulting in a total of €1.1 trillion in QE this year.[xiii] Lastly, the Bank of Japan raised the upper limits on its ETF, REITs and corporate bond purchases while also starting a lending program for commercial banks. But as is the case with the Fed, these measures' effectiveness is limited. Interest rate cuts or massive bond purchases can't lift shelter-in-place orders that are preventing businesses from conducting regular commerce.

GLOBAL FISCAL RESPONSE OVERVIEW

Similar to central banks, governments have pledged to help businesses and citizens weather the Covid-19 storm. Here are some of the highlights in several major developed economies. (Exhibit 5, 6 and 7)

EXHIBIT 5: US RESPONSE

	Amount	Details
For Businesses	$510 billion	Loans and assistance for big business
	$359 billion	Loans and assistance for small business
For Individuals	$250 billion	One-time tax rebates
	$250 billion	Unemployment benefits
	$24 billion	Food safety net for most vulnerable
Other	$150 billion	Fund for state and local governments
	$100 billion	Hospital funding
	$51 billion	International assistance

Source: International Monetary Fund, as of 14/04/2020.

EXHIBIT 6: UK RESPONSE

	Amount	Details
For Businesses	£330 billion	Loans and guarantees available to businesses
	£30 billion	Deferred VAT until end of the year
	£27 billion	Additional business support measures, including property tax holidays and direct grants for small firms
For Individuals		Pay 80% of earnings of self-employed workers and furloughed employees (maximum of £2500 per employee per month) for three months
	£7 billion	Strengthen social safety net
Other	£5 billion	Funding for National Health Service, public services and charities
	£150 million	International assistance

Source: International Monetary Fund, as of 14/04/2020.

EXHIBIT 7: CONTINENTAL EUROPE RESPONSE

	Amount	Details
Germany	€156 billion	Supplementary budget targeted at supporting health care industry, workers and small businesses and the self-employed
	€757 billion	Economic stabilisation fund to support firms of all sizes
France	€100 billion	Fiscal measures targeting health care industry, business liquidity, workers, small businesses and the self-employed, and the unemployed
	€312 billion	State guarantees for bank loans and credit reinsurance schemes
Italy	€25 billion	Emergency package to support health care system, jobs and laid-off workers, and businesses
Spain	€13.9 billion	Fiscal measures targeting health services as well as workers
	€100 billion	Government loan guarantees for firms and self-employed

Source: International Monetary Fund, as of 14/04/2020.

COVID-19 AID IS NOT STIMULUS

Many have called these big plans "stimulus." We disagree. Actual stimulus aims to create demand when there is none. That usually takes place during a traditional recession, an economic contraction that corrects the prior expansion's excesses. A prime example of this is the recession following the 2000 Tech Bubble, when many companies went under after burning through cash on unprofitable, and often unrealistic, ideas. In this economic environment, businesses must get lean and mean to survive, and they are loathe to take risk. At that juncture, fiscal stimulus can help kick-start dormant private sector demand through new public investment, frequently on infrastructure projects. While these investments aren't always the most efficient use of money, the recipients can then spend, invest or save

xii "Our Response to Coronavirus (COVID-19)," Staff, Bank of England, as of 01/04/2020. https://www.bankofengland.co.uk/coronavirus

xiii "Europe Bonds Soar as Lagarde Pledges No Limits to ECB Action," Jana Randow and John Ainger, Bloomberg, 18/03/2020. https://www.bloomberg.com/news/articles/2020-03-18/ecb-announces-750-billion-euro-pandemic-bond-buying-program

accordingly. That first spend helps get capital moving, leading to money changing hands several times over—a phenomenon known as the multiplier effect—which helps encourage economic activity and growth.

In contrast, the global economy isn't suffering a traditional recession. Rather, Covid-19-related restrictions caused an institutionally induced economic contraction. Government response packages today are more of a temporary replacement for lost revenues while shoppers and workers are idled—financial lifelines to help businesses and individuals stay afloat. That is fine if it works, but it doesn't forcibly create new demand. This isn't stimulus any more than 2009's General Motors bailout was "stimulus." The trillions of dollars committed by governments globally won't jump-start a recovery, in our view. They are just a massive backstop.

Moreover, the recovery should occur regardless of how much governments spend. Markets don't need government saviour to rescue them. The economic cycle turns with or without assistance, whether it takes the form of a bailout or stimulus. During the eurozone's 2011 – 2013 regional recession, national governments pursued austerity—the opposite of massive spending plans. That didn't prevent an economic expansion from beginning in mid-2013.

Importantly, the Covid-19-driven artificial contraction thus far hasn't permanently destroyed huge amounts of wealth the way a typical recession does. Forced closures caused a sharp, sudden contraction, but they also likely create pent-up demand. That likely paves the way for a big rebound—think a depressed spring with the pressure removed—when activity resumes in earnest.

ON THE PANDEMIC

No look at Q1 2020 is complete without discussing Covid-19 itself. Stress and fear not only complicate how investors approach markets, they make it difficult to process headlines and emerging news. That is doubly true now, considering our hyper-partisan society has politicised so much about this disease. To us, that is harmful to understanding the situation we all confront—and makes it tougher to separate one's view of the disease from markets, which is crucial. Much about this disease remains unknown—even by global health experts. But the virus has two possible conclusions: Either we get a vaccine or herd immunity, as more exposure to the disease leads to large portions of the public forming antibodies. Neither will come immediately, but they should within the 3 – 30 month window markets typically pre-price.

Even now, very little meaningful information about Covid-19 is actually known. Numerous theories and hypothetical models try to project where the disease heads. These theories and models shape much of the public debate. Yet many are untested, aren't peer reviewed and haven't adequately been subjected to the scientific process to qualify as knowledge. Here is a short list of basic things no one really has answers to:

- **How contagious is Covid-19?**
- **How many people have been exposed to it in total?**
- **What share of carriers show no symptoms, and how contagious are they?**
- **How many people had a mild case and recovered without even knowing it?**
- **What is the actual death rate?**
- **How long does Covid-19 live in the air and on surfaces?**
- **Scientists seem relatively sure a person who had it has immunity, but is it lasting?**

It seems initial ideas about Covid-19 being very contagious were correct. Yet the modelling on deaths and hospitalizations now looks overstated. Consider the Diamond Princess cruise ship as a contained, random model. The University of Oxford's Centre for Evidence-Based Medicine (CEBM) reported a death rate of 0.85% among 705 people who tested positive.[xiv] That is quite high, but this is on a cruise ship, which likely had a greater share of older people—an at-risk group. The general public should see a lower death rate when more data is available. As CEBM put it, "Taking account of historical experience, trends in the data, increased number of infections in the population at largest, and

xiv Source: "Oxford COVID-19 Evidence Service," Jason Oke and Carl Henegan, University of Oxford's Centre for Evidence-Based Medicine, updated on 22 April 2020.

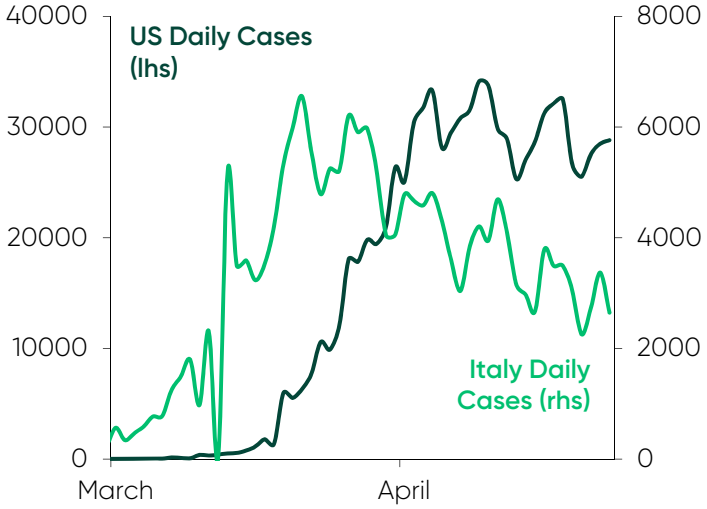
potential impact of misclassification of deaths gives a presumed estimate for the Covid-19 IFR [infection fatality rate] somewhere between 0.1% and 0.36%".[xv] Yet many of the shockingly high projected death tolls from Covid-19, including the Imperial College of London's high-end projections, employed a 0.9% death rate—higher than that of the Diamond Princess.

The main reason no one knows the actual fatality rate: The denominator—the number of people infected—is unknown. On the Diamond Princess, roughly half of the positive cases showed no symptoms. For many younger people, Covid-19 is mild. Many people could have had the disease, gotten over it and never known it.

On 23 April, New York State published a study echoing this point. The study randomly sampled 3,000 residents using tests administered at grocery stores and other shops. It suggests 13.9% of New Yorkers had Covid-19 antibodies in their blood.[xvi] If correct, this would mean some 2.7 million people had been exposed just in New York State—and recovered. The same day, Johns Hopkins' Covid-19 tracker showed 2,682,255 positive cases worldwide.[xvii] While many spun the news of the broader spread fearfully, the crucial message is Covid-19's mortality rate is likely a small fraction of the lofty figures many cite. The crude figures of deaths divided by known cases that pundits often discuss are likely overstated dramatically.

This doesn't mean Covid-19 is not a threat. However, the risk is far greater for the elderly or those with pre-existing conditions. Italy is a case-in-point. As of 20 April, Italy's national institute of health reported 21,551 Covid-19 deaths.[xviii] Decedents' average age was 79—and 96.3% of those who passed had pre-existing conditions. However, even in Italy—once the virus's principal hotspot—the curve of new cases and deaths are flattening. The curve in the US seems to be starting to flatten, as well. (Exhibit 8)

EXHIBIT 8: ITALY AND US—KNOWN NEW CASES PER DAY



Source: US Centers for Disease Control and Johns Hopkins University, as of 23/04/2020.

FLATTENING THE CURVE?

That last point is critical. The aims of social distancing and business restrictions were to prevent Covid-19 patients from overrunning health care systems worldwide.

xv Ibid.

xvi "New York Antibody Study Estimates 13.9% of Residents Have Had the Coronavirus, Gov. Cuomo Says," Noah Higgins-Dunn, Kevin Breuninger and Jasmine Kim, CNBC, 23/04/2020.

xvii Source: Johns Hopkins University's Coronavirus Tracker, as of 23/04/2020 at 11:31 AM.

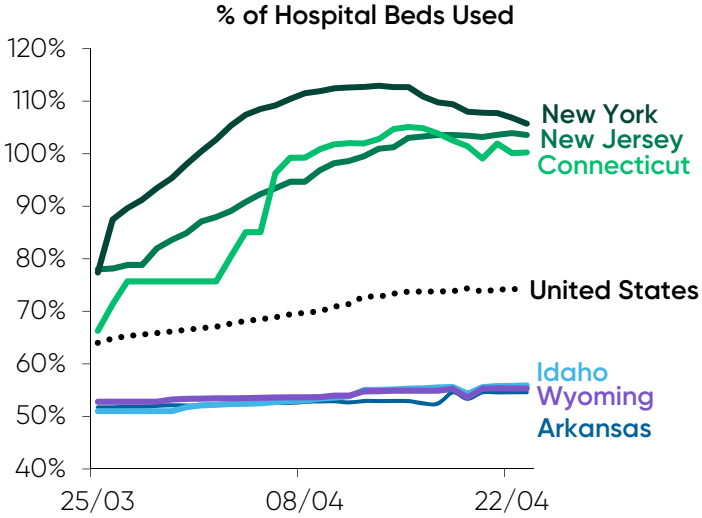
xviii Source: Instituto Superiore di Sanita, as of 23/04/2020. https://www.epicentro.iss.it/en/coronavirus/bollettino/Report-COVID-2019_20_april_2020.pdf

The hospital overrun many feared has happened in a few isolated places, such as select northeastern US states and Italy. But as Samuel N. Hazen, CEO and Director of HCA Healthcare (America's largest publicly traded hospital network) put it:

> *If you think about social distancing and the objective around social distancing, it was to prevent an overrun of the health care system.*
>
> *Well, in many of our markets, the initial forecast were sobering, to be honest with you, and they are—they have come in significantly less. And so we have ample capacity … And that's what we shared with the different governor's offices, in local official's offices….*[xix]

Overall, US hospital capacity is operating at 74%, noticeably below maximum capacity. But there is huge variance. Some states are stretched; others are running at fractions of normal capacity. Exhibit 9 illustrates this by plotting the percentage of US hospital beds currently being used, as well as the top three and bottom three states.

EXHIBIT 9: HOSPITAL BED UTILIZATION RATE



Source: The COVID Tracking Project, the Robert Wood Johnson Foundation, Kaiser Family Foundation and FactSet, as of 23/04/2020. All figures are based on 2018 estimates of hospital bed capacity. US figure aggregates state-level data.

THE PELTZMAN EFFECT

One reason more states' hospital systems aren't bumping up against capacity is that capacity isn't fixed. Pundits lauded China early in the outbreak for rapidly constructing field hospitals to deal with overruns. It is less reported, but this also happened in the northeastern US and Italy—a factor many models did not account for. Yet another key reason why the US hospital system isn't broadly stretched: the Peltzman Effect.

When people perceive a risk, they take actions to protect themselves from it—and in doing so, unwittingly guard themselves from an array of other, similar threats. That is the Peltzman Effect. With a respiratory disease like Covid-19, that primarily means you would expect a lower incidence of influenza and pneumonia deaths. These measures also mean fewer hospitalizations and, in all likelihood, fewer deaths from sepsis. The National Institute of Health estimates nearly 1.7 million Americans get sepsis annually, with 270,000 dying. Similarly, less commuting likely means fewer traffic accidents.

But the factors driving low hospital utilization have another unintended effect. While a hospital system under stress from too much demand faces obvious issues, an underutilised hospital with no elective procedures occurring due to Covid-19 restrictions faces a steep decline in revenue. HCA Healthcare reported admissions fell -30% y/y in April, with inpatient and outpatient surgeries down -50% y/y and -70% y/y, respectively.[xx] A prolonged shutdown of the economy that limits elective procedures restricts their revenue. These groups also lose money on the average Covid-19 treatment, adding to financial pressure. The US government's CARES Act provides $175 billion in funding for hospitals to counter this. That may help offset some pressure in the short run, but it seems insufficient to offset a lasting interruption to a ~$1 trillion revenue stream. Differing capacity, outbreak spread and other local factors mean applying policies similarly nationwide—and even within some large states—is removed from the reality on the ground and is questionable policy.

xix Source: HCA Healthcare quarterly earnings call transcript, as of 23/04/2020. https://finance.yahoo.com/news/edited-transcript-hca-earnings-conference-225614735.html

xx Source: Company filings, FactSet, as of 23/04/2020.

HERD IMMUNITY AND SOCIAL DISTANCING

There are two possible conclusions to the Covid-19 story: Either we get a vaccine or humanity reaches herd immunity when the virus has touched a sufficiently high percentage of people. The key question policymakers face now is: How do you manage the virus in the interim? In most developed nations, the answer has been business restrictions and social distancing—which again, targeted limiting stress on the healthcare system. But now it seems politicians have shifted the objective. Now they want to see declining diagnoses and deaths.

Maybe this seems sensible on the surface. However, in the short term, we can't know if this is right or wrong. Even if social distancing policies slow Covid-19's spread, it may simply have the effect of delaying herd immunity. As mentioned early on, scientists don't even know this immunity is lasting yet, necessitating a vaccine.

SWEDEN

This brings us to an interesting counterfactual: Sweden. Before we present this, we want to be clear: We have no basis to determine whether Sweden's response is better or worse than any other nations'. But the different approach presents questions we think policymakers and the population at large should be asking about policies that close borders, prevent travel and impede business to a significant degree. If we can't ask these questions now, with astounding economic fallout directly linked to these policy decisions, when can we?

The Swedish government is using far looser restrictions on activity, including keeping restaurants open with stepped up cleaning and loose service guidelines. They are allowing groups of up to 49 people to meet and have much more limited social distancing policies than most of the world. The government did recommend older people and those with pre-existing conditions to take precautions and stay indoors, and they have suggested that employees able to work remotely do so. The big difference: There are no legal requirements that any individual adhere to social distancing. Their goal is to take a quicker path to herd immunity, admitting they can't stop Covid-19 completely.

Sweden's government isn't without critics. Many point to the fact it has a higher per-capita death rate than neighbouring Norway. People say this justifies the harsher regimes elsewhere. But both the Swedish plan's architect Anders Tegnell and Sweden's former chief epidemiologist, Professor Johan Giescke, noted recently that this largely hinges on different nursing homes. Norway typically has very small nursing homes, while Sweden's are much larger. Both he and Tegnell agree that an added problem was poor communication with nursing home workers early on.

While the US obviously has a far larger and more diverse population, by density Sweden and the US are very similar. World Bank data show Sweden and the US, respectively, are the 41st and 50th least densely populated nations and dependencies out of 210.[xxi] Sweden's per-capita death rate of 0.0002332 (or 233.2 per million persons) isn't far removed from the United States' 0.0001763 (176.3 per million)—and the age distribution of deaths are nearly identical.[xxii] Sweden's per-capita death rate is higher than Norway's 0.00003597, but Norway's population density is far lower. Does that play a role? We don't know, but it makes intuitive sense—and has been cited by some as a reason urban centres such as New York City are under pressure.

Finally, Swedish officials claim they are mere weeks from attaining herd immunity. It is unclear if that is true—or if herd immunity has any staying power in this situation. But if it is, it could very well mean their approach ultimately results in fewer deaths, less hospital strain and no economic lockdown.

We often quote Sir John Templeton's famous maxim that the four most dangerous words in English are, "This time is different." The late US Navy Rear Admiral and computing pioneer Grace Hopper had a corollary. To her, the most dangerous words were, "We've always

xxi Source: World Bank, as of 29/04/2020. Based on 2018 population density, the latest year available.

xxii Source: Our World in Data, European Centers for Disease Control, as of 29/04/2020.

done it this way." Will Sweden's prove a better approach in the end? No one can know now, but it is worth asking the question and following the data.

MORE QUESTIONS

In our view, the discovery of two Covid-19 deaths in the San Francisco Bay Area that date to early February raise even more questions. This shows the disease circulating in the US far sooner than thought. Most researchers think it takes about a month for the disease to progress from infection to death. If so, this implies the disease was here in early-to-mid January. Moreover, one of the two decedents hadn't travelled—it was spread person-to-person. This, plus the aforementioned New York study and one covering a Boston homeless shelter, all suggest the disease is already much more widespread than researchers thought. What does this mean for herd immunity?

Some will no doubt see that as a call for broader testing to see what share of the population have antibodies. Some, such as Washington Governor Jay Inslee, argue it is a pre-requisite to loosening business restrictions. Perhaps that is a fair point, but politics may be, unfortunately, colouring testing, too. A recent Stanford study suggesting Covid-19 antibodies existed more broadly than thought was dismissed by many as hinging on false positives—one of several to see a similar reaction. But it raises a troubling question: Even if testing shows it is fine to "reopen" the economy, will politicians accept the results? We won't get complete clarity for a long time.

We, of course, don't claim to be experts on viral outbreaks. But we do talk to experts, and they say very different things off the record than others say on. Moreover, again, even the experts have significant knowledge gaps on Covid-19. Whether it is US President Trump, medical or political leaders around the world or academic modelers, nearly everyone has said something proven false in short order.

On this front, we can't help but think speculation from expert agencies isn't helpful. Take, for example, the World Health Organization (WHO). We think it is important such agencies retain credibility, especially in a crisis. The WHO recently stated that there was "no evidence" coronavirus survivours have immunity. Perhaps that is true, but there is equally little evidence they don't have immunity. Where are the data showing how many of the 970,000 who have recovered from Covid-19 have been re-infected? Without this, WHO's statement seems like unscientific speculation.

Similarly, the WHO accidentally published documents on a Chinese trial of Gilead Sciences' coronavirus treatment, Remdisivir, which media used to call the drug a failure. It is widely known the Chinese study didn't follow rigorous standards and that researchers were testing it on patients further along in the disease's progression than Gilead intended it for. Days later, data from a correctly constructed trial showed Remdisivir having success in reducing Covid-19's severity. Unscientific speculation and blunders damage these agencies' credibility.

For investors, it is dangerous to presume you must know the disease to know how markets will react. Markets will, as they have to date, pre-price the economy's likely course. Extending clampdowns—even if they are limited to a regional or local level and not entire countries—could ensure a long recession if they are large enough economic regions. Hence, we are tracking state-and-local level institutional responses daily as part of our means of anticipating the economic conditions markets will pre-price.

DON'T OVERESTIMATE OIL'S IMPACT

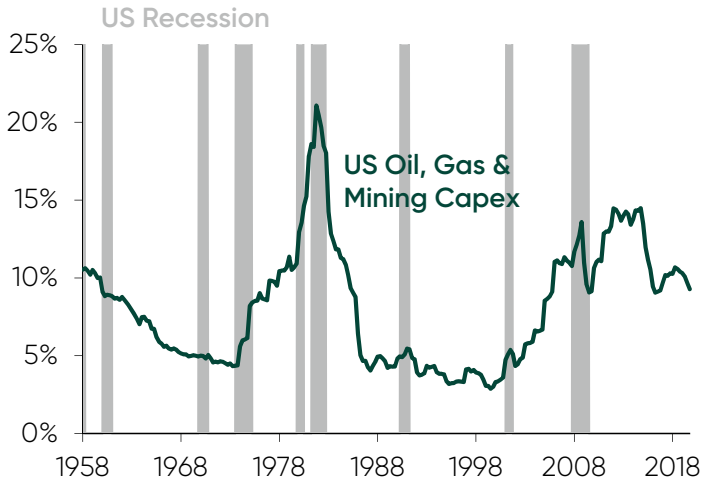
Oil prices deteriorated significantly in Q1, amid widespread discussion of a price war between Saudi Arabia and Russia. When negotiations to extend supply cuts fell through, both instead increased production, in hopes of stealing market share and forcing higher-cost producers out of business. With US producers still maintaining supplies, global output soared. Meanwhile, demand fell drastically as Covid-19 idled cars, planes and a large portion of global manufacturing. As a result, oil prices fell from 2020's high of $70.25 on 6 January to $14.85 at quarter-end, their lowest level in over 20 years.[xxiii] OPEC and other large producers eventually agreed to a large supply cut in early April, but it still doesn't come close to matching the demand shortfall,

xxiii Source: FactSet, as of 17/04/2020. Brent crude oil prices 31/12/1997 – 16/04/2020.

likely keeping prices low. Highlighting this point, oil prices continued plunging after the agreement. As storage capacity neared its limits, oil futures contracts—not actual prices, but contracts on future delivery set to expire in late April—fell into negative territory.

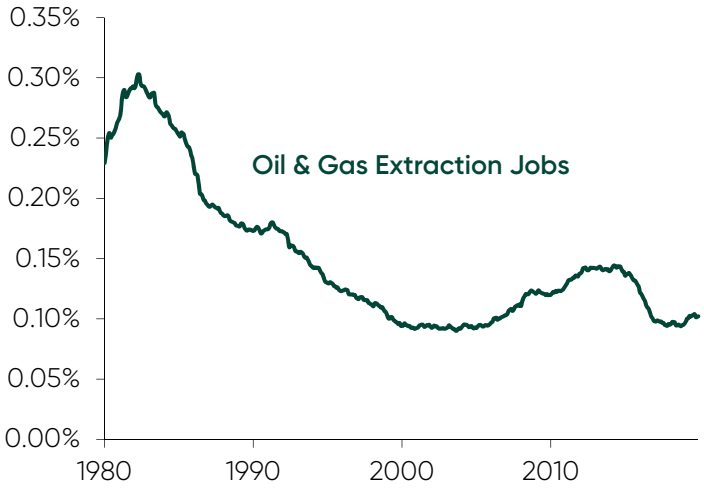
We wouldn't read much into this historic plunge for better for worse. As we have long said, oil isn't a big economic driver. Its influence has waned substantially since the 1970s, when the oil shock had a severe economic impact. Today, developed-world economies are much more energy-efficient. Further, cheap oil doesn't do much good when we can't drive or fly. It will show up in reduced home heating costs, and not much else—this isn't a massive tailwind. Nor is it a headwind. Low prices may force Energy firms to cut investment and headcount, but oil & gas was already a low share of overall capital expenditures and nonfarm payrolls. (Exhibits 10 & 11) Banks' exposure is also minimal. (Exhibit 12)

EXHIBIT 10: OIL & GAS INVESTMENT
% of US Non-Residential Capex



Source: FactSet, as of 20/04/2020.

EXHIBIT 11: OIL & GAS EXTRACTION JOBS
% of US Non-Farm Payrolls



Source: FactSet, as of 20/04/2020.

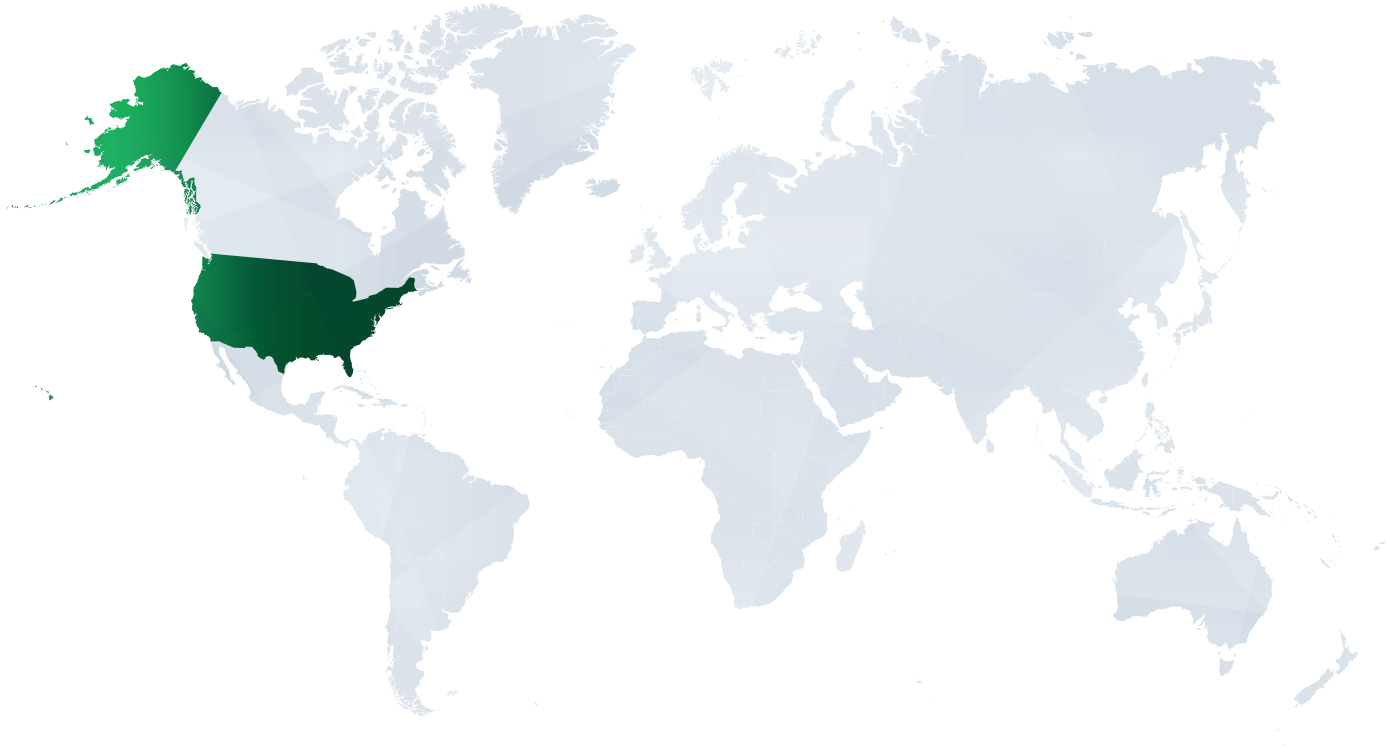
EXHIBIT 12: BANKS' EXPOSURE TO OIL IS LIMITED

	US Mega Bank Energy Loan Exposure			
	JPMorganChase	Bank of America	Wells Fargo	Citigroup
Energy Loans as a % of Total Loans	2.8%	1.7%	1.4%	-
Energy & Mining Loans as a % of Total Loans	3.8%	4.4%	3.1%	4.5%

Source: Company filings, as of 28/02/2020.

Relative to prior quarterly reviews, we included more of our market commentary in the above Market Recap section and less in the following regional commentary sections as countries globally are largely dealing with the coronavirus and the economic fallout from the shutdowns in similar ways.

UNITED STATES **COMMENTARY**



THE ELECTION TAKES SHAPE

As a reminder, our political commentary is intentionally non-partisan. We favour no politician nor any political party and assess developments solely for their potential market impact (or lack thereof). We believe political bias can blind—increasing the likelihood of investment error.

When 2020 began, 15 candidates were vying for the Democratic presidential nomination. Now, all but one have dropped out, leaving former Vice President Joe Biden the presumptive nominee. Barring unforeseen circumstances, he and President Trump will face off in November. Now, attention shifts not only to who will win, but also how the vast restrictions taken to slow the coronavirus's spread will impact the campaign. The latter makes November's election more challenging than usual to predict, in our view. Both candidates have viable paths to victory but face challenges. That raises near-term uncertainty but potentially creates a stronger-than-normal political tailwind for equities when election clarity begins arriving later in 2020.

FROM THE ARENA TO THE SCREEN

We won't belabour the numerous twists and turns that led to Mr. Biden's big comeback. But we think the coronavirus response's impact is noteworthy. On 10 March , both Joe Biden and Vermont Senator Bernie Sanders cancelled rallies due to the virus. President Trump soon did the same. Traditional campaigning—rallies, fundraisers, neighbourhood canvassing—ceased, with Joe Biden soon offering post-primary victory remarks in his makeshift basement studio, homebound like most other Americans.

Going forward, until restrictions on large gatherings lift, Mr. Biden and President Trump will have little choice but to eschew large events. Social distancing also eliminates

traditional door-to-door grassroots campaigns, while at the same time making it much harder for candidates to meet potential donors in person. As long as these measures are in place, candidates will largely carry out their campaigns online or through television and direct mail advertising.

All of this raises uncertainty in the near term, though who benefits and who loses out is sheer speculation—especially since the duration of the restrictions is unknowable. Could they last long enough to impact the parties' conventions? Could virus fears keep voters from the polls in November and increase vote-by-mail efforts, or will in-person turnout hit a multi-decade high as it did in South Korea's recent parliamentary election despite social distancing protocols? Will the virus itself dominate the campaign, or will other issues regain centre stage? It is impossible to assign probabilities to those outcomes now, let alone reasonably assess who stands to gain. We do think removing normal fundraising efforts likely shifts power to the major donors behind each party. But it doesn't offer a clear advantage to either party.

EXPECT AN ENHANCED ELECTION EFFECT

With short-term uncertainty running higher than usual, we expect the election's impact may be harder to isolate than it normally is. However, we expect its typical impact—falling uncertainty acting as a tailwind for equities as the year progresses—to be even more concentrated this year.

Typically, election years begin with a broad slate of candidates for one or both parties, many of whom take extreme positions to appeal to their bases. This wide range of potential outcomes stokes uncertainty, muting first-half returns. However, as the primaries progress and nominees become clear, greater clarity allows investors to begin handicapping election outcomes. Candidates also move to the centre to court independent voters, alleviating some concerns about extreme policy proposals. Falling uncertainty usually leads to stronger second-half returns.

This year, the early bear market adds a variable. If the social distancing restrictions end by midyear, that potentially tees up a turbocharged second half for equities, with the election tailwind boosting the normal early bull market recovery. Conversely, if forced business closures last longer, extending the bear market, falling electoral uncertainty could be a positive helping partly offset the economic negativity to some degree.

STILL TOO EARLY TO PICK A WINNER

The coronavirus likely has election ramifications, too. But these are entirely unclear today. The president did receive a bump in his approval ratings in late March—not atypical in a crisis, but this seemingly faded in April.[xxiv] History offers no precedent for how the pandemic might boost or sink a president's popularity—The US has never held a presidential election during a health crisis. The Spanish flu of 1918 did run into election season, but those were midterm races during Woodrow Wilson's second term. Additionally, World War I hung over everything then.

Unknowable coronavirus impacts on the campaign aside, we think the election outcome will depend largely on whether the US votes "bottom up"—i.e., echoing recent state election trends—or "top down," according to recent presidential elections prior to 2016. In 2016, most pundits assumed Hillary Clinton would defeat President Trump because traditional "red state/blue state" labels rely on top-down analysis. Few noticed that many state legislatures and governorships had flipped Republican in recent years, mostly in lower-income, non-urban areas (Exhibit 13, on the following page)—away from where large media outlets tend to be located. In 2016, voters in those states cast their ballots as they had in recent state races—not as they had in previous presidential contests—carrying Donald Trump to the White House.

Even after the 2018 mid-term elections' "blue wave," state legislatures still lean Republican. The GOP controls 29 of them, with those states representing 300 electoral votes—enough for President Trump to capture re-election, even if he again loses the popular vote.[xxv] A top-down analysis, conversely, favours Democrats.

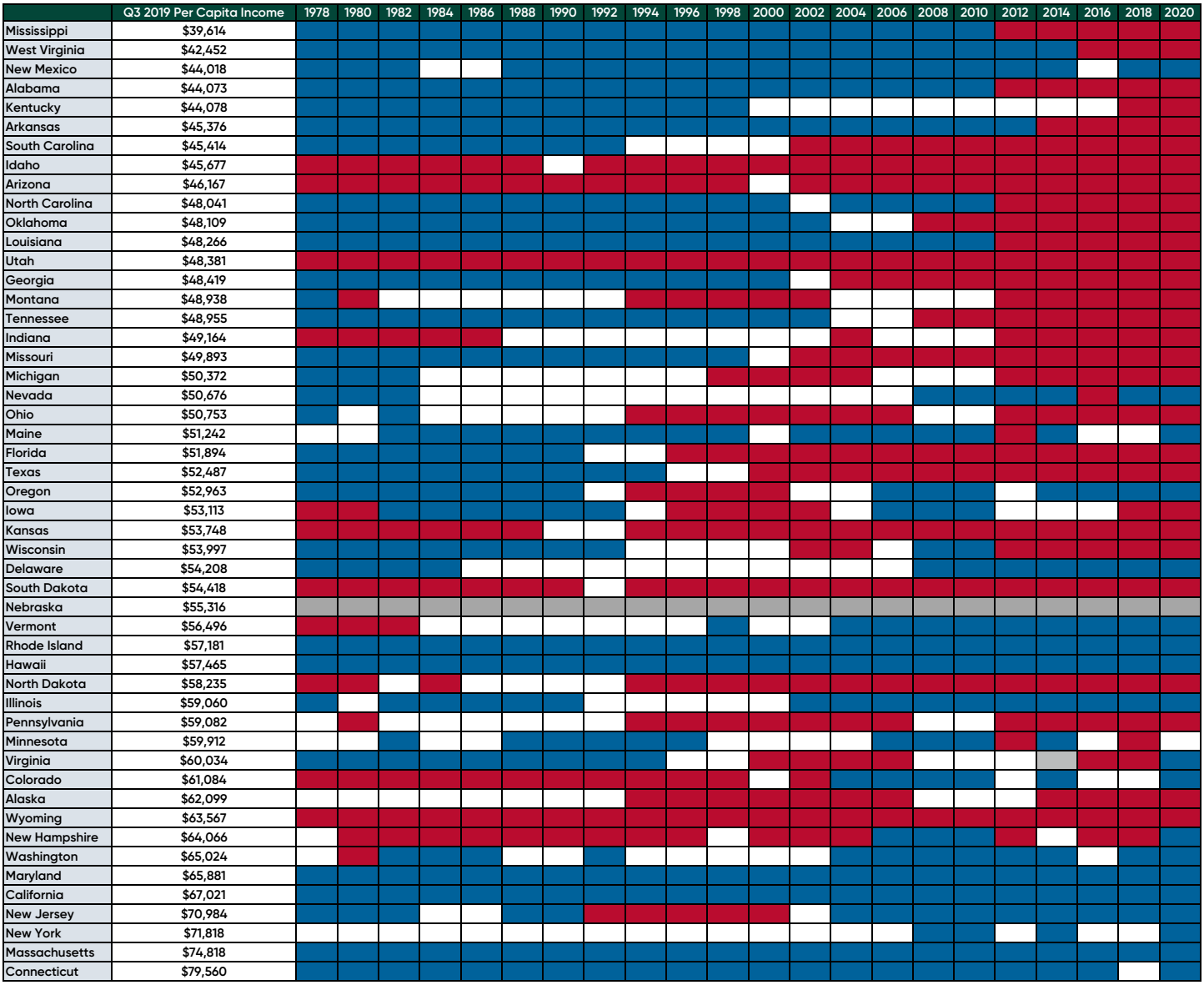
xxiv Source: Real Clear Politics, as of 14/04/2020.

xxv Source: National Council of State Legislatures and Fisher Investments Research, as of 16/04/2020.

In the past five contests, 24 states consistently voted Democratic, representing 251 electoral votes.[xxvi] Republican candidates ran the table in 20 states over that stretch, representing 206 electoral votes. The remaining six states have split five-year histories and account for 81 "swing" votes.

Incumbents are difficult to beat. In a normal year, the odds favour their winning re-election. But this isn't a normal year. Typically, recessions threaten incumbents' re-election chances—a factor that could favour Joe Biden this November. In the past century, only four sitting presidents lost re-election bids—George H.W. Bush, Jimmy Carter, Gerald Ford and Herbert Hoover. All lost either during a recession or in the near aftermath of one, when job growth—and sentiment—remained weak. Perhaps this is what polls are hinting at. RealClearPolitics' average gives Joe Biden a 6.3 percentage point lead over President Trump at the time of this writing.[xxvii]

EXHIBIT 13: PARTISAN COMPOSITION OF STATE LEGISLATURES OVER TIME (SEE PRIOR PAGE)



Source: National Conference of State Legislatures, US BEA, as of 21/01/2020. 1978 – 2020 legislative partisan composition by state and Q3 2019 per capita income by state. *Excludes Nebraska (non-partisan unicameral legislature).

xxvi Source: The Wall Street Journal, US National Archives and Fisher Investments Research, as of 19/11/2019.

xxvii Source: RealClearPolitics, as of 29/04/2020.

We can't know now who wins—there is far too much campaigning left. Ultimately, the White House will go to the person who campaigns better as the vote draws near. In 2016, Donald Trump's success in pursuing voters in Midwestern swing states (Pennsylvania, Ohio, Michigan and Wisconsin) seemingly surprised the Democratic Party. He isn't sneaking up on them this time.

CONGRESSIONAL RACES: TOO EARLY TO TELL

As written in past Reviews, we weigh Congressional races' structural factors: Which party must defend more seats in the other party's traditional territory? Those seats are generally the most vulnerable. Exhibit 14 shows each contested Senate seat's incumbent party this November, alongside the Republican candidate's support in the past two presidential contests.

Currently, only two Republicans and one Democrat must defend seats in opposition territory. Colorado, for example, has voted Democrat in each of the past three presidential races, putting first-term GOP Senator Cory Gardner at risk.[xxviii] Its Senate also flipped Democratic in 2018, giving it a clean sweep of the state legislature and governorship.[xxix] Further, it looks increasingly likely that popular former Governor John Hickenlooper will oppose Senator Gardner. That will make this a key race to watch in November, as the Democrats likely need it to wrest control of the Senate. Few other GOP seats look as vulnerable as Senator Gardner's.

On the flipside, Democratic Senator Doug Jones, who won Alabama's 2017 special election, is running for re-election in a state that hasn't voted for a Democratic presidential candidate since Jimmy Carter—and whose governorship and legislature have been under GOP control without interruption since 2011.[xxx] But here too, the coronavirus response has delayed clarity on his opponent, as a previously scheduled 31 March runoff between former Attorney General Jeff Sessions and former Auburn University football coach Tommy Tuberville was delayed until July. This will be another key race to watch as it pertains to Senate control.

EXHIBIT 14: 2020 SENATE RACES

Senator	Party	State	2016 % Vote for Trump	2012 % Vote for Romney
Enzi, M. (OPEN)	R	WY	70%	69%
Moore Capito, S.	R	WV	69%	62%
Inhofe, J.	R	OK	65%	67%
Jones, D.	D	AL	63%	61%
McConnell, M.	R	KY	63%	60%
Rounds, M.	R	SD	62%	58%
Alexander, L. (OPEN)	R	TN	61%	59%
Cotton, T.	R	AR	60%	61%
Sasse, B.	R	NE	60%	60%
Risch, J.	R	ID	59%	65%
Hyde-Smith, C.	R	MS	58%	55%
Cassidy, B.	R	LA	58%	58%
Daines, S.	R	MT	57%	55%
Roberts, P. (OPEN)	R	KS	57%	60%
Graham, L.	R	SC	56%	55%
Sullivan, D.	R	AK	53%	55%
Cornyn, J.	R	TX	53%	57%
Ernst, J.	R	IA	52%	46%

Senator	Party	State	2016 % Vote for Trump	2012 % Vote for Romney
Loeffler, K.*	R	GA	51%	53%
Perdue, D.	R	GA	51%	53%
Tillis, T.	R	NC	51%	50%
McSally, M.*	R	AZ	50%	54%
Peters, G.	D	MI	48%	45%
Shaheen, J.	D	NH	47%	46%
Smith, T.	D	MN	45%	45%
Warner, M.	D	VA	45%	47%
Collins, S.	R	ME	45%	41%
Gardner, C.	R	CO	45%	46%
Booker, C.	D	NJ	42%	41%
Coons, C.	D	DE	42%	40%
Merkley, J.	D	OR	41%	42%
Reed, J.	D	RI	40%	35%
Udall, T. (OPEN)	D	NM	40%	43%
Durbin, R.	D	IL	39%	41%
Markey, E.	D	MA	34%	38%

Source: Fisher Investments Research and US Senate, as of 08/01/2020. *Special election in 2020. "OPEN" indicates the incumbent isn't contesting the seat.

xxviii Source: Ballotpedia, as of 14/04/2020.

xxix Source: Ballotpedia, as of 14/04/2020.

xxx Source: Ballotpedia, as of 14/04/2020.

Q1 VOLATILITY AND US EQUITY MARKET LIQUIDITY

Recent market volatility seems more extreme than it has been in the past. We believe there are some structural reasons explaining this change. For instance, US equity markets are less liquid today than they have been in the past. The largest causes of lower liquidity today are:

- **Fewer market making firms**
- **Market makers don't take on directional positions tied to regulation**

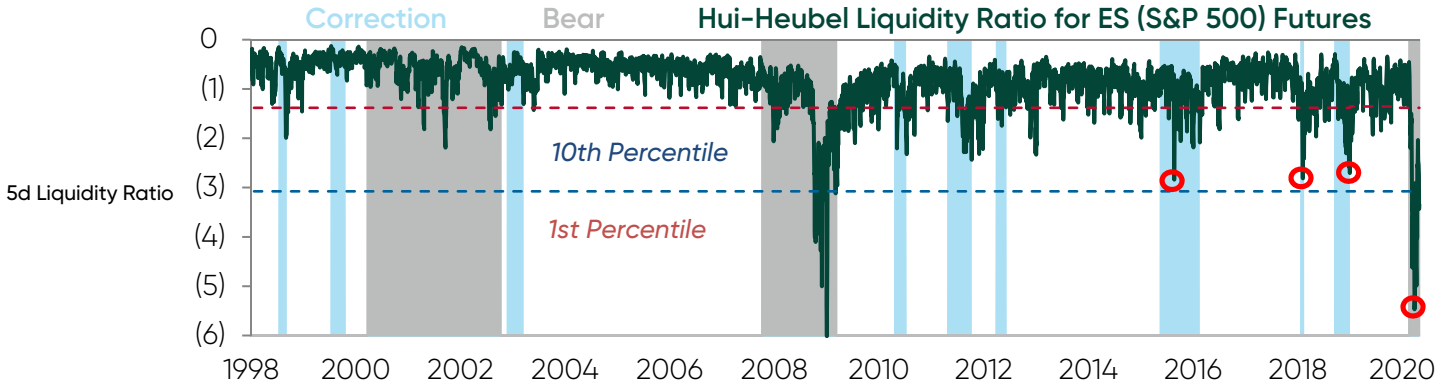
The second point is largely due to the electronic nature of the firms that make markets today. Electronic market making, commonly known as High-frequency trading (HFT), unarguably led to narrower spreads and lower trading costs; but it also led to more fickle liquidity. HFTs provide liquidity without taking into account fundamental information, and thus naturally withdraw liquidity during periods of market stress to avoid being adversely impacted. This was evident several times in the last decade and is also happening now.

One key factor that drove the ubiquity of HFT today is regulation. Dodd-Frank and Basel III dramatically reduced banks role in market making by disincentivizing banks from holding securities that have a higher risk weighted assets (RWA) cost. While banks remain active in markets such as equities, high yield debt, and derivatives, they attempt to hold as close to a net neutral position as possible to avoid high RWA penalties, which affect major regulatory capital ratios. In addition, the Volcker Rule outlawed proprietary trading, outside of making markets for clients, which in practice has many gray areas. Most banks err on the side of caution and avoid carrying any net long or short risk in equities, high yield debt, or derivatives. The Volcker Rule was passed in 2010, but was phased in slowly before coming into full effect in 2015. In short, regulation probably accelerated the existing trend of market making moving from the highly-regulated banking system to lightly-regulated HFT firms.

As a result, during times of market stress, liquidity has dried up in a way that is far more extreme than the past. The five worst equity market liquidity environments since 1998 were the last four market downturns (August 2015, February 2018, December 2018, March 2020), and late 2008. (Exhibit 15)

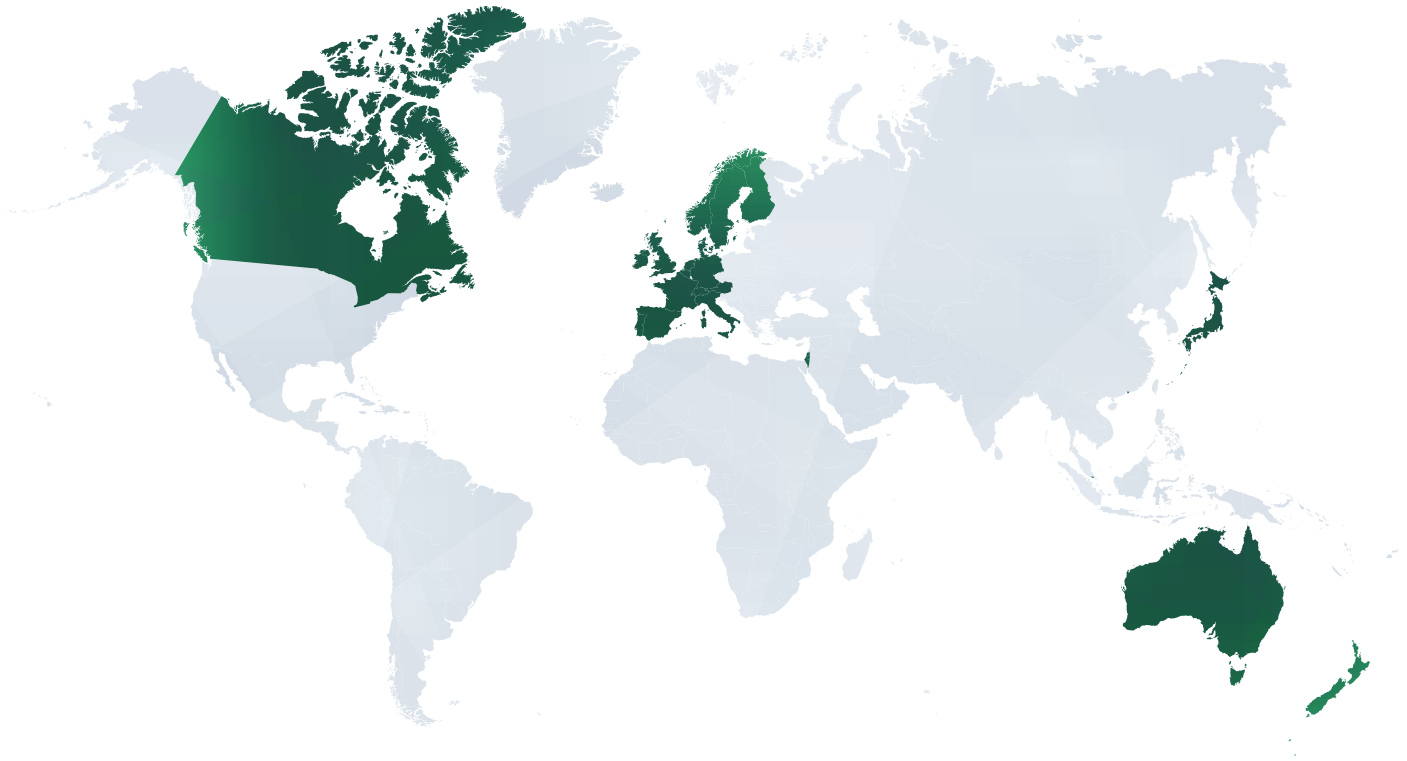
Combining the lack of market liquidity and trading that can be done at low barriers with lightning speed, you have a recipe for market panic as we saw in the downturn. However, over the medium and long-term markets will move more on fundamentals.

EXHIBIT 15: LIQUIDITY OF S&P 500 FUTURES OVER TIME



Source: FactSet, daily data as of 30/04/2020.

GLOBAL DEVELOPED EX-US **COMMENTARY**



GLOBAL VIRUS RESPONSE

As mentioned earlier, policymakers in developed markets across Europe and Australasia have implemented shelter in place orders attempting to minimise the spread of Covid-19. Many have also announced large economic response packages in an attempt to support their economies. In Europe, Germany unveiled a €750 billion plan-including a €400 billion "stabilization" fund to backstop corporate debt at risk of default-while France earmarked €45 billion in aid for businesses and workers.[xxxi] The French government also guaranteed up to €300 billion in corporate borrowing from commercial banks.[xxxii] The UK government will provide £330 billion in loan guarantees to businesses and defer VAT payments worth £30 billion.[xxxiii] In Japan, the ruling Liberal Democratic Party (LDP) proposed a ¥60 trillion package, with direct spending accounting for ¥20 trillion of the total.[xxxiv] In Australia, Prime Minister Scott Morrison's government seeks to support businesses and workers through A$213.6 billion in federal aid.[xxxv]

While we doubt these fiscal and monetary measures will do much to boost a global economy that is shuttered in many respects. The economic cycle will turn with or

xxxi "Factbox: Global Economic Policy Response to Coronavirus Crisis," Staff, Reuters, 30 March 2020.

xxxii Ibid.

xxxiii "Japan Plans Record 60 Trillion Yen Stimulus as Virus Spreads," Yoshiaki Nohara, Emi Nobuhiro and Emi Urabe, Bloomberg, 30 March 2020.

xxxiv Ibid.

xxxv "Australian economic stimulus package: how much governments have committed to coronavirus crisis," Paul Karp, The Guardian, 31 March 2020.

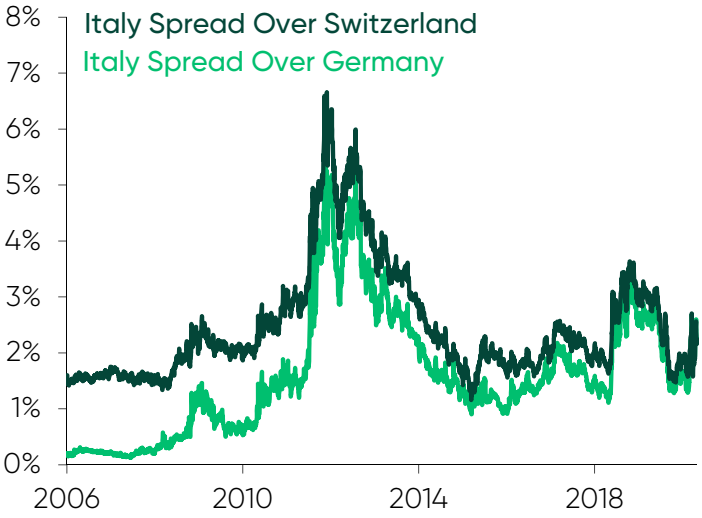
without these extraordinary pledges and plans. During the eurozone's 2011 – 2013 recession, a eurozone bull market started more than a year before the economic recovery began.[xxxvi]

A LOOK AT ITALIAN DEBT

As bear markets progress, it is common for fears to morph from the primary driver to hunt for secondary effects—the proverbial "second shoe to drop". Often, these fears amount to echoes reverberating from the initial downturn. In 2009, many who thought US subprime mortgage defaults were driving the bear market pointed to Alt-A mortgages as the next shoe. Still others feared inflation and debt issues tied to global governments' and central banks' efforts to stimulate the economy. The same is happening today. The downturn's primary cause is the interruptions to business caused by Covid-19. Yet the massive governmental response is giving rise to other, secondary fears. One common one reboots a longstanding fear existing throughout the 2009 – 2020 bull market: Italian debt, particularly if the eurozone doesn't collectivise debt tied to the Covid-19 response. Yet we think fears over Italy's debt sustainability are likely to prove unfounded once again.

Fear over Italian debt is nothing new. During the 2009 – 2020 bull market, it was a fairly frequent source of concern. After Greece kicked off the eurozone's sovereign debt crisis by revealing much higher-than-documented deficits and debt, Portugal and Ireland came under market pressure—with rates and yield spreads versus stalwart Germany rising. Many presumed Italy, which then sported a roughly 120% debt-to-GDP ratio, was next.[xxxvii] Italian 10-year BTP spreads over 10-year German bunds and 10-year Swiss debt ballooned. Prior to 2008's global financial crisis and Greece's deficit admission, Italy paid a fraction of a percentage point more than Germany to borrow for a decade—about 1.5 percentage points more than Switzerland. But during the eurozone's 2010 – 2013 sovereign debt crisis's peak, Italian spreads over Germany and Switzerland hit 5.6 and 6.7 percentage points, respectively—highlighting fear over Italy's creditworthiness. (Exhibit 16) Many presumed it, with over €1 trillion in nominal debt, was too big to bail out. Many argued that this meant the eurozone must share debt in a fiscal union. But Dutch and German leaders (among others) objected, arguing this put their relatively low-debt nations on the hook for past profligacy by Italy and other southern nations.

EXHIBIT 16: 10-YEAR BOND SPREAD, ITALY VERSUS GERMANY AND SWITZERLAND



Source: FactSet, as of 30/04/2020. 10-year BTP yield minus 10-year bund and 10-year Swiss government bond yields, 31/12/2005 – 29/04/2020.

But in time, fear faded as Italy successfully rolled over debt in the public markets. Growth eventually returned to the Continent and spreads retreated—until May 2018, when the populist League and Five-Star Movement performed well in Italy's national elections. These parties often talked of big deficit spending plans that flouted the EU's deficit and debt limits. They even occasionally spoke of threatening to leave the euro if they couldn't get permission from Brussels to run bigger deficits. As Exhibit 16's spike in mid-2018 shows, fear of an Italian default resurged. But political gridlock and the incompatibility of these populist groups meant very little actually changed. In time, fear faded. But now it is back, as many speculate that the Covid-19 lockdowns will slash GDP while stimulus plans drive up spending—putting Italy, with its debt at 134.8% of GDP entering

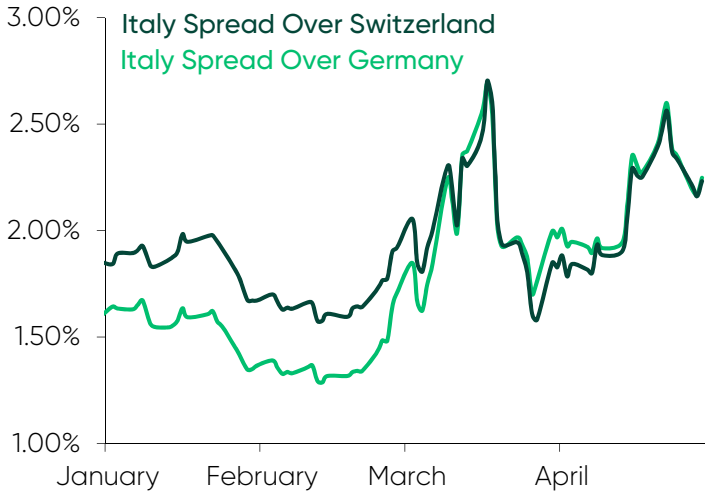
xxxvi Source: FactSet, as of 30/03/2020. MSCI EMU Index return with net dividends in USD, 02/05/2011 – 01/06/2012 (eurozone bear market dating). Eurozone gross domestic product, quarter-over-quarter percentage change, Q4 2011 – Q1 2013 (recession dating).

xxxvii Source: FactSet, The Bank of Italy and Oxford Economics, as of 30/04/2020. Italy debt-to-GDP ratio in Q3 2010.

2020, at risk.[xxxviii] Many see this as again necessitating pooling debt tied to eurozone Covid-19 response plans in so-called coronavirus bonds.

There is little doubt Italian debt-to-GDP will rise in 2020. To what extent isn't knowable, considering the wide range of GDP contraction estimates and uncertain spending plans. But yields and spreads rose noticeably after this bear market began. (Exhibit 17)

EXHIBIT 17: ITALIAN SPREADS JUMP AS COVID-19 RESTRICTIONS HIT



Source: FactSet, as of 30/04/2020. 10-year BTP yield minus 10-year bund and 10-year Swiss government bond, 31/12/2005 – 29/04/2020.

Some feared credit raters would downgrade Italy to junk status. But in mid-to-late April, both Moody's and S&P declined to change their ratings, claiming Covid-19's effect is a one-off. Moody's already rates Italy one notch from junk, with S&P rating it two notches above its measure of junk status. Fitch, however, did downgrade Italy to a level matching Moody's, citing its expectation that debt would jump to 156% of GDP.

In our view, it is hard to see what all the concern over Italy's rating is about. Many claimed a downgrade would put Italy at risk of being shut out of the ECB's sovereign bond buying—which they argue is keeping Italy's debt affordable. But the ECB already eschewed its "limits" on buying junk-rated debt.

Regardless, we think the reason Italian debt fears keep ebbing after they emerge applies now, too: Italian debt isn't unsustainable. Yes, it entered 2020 at 135% of GDP and will rise by an unclear amount from here. But debt-to-GDP compares two very different measures. Debt is accumulated over decades. GDP is the annual flow of economic activity.

In our view, comparing tax revenue to interest payments is a far better metric that compares two flow-related statistics. This goes straight to the question: Can Italy afford its debt payments or not? As Exhibit 18 shows, the country entered 2020 with interest payments accounting for their lowest share of tax receipts since the early 1980s.

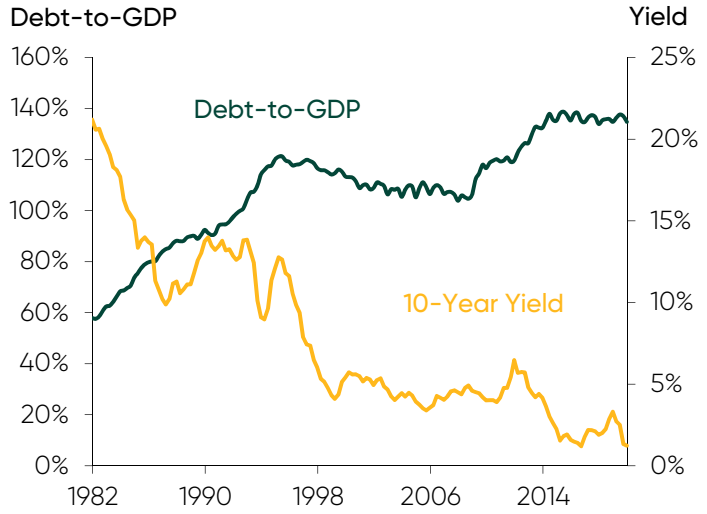
EXHIBIT 18: ITALY INTEREST PAYMENTS' SHARE OF TAX REVENUE

Source: FactSet, Oxford Economics and the Bank of Italy, as of 30/04/2020. Q4 1981 – Q4 2019.

xxxviii Ibid. Italy debt-to-GDP ratio in Q4 2019.

The reason Italian payments are so affordable now is that, despite rising debt, yields have tumbled. (Exhibit 19)

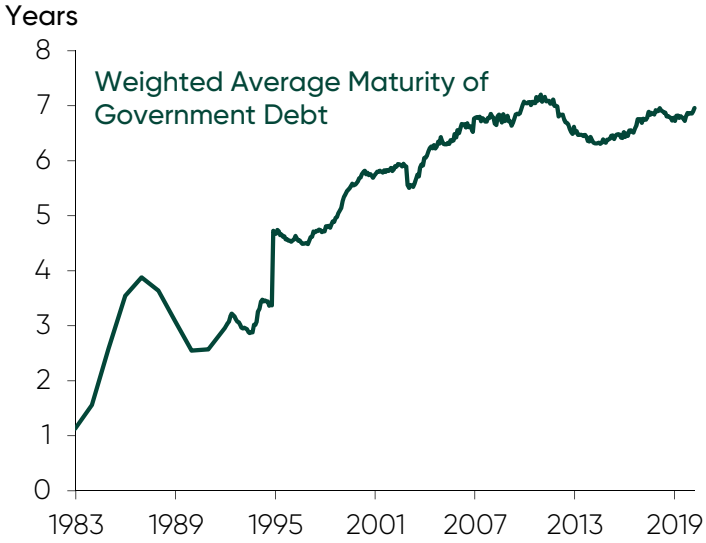
EXHIBIT 19: FALLING YIELDS OUTWEIGH RISING DEBT-TO-GDP



Source: FactSet, Oxford Economics and the Bank of Italy, as of 30/04/2020. Q4 1981 – Q4 2019.

Of course, this does mean rising interest rates could threaten Italy's debt. But they would have to climb very far and—crucially—remain there for years. As with most sovereign nations, most of Italy's outstanding debt is fixed-rate. Hence, once a bond is issued, secondary market fluctuations don't impact the country's interest payments. They will matter only when that nation goes to refinance its debt. Today, the weighted-average maturity of Italian debt is nearly seven years, meaning much of it won't come due until years from now. (Exhibit 20) Covid-19 restrictions will likely be long gone by then, and any fear over short-term Italian funding with them.

EXHIBIT 20: WEIGHTED-AVERAGE MATURITY OF ITALIAN DEBT



Source: FactSet, Oxford Economics and the Bank of Italy, as of 30/04/2020. 31/12/1982 – 31/03/2020.

Hence, we don't expect a one-time uptick in debt issuance to cause an Italian debt crisis—true whether or not the eurozone elects to share Covid-19-response debt in collective coronavirus bonds. Italy's debt is much more sustainable than many analysts and pundits presume.

In this vein, Italy's debt has become politicised. Due to its sheer size, many who favour greater eurozone integration—like a fiscal transfer union—cite it as the reason nations must pool debt. While we won't weigh in on the merits of a potential eurozone fiscal transfer union, we see few facts suggesting it is necessary to support Italy. But we wouldn't be surprised if Italian debt were cited as justifying greater integration in virtually any near-future eurozone economic downturn.

NOTABLE POLITICAL EVENTS DURING THE QUARTER

On 31 January, the UK officially left the EU, a development more than three and a half years in the making. Some uncertainty remains, as the UK and EU must negotiate a new trade deal before the Brexit transition period ends in December. Many experts forecast flagging growth due to the quick exit timeline, showing pessimism towards the UK economy remains rampant. In our view, those concerns seem off base. For instance, reaching a trade deal with the EU shouldn't be as onerous as feared unless the coronavirus impairs this progress. Both sides have an incentive to get a deal done, and they also already have harmonised regulation. More importantly, the biggest source of uncertainty-what Brexit was going to look like and when it was going to happen-has finally passed, allowing businesses to finally move on.

In Spain, Prime Minister Pedro Sánchez's centre-left Socialist Party formed a minority coalition with the leftist populist Podemos in January-the country's first government in nearly a year. Positively, this development removes some longstanding political uncertainty, but many investors fear the leftist coalition will make good on their campaign pledges and implement a slew of anti-business policies (e.g., raising income and capital gains taxes, taxing banks and rolling back labour market reform). Yet it looks highly unlikely this government will be able to get much done particularly with the political focus on coronavirus. The Socialist-Podemos coalition lacks a Parliamentary majority and entered power only because a Catalan separatist party abstained from the investiture vote. This government may not even have much staying power given their dependency on smaller parties such as the Catalan separatists. While the noise surrounding Spanish politics may grab attention, the worst-case scenarios aren't likely to play out as feared-setting up a positive surprise.

EMERGING MARKETS **COMMENTARY**

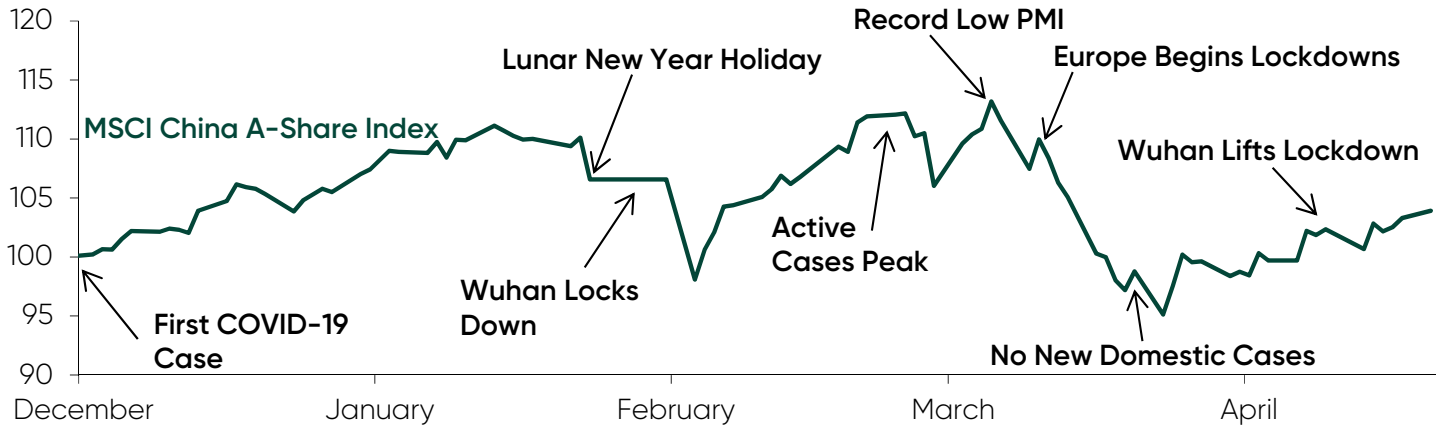
CHINA: EARLY SIGNS OF RECOVERY FROM COVID-19 BUSINESS DISRUPTION

Business disruptions to control the Covid-19 pandemic drove China's Q1 GDP down -6.8% y/y—its first negative read since the country's economic opening under Deng Xiaoping.[xxxix] With the combination of weak export demand as the developed world battles Covid-19 and China's GDP impact, it may be some time before economic improvement is apparent in official data. Yet Chinese equities' ups and downs during the quarter show why we think the market is unlikely to wait for clarity on the economic front.

xxxix Source: FactSet, as of 20/04/2020. China real GDP, Q1 2020.

As China's government and economy dealt with the outbreak, equities led the way. On 27 January, a few days after authorities locked down Wuhan (the city where the coronavirus originated), China's State Council announced the week-long Lunar New Year holiday would be extended to 2 February across the country as the outbreak's scale—and what it would take to contain it—became apparent. When markets reopened after the break, the MSCI China A-Share Index of mainland Chinese equities plunged. (Exhibit 21) However, a day later, it began recovering, and it was back at new highs by 14 February—despite worsening Covid-19 case counts and economic data.

EXHIBIT 21: CHINESE EQUITIES LED ECONOMIC DEVELOPMENTS



Source: FactSet, as of 20/04/2020. MSCI China A-Share Index with net dividends in CNY, 29/11/2019 – 20/04/2020. Indexed to 100 at 29/11/2019.

We believe Chinese equities were rising in anticipation of case counts dwindling, companies reopening and economic data beginning to improve. Those developments became apparent in March, before the global response to the pandemic affected mainland equities anew as the likelihood of a global economic contraction rose. In mid-March, China's Ministry of Industry and Information Technology reported 95% of large firms and 60% of small- and medium-sized firms resumed operation outside of Wuhan's Hubei province. FedEx on its 17 March Q1 earnings call corroborated this, noting 90 – 95% of large manufacturers and 65 – 70% of small manufacturers restarted production.[xl] This was as daily new Chinese coronavirus cases—and deaths—shrank dramatically.

March hard data, while still showing year-over-year contraction, had hints of improvement from January – February declines. (Exhibit 22)

EXHIBIT 22: CHINA MONTHLY DATA SINCE COVID-19 OUTBREAK

Indicator (Y/Y%)	Mar	Jan – Feb	Dec
Retail Sales	-15.8	-20.5	8.0
Industrial Production	-1.1	-13.5	6.9
Exports	-6.6	-17.2	7.6
Imports	-0.9	-4.0	16.3
Fixed Asset Investment (YTD)	-16.1	-24.5	5.4
New RMB Loans	12.7	12.1	12.5
Total Social Financing	11.5	10.7	10.7
M2 Money Supply	10.1	8.8	8.7

Source: FactSet, as of 20/04/2020.

Below the surface some category details exhibited strength—evidence of underlying domestic demand. For example, retail sales line items such as communication devices rebounded 6.5% y/y in March from the previous two months' combined -8.8%, while online retail sales growth nearly doubled, accelerating to 5.9% y/y from 3.0%.[xli] Within fixed asset investment—a gauge of capital expenditures—real estate investment's contraction slowed to -7.7% year to date through March versus the same period a year ago—less than half January –

xl Source: FedEx Investors Relations Department, as of 02/04/2020. Statement made during Q1 2020 earnings call held on 17/03/2020.

xli Source: FactSet, as of 20/04/2020. China retail sales, January – February and March 2020.

February's -16.3% year-to-date, year-over-year pace.[xlii] Further, while infrastructure investment contracted, the pace slowed significantly (March: -16.4% YTD y/y; January – February: -26.9%).[xliii]

Meanwhile, although monetary policy cannot offset the impact of the disruptions to business stemming from the world's Covid-19 response, it may help cushion the effect some short term. The People's Bank of China (PBoC) cut reserve requirements for banks directing loans to smaller businesses, freeing up around $78 billion in funds, while also increasing banks' quotas for lending to them. The central bank also cut its direct lending rate to banks. This is showing up in new loan, aggregate credit and money supply growth data, which should help support economic activity.

However, outside China, Covid-19's spread accelerated, with overseas responses renewing pressure on Chinese equities. Developed-world countries' containment measures destroyed demand for Chinese goods, making a global economic contraction almost assured. As shops and malls closed throughout the US and Europe, retailers there cancelled orders for Chinese deliveries. Factories idled during lockdowns reopened to find their main trading partners closed down. Global equities fell accordingly, and China wasn't spared.

From here, Chinese equities' recovery is probably tied to global recovery. But we don't think global or Chinese equities will wait for clarity on the virus or improving economic data. Markets are forward-looking economic indicators. As China and the world locked down, equities moved first—in anticipation of the rising likelihood of recession. They will likely do the same and move in advance of improving economic data.

Of course, the timing of a recovery likely does hinge on lifting the restrictions on business. Regardless, there is no all-clear signal. As China's initial experience showed, Chinese equities moved well ahead of medical and economic data. We expect markets will once again anticipate global recovery before it is readily apparent.

ADDITIONAL EM COVID-19 MEASURES

While some EMs (like China and South Korea) appear past the worst of the virus, many others are far earlier in the fight and data have yet to even hint at the fallout. But as in China, equities likely won't wait for this to fade before starting to anticipate brighter days ahead.

EM governments aren't waiting to enact policy responses to the likely economic impacts. Many have announced or implemented an array of monetary moves and fiscal measures designed to alleviate Covid-19-related economic pain. Although we question these efforts' overall efficacy, we think they are worth being aware of. Exhibits 23 and 24 show some of the most notable.

EXHIBIT 23: NOTABLE EM FISCAL MEASURES

Country	Fiscal Measure
China	Approved $170 billion in tax cuts and spending.
South Korea	Passed a $9.6 billion initial supplementary budget containing funds for coronavirus response efforts, business loans and subsidies, and job and income support for low-income families.
	Approved $82 billion in corporate support, including loans to small and mid-sized businesses, corporate bond-buying and stock purchases.
	The government is considering a second supplementary budget comprised of $7.4 billion in cash payments to households.
Brazil	Pulled forward $29 billion in planned social spending.

Sources: Vox EU, Reuters, Bloomberg and The New York Times, as of 02/04/2020.

EXHIBIT 24: NOTABLE EM MONETARY MEASURES

Country	Monetary Measure
China	Reduced banks' reserve requirements, freeing up $78 billion that authorities are encouraging banks to loan to small businesses.
	Cut rates on loans to banks from the central bank.
	Raised quotas for bank lending to small and medium-sized businesses.
South Korea	Cut short-term interest rates.
Brazil	Cut short-term interest rates.
	Reduced bank capital requirements by $11 billion.
	Permitted banks to offer more loans and lower rates to more creditworthy companies and households.
	Announced $231 billion in various liquidity measures, of which $129 billion will go towards loans to banks.
India	Cut rates on short-term loans to banks from the Reserve Bank of India (RBI) as well as the rate banks receive on reserves kept at the RBI.
	Offered $18.4 billion in emergency loans to banks, plus an additional $13 billion on the condition they use the funds to buy corporate debt .
	Cut banks' reserve requirements, freeing up $18.4 billion for potential new bank loans.
	Permitted banks to let businesses and households defer payments on loans for up to three months without damaging their credit or incurring penalties.

Sources: The New York Times, The Financial Times, Reuters, The Financial Post, Mint, The Financial Express and Entrepreneur India.

xlii Ibid. China fixed asset investment, January – February and March 2020.

xliii Ibid.

OIL'S IMPACT ON EMERGING MARKETS

As mentioned in the Market Recap, oil prices collapsed in Q1, falling -78.1% amid wild daily swings as coronavirus-related business disruptions hurt demand and major oil exporters waged a temporary price war, initially boosting output instead of agreeing on cuts.[xliv] Although OPEC+ did agree to cuts in mid-April, the ongoing demand plunge from Covid-19-related restrictions seemingly outweighed it, with prices falling further late in April—with expiring futures contracts even entering negative territory, as storage options dwindled. In the near term, lower-cost producers in developing economies likely fare better, though all oil exporters probably suffer to some degree. Conversely, oil importers likely benefit slightly from the lower prices—although they likely won't feel that positive effect while business disruptions and social distancing are in place.

In early March, OPEC+ was considering extending or deepening existing cuts. After talks fell apart, prices fell as markets anticipated additional supply from OPEC+ countries as well as continued record output from US producers. Even though few of the latter can profit with prices this low, they can recoup some of their investments by continuing to pump—at least until the cost of transport or storage becomes prohibitive. Soon after, markets reckoned with Covid-19 containment efforts' effects on commerce. Travel and transportation—major sources of oil demand—appear among the hardest-hit industries. Many factories also stand idle and businesses have been forced to close. Oil prices fell anew as the extent of the near-term demand destruction became apparent.

Oil's second plunge drew OPEC+ countries back to the negotiating table. On 12 April, they agreed to production cuts totalling 9.7 million barrels per day (bpd) in May and June—just under a quarter of their current production. In July, the cuts fall to 7.6 million bpd—then again to 5.6 million bpd starting next January, before expiring in April 2022. In our view, while historically large, the cuts aren't as sweeping as they initially appear. Saudi Arabia's promised 3.8 million bpd in cuts merely bring production 1.3 million bpd below its January – March average.[xlv] G-20 nations separately promised a 5 million bpd reduction—the bulk coming from the US, Brazil and Canada—but this merely reflects projections for market-driven cuts, not mandated ones. These will also likely take time to play out—and since they are linked to oil prices, they probably don't happen if prices recover. For instance, the US pledged to reduce output by 300,000 bpd—but the Energy Information Administration forecasts output falling 500,000 bpd as producers respond to low prices.[xlvi] Finally, the deal doesn't take effect until May, leaving participants free to keep pumping at current high levels until then.

In our view, OPEC+'s agreement won't keep supply reductions from outstripping declining demand for the foreseeable future. Even assuming perfect compliance—which is far from assured, given some OPEC members' history of pumping beyond agreed-upon levels—9.7 million bpd in cuts is nowhere close to the International Energy Agency's 29 million bpd demand decline estimate.[xlvii] The imbalance has already swelled global oil inventories, and remaining storage capacity is filling quickly. Producers and traders are turning to container ships as onshore space runs out. Absent rebounding demand, the cuts may just delay the inevitable by a few weeks.

Governments' swiftly ending Covid-19 related restrictions might help oil markets balance. But full demand restoration seems unlikely in the near future. Large portions of major economies are still on lockdown, and extant plans call for phasing out business and movement restrictions gradually.

In the near term, low oil prices likely benefit EM importers such as China, India, South Africa and Turkey, though Covid-19-related restrictions on commercial activities mean that impact won't be felt in the here-and-now. Conversely, they are an additional economic and budgetary negative for major EM exporters such as Russia, Saudi Arabia, Mexico, Brazil and the UAE. Since many of these countries derive a substantial portion of government revenues from oil production, the supply

xliv Source: FactSet, as of 08/04/2020. Brent crude oil price percentage change, 31/12/2019 – 31/03/2020.

xlv Source: US Energy Information Administration, as of 14/04/2020.

xlvi Ibid., as of 20/04/2020.

xlvii "Oil Market Report - April 2020," International Energy Agency, 15/04/2020.

glut may create big shortfalls. Hence, sovereign credit risk in Emerging Market oil exporting nations is up, as evidenced by rising yields on Saudi Arabian, Mexican, Brazilian and Russian government bonds.[xlviii] Credit rating agencies have taken notice. In late March, S&P downgraded Mexican sovereign debt as well as that of Pemex, the state-owned oil giant. S&P also lowered its outlook on Brazilian debt from "positive" to "stable" while maintaining its junk rating. While ratings changes are typically backward-looking, they show the strain on many oil exporters' public finances.

Low oil prices likely also weigh on oil-heavy EMs' near-term GDP growth—both directly and indirectly. The Energy sector makes up a large portion of some EM exporters' economies. For example, Saudi Arabia's oil sector generated 41.8% of GDP in 2019.[xlix] In Mexico, the oil and gas industry was just 4.6% of 2019 GDP, but since Pemex is the chief provider of domestic energy and a large source of foreign currency, it is very important to the overall economy.[l] To whatever extent other sectors—such as banking and manufacturing—have ties to Energy firms as financiers or suppliers, the consequences likely ripple further. Less directly, if governments reliant on oil for revenue opt to tighten belts in order to shore them up, growth could suffer.

Broadly, the less diversified the economy, the greater (and more lasting) the economic and budgetary damage from oil prices' slump. Markets in some EM oil exporters—such as Mexico and Brazil, which are underperforming the MSCI EM by 22.9 and 28.1 percentage points respectively since 4 March, the day before the first failed OPEC+ deal caused oil prices to sink—may have begun reflecting this damage.[li] Coronavirus developments are, of course, dominating all other market factors today. But if oil prices stay low, they likely influence country-to-country market performance more in the future.

xlviii Source for Mexico, Brazil and Russia: FactSet, as of 13/04/2020. 10-year sovereign bond yields, 14/02/2020 – 10/04/2020. Source for Saudi Arabia: "Saudi Bond Yields Climb Amid Oil-Price War," Avantika Chilkoti, The Wall Street Journal, 11/03/2020.

xlix Source: FactSet, as of 27/04/2020.

l Ibid.

li Ibid. MSCI Mexico Index, MSCI Brazil Index and MSCI Emerging Markets Index returns with net dividends, 04/03/2020 – 24/04/2020.

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