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Family Office Service: Global Economics and Markets Newsletter

Financial Market and Economic Ramifications of COVID-19

March 2020

This Month's Big Themes

Financial Market Crash

With the rapid spread of the COVID-19 (novel coronavirus) around the world from early March 2020 and the measures taken by governments since then to stem the spread of the virus such as imposing lock-downs and requesting people to stay at home, businesses closing their doors, economic activity is declining rapidly. It is already expected that many of the worlds developed economies and numerous emerging market economies will already be in a deep recession, ending what has been some of the longest economic expansions in history such as in the US, Australia and Japan. Some are predicting a decline in real activity worse than the Great Depression in the 1930s. As a result, with such a decline in real economic activity, financial markets around the world have crashed. Falling into what investors and economists call a bear market (when asset prices fall by 20% or more from a peak). For example the MSCI AC World Index, which is made up of different developed country MSCI indexes has fallen 32% since its January 2020 peak. Investors have moved into safe haven assets such as cash instruments like US Treasury T-Bills. Risk spreads have increased significantly between countries such as the Eurozone spreads in countries like Italy, France, Spain, Portugal and Greek bond yields relative to German bunds; or spreads between investment grade corporate bonds and high-yield bonds causing credit markets to seize.

MSCI All Cap World Index has fallen almost 30% from its peak in January 2020

Source: investing.com

In response to the economic implications of the virus, central banks and governments from around the world have taken unprecedented actions to try and reduce the economic fallout. In some cases, monetary policy interest rate tools have fallen to record lows, sending bonds yields, such as the US 10-year Treasury bond yields to historical lows. For example, by 9 March 2020, the yield on the 10-Year US Treasury bond fell to an all-time low of 0.387% during intra-day trading as investors chased safe haven assets following the rising fears that the impact of the COVID-19 on the global

economy. Previously, the record low had been 1.32%. To put into context how significant the recent decline in bond yields has been, as recently as one year ago, the yield on the 10-Year US Treasury was close to 2.8%.

With the fall in economic demand, so too has there been a fall in the demand for oil, although oil prices have also been shaken because of the fall out between Saudi Arabia and Russia regarding output cuts (please see 3. Commodities on page 6).

Global Policy Response to COVID-19

Since the start of March 2020, fiscal and monetary policy makers the world over have taken extraordinary action in an attempt to prevent the economic fallout, and limit the damage of what may be a very deep and long-lasting recession.

To date the most notable actions have been taken by President Trump's administration and also the Federal Reserve. The Trump administration unveiled a USD 1 trillion stimulus package that could deliver USD 1,000 check to Americans to buttress an economy hit by COVID-19 (costing approximately USD 500 billion). To put this into context, this fiscal package is larger than the USD 787 billion package the administration of President Obama rolled out following the Lehman crisis. Although the size of the package is significant, the efficacy of such a program may be limited because a not insignificant number of people will remain in isolation and therefore, may not be in a position to spend the money in items other than everyday necessities. Other fiscal measures included within the USD 1 trillion package was USD 50 billion in bailout loans for the airline industry and ·upwards of USD 500 billion for small businesses and other expenditures.

The Federal Reserve has taken a number of steps starting with - for the first time since the financial crisis in 2008 - taking action outside of their usual monetary policy meeting schedule on 4 March 2020. They cut the benchmark Federal Funds rate by 50 basis points. As a general rule monetary policy changes work best when they are least expected. On 12 March the Federal Reserve expanded reverse repo operations, adding USD 1.5 trillion of liquidity to the banking system. Then on 15 March the Federal Reserve cut interest rates by a full percentage point, down to a range of 0.00% to 0.25%. This dropped the fed funds rate to the level it was before the rate increases starting in 2015. In addition, the Federal Reserve restarted quantitative easing with the purchase of USD 500 billion in Treasuries and USD 200 billion in mortgage-backed securities.

However, there is an argument that the cuts in interest rates and other actions taken by central banks in response to the Covid-19 crisis will mostly be. Monetary policy easing is meant to boost demand by making credit cheaper. Yet demand is not the problem. Rather, there is a problem with supply as supply chains are disrupted. In addition, to the extent that demand is weak, it is not because of a lack of income or high capital costs. Rather, it is due to fear and the fact that consumers in many places are simply staying home. Monetary policy easing is not likely to change the calculus for consumers.

Other measures taken around the world are presented in the table below:

Country/ Region	Fiscal Policy	Monetary Policy
Australia	USD 11.4 billion stimulus package	Cut the cast target rate to 0.25% and introduced quantitative easing to maintain a target yield on 3-year Australian Government bonds of around 0.25%
South Korea	USD 9.8 billion stimulus package	
United Kingdom	USD 37 billion in fiscal stimulus were announced on 11 March during the annual budget and then on 17 March, a larger stimulus package was unveiled including USD 379 billion in business loan guarantees and USD23 billion in business tax cuts and grant funding to businesses hit worst by the virus, such as retail and hotel businesses.	The Bank of England lowered interest rates from 0.75% to 0.25% and lowered capital requirements for Banks on 11 March Then on 19 March continued monetary stimulus with an unscheduled announcement, saying it was buying USD 228 worth of U.K. government bonds and corporate bonds and cutting interest rates from 0.25% to 0.1%.
EU		On 12 March, several monetary stimulus measures were announced including an additional USD 128

		billion in bond purchases over the course of 2020, loosened capital requirements on banks and lowered the interest rate on and eased lending requirements for its targeted long term refinancing operations (TLTRO). Then on 19 March the European Central Bank (ECB) announced an asset purchasing program it calls the Pandemic Emergency Purchase Programme (PEPP) which will purchase roughly USD 800 billion of additional bonds throughout 2020
Germany	Germany authorized its state bank KfW, to lend out as much as USD 610 billion to companies to cushion the effects of the COVID-19.	
France	USD 49 billion aid package and guarantee bank loans up to USD 300 billion.	
Italy	USD 28 billion aid package.	
Japan	The government announced two packages: one in February of USD 15 billion and one in March for an additional USD 4 billion.	The Bank of Japan will be doubling the rate at which it was purchasing ETFs from USD 56 billion a year to USD 112 billion, and also increased purchases of corporate bonds and commercial paper. In addition it announced a new program of 0% interest loans to increase lending to businesses hurt by the virus.
Canada	USD 7.1 billion package to assist businesses.	On 4 March the Bank of Canada cut the policy interest rate from 1.75% to 1.25% and then on 13 March, cut policy rate again to 0.75%

Source : investopedia.com. Article can be accessed through this link.

Other multi-country measures have also been taken such as on 15 March, the central banks of Canada, the U.K. Japan, the U.S., Switzerland, and the European Central Bank all agreed to lower the price of U.S. dollar liquidity swap line arrangements and then on 19 March, the Federal Reserve announced that it is establishing dollar liquidity swaps with the central banks of Australia, Brazil, Denmark, South Korea, New Zealand, Singapore, and Sweden.

In early March 2020 the World Bank announced an initial USD 12 billion in immediate funds to assist countries grappling with the health and economic impacts of the COVID-19 virus outbreak and on 4 March, the International Monetary Fund made USD 50 billion in loans available to deal with the COVID-19, including USD10 billion of zero-interest loans to the poorest International Monetary Fund (IMF) member countries. On 16 March the IMF also said it "stands ready to mobilize its USD 1 trillion lending capacity to help our membership."

Source: https://www.worldbank.org/en/news/press-release/2020/03/03/world-bank-group-announces-up-to-12-billion-immediate-support-for-covid-19-country-response

Source: https://www.imf.org/en/News/Articles/2020/03/04/sp030420-imf-makes-available-50-billion-to-help-address-COVID-19

Asia PMI Survey Data

Although analysts expect economic data to decline significantly over this period and into the near future, actual economic data (known as 'hard' data) comes with a lag of a few months. However, survey data (known as 'soft' data) such as purchasing manager indicators (PMI) which contains some element of expectations is published frequently and gives investors and economist some insights into the near term. One thing about PMI data is that it has used as a forecasting variable for GDP and so can provide some insights. The PMI is a forward-looking indicator meant to signal the direction of activity in the manufacturing or services sectors. It is based on sub-indices such as output, new orders, export orders,

employment, pricing, and inventories. A reading above 50 indicates growing activity; the higher the number, the faster the growth – and vice versa.

China was the first country to be affected by COVID-19 and the immediate economic impact was felt domestically and some initial impact on its neighbours such as Japan and South Korea who rely on exporting to China. It is not unreasonable to assume due to the fact that the economic crisis worsened after the release of the March survey data and so the publication of April 2020 survey data will start to contain some of the economic effects around the rest of the world. It is also likely that the PMIs in Japan and South Korea will worsen also.

China's National Bureau of Statistics (NBS) reported that it's PMI for manufacturing and services fell sharply in February 2020 suggesting economic activity is collapsing.

In its latest report for February the manufacturing PMI slipped from 50.0 in January to 35.7 in February, a record low; a deeper decline in activity than took place during the global financial crisis in 2008-09. At that time, the index fell to 38.8. In February 202, the sub-index for export orders fell to 28.7, indicating that trade nearly dried up and that global supply chains were disrupted to a degree unprecedented. The employment sub-index fell to 31.8, indicating that companies were not able to maintain employment at normal levels due to a shortage of migrant workers.

The NBS services PMI fell from 54.1 in January to 29.6 in February, also a record low. The previous low was 49.7 in November 2011. The services PMI reflects activity in such industries as retailing, tourism, financial services, transportation, distribution, healthcare, and education. The sharp decline demonstrates the impact of restrictions on the movement of people and the fact that many workers have not been able to return to employment. It also reflects the fact that people are staying at home and not shopping or visiting entertainment or tourist sites. A sub-index of construction activity, a key economic driver that Beijing has hoped would prop up growth, plunged to 26.6 from 59.7 in January.

Source: https://www.reuters.com/article/china-economy-pmi-factory-official/rpt-update-2-china-feb-factory-activity-contracts-at-record-pace-as-COVID-19-bites-idUSL4N2AV01L

The official PMI is heavily weighted toward state-run companies. The Markit PMI, on the other hand, is weighted more toward private sector companies, and the latest data are not good either. The Markit PMI for manufacturing declined from 51.1 in January to 40.3 in February 2020, a level reflecting a very sharp decline in activity. This was the lowest level since the survey began in 2004. All sub-indices were down sharply. The sub-index for export orders fell to the lowest level since the financial crisis ten years ago.

In Japan the manufacturing PMI fell from 48.8 in January to 47.8 in February 2020, the lowest level since May 2016. New orders fell at the fastest pace in seven years. New orders for investment goods were especially weak, suggesting that Japanese companies are putting off investment projects. Export orders declined for the 15th consecutive month and were especially poor in February 2020, likely due to the impact of the virus given the very sharp decline in orders from China. Markit reported difficulty of Japanese companies in obtaining needed parts from China. However, Markit commented that the weakness of Japanese manufacturing "cannot be wholly attributed to the COVID-19 outbreak, so it appears that Japan's manufacturing recession goes much deeper." It pointed to weak domestic demand in Japan on the part of consumers and businesses.

Source: https://www.reuters.com/article/us-japan-economy-pmi/japans-factory-activity-shrinks-at-fastest-pace-since-2016-on-COVID-19-hit-pmi-idUSKBN20P01G

South Korea's manufacturing was hit by the virus as well. The manufacturing PMI declined from 49.8 in January to 48.7 in February 2020. Output fell at the fastest pace in five years and Markit reported that there was considerable disruption of factory activity in the automotive sector. Export orders fell at the fastest pace in six years.

Global Airline Industry

On 5 March 2020, the International Air Transport Association (IATA) published analysis that said airlines would face a loss of revenue that could be as much as USD113 billion, comparable to what airlines experienced during the 2008-09 financial crisis. Of this loss, USD58 billion would be in the Asia Pacific region. The expectation of such losses has led investors to dramatically limit their exposure to airline equities.

Source: https://www.iata.org/en/iata-repository/publications/economic-reports/COVID-19-updated-impact-assessment/

While much of the damage so far has involved international flights, two major US airlines announced that they would curtail domestic routes as well. United and JetBlue both said they will do this, with United cutting domestic routes by 10% and international routes by 20%. JetBlue said it will initially cut capacity by 5%. Meanwhile Delta announced scale back

flying by more than 70% until demand begins to recover, parking 600 of its aircraft. Other measures by Delta airlines include cutting corporate pay by as much as a half.

Major European airlines have also cut capacity with British Air suspending 400 scheduled flights and Lufthansa also announcing a cut to capacity by parking 700 of its 763 aircraft as well as announcing the executive board by 20%. In Asia, major airlines are seeing a large drop in air travel, especially those dependent on trips to and from China. China's international flights have seen an 80% drop in occupied seats while domestic flights have seen a 60% decline. International seat numbers in Japan are down 20%. IATA said it was worried that, under existing rules, airlines could lose valuable landing slots at major airports if they fail to use them. It called on authorities to temporarily suspend these rules. It also asked governments to temporarily cut airline taxes. Meanwhile, the decline in air transportation will have a spill over effect on related industries such as hotels, restaurants, tour companies, conference facilities, ground transportation, and retailing.

Airlines have stated they are likely to need state funding for the sake of their survival. Already airlines are laying-off staff and implementing staff cuts but more is needed to support the industry. For example in the US a rescue package worth USD 50 billion of loans was put together. The industry requested grants but this was not permitted by the government. The Trump administration's lending proposal would require airlines to maintain a certain amount of service and limit increases in executive pay until the loans are repaid. The Indian government was planning a rescue package of up to USD 1.6 billion to aid carriers battered by COVID-19. Taiwan's Transport ministry said it was inviting its airlines to submit capital requirements and financial plans with the view to giving them assistance, such as rolling over loans and providing operating funds. And in New Zealand, the government outlined the first tranche of USD 344 million aviation relief package as the government said it would shut its borders to those who were not citizens or residents.

Source: *https://www.reuters.com/article/us-health-COVID-19-airlines/airline-industry-turmoil-deepens-as-COVID-19-pain-spreads-idUSKBN21542J?feedType=RSS&feedName=businessNews*

Country/Regional Updates

China

The covid-19 crisis has had a significant negative impact on Chinese trade. In January and February 2020 combined, exports evaluated in US dollars were down 17.2% year-on-year. This follows growth of 7.9% in December 2019. China normally combines trade data for January and February because the timing of the Lunar New Year holiday can distort the data for each individual month. The decline in exports was across the board and, unlike previous episodes, was not principally due to trade restrictions (due to US tariffs) or weakness in demand. Rather, it reflected the fact that fewer people in China were working, factories were producing less, transportation was disrupted, and there were restrictions on movement. In addition, imports into China were down 4% in January and February 2020 y/y reflecting the downturn in Chinese factory production and the consequent reduction in the demand for components.

After hitting a record high in January 2020, bank lending in China fell sharply in February as a consequences of the COVID-19. The volume of new loans fell from USD 480 billion in January 2020 to USD 130 billion in February with a decline in borrowing from both households and businesses. However, many businesses took advantage of the central bank's special facility meant to assist small businesses with rolling over existing debts.

Some of the first hard data out in China that is linked to GDP is that linked to investment. In January and February 2020 combined, fixed asset investment fell 24.5% y/y, an unprecedented number. The decline encompassed all sectors and both public and private sector investment. This compares to the 5.4% increase in fixed asset investment in 2019, which itself was a historically poor performance. Also, industrial production fell 13.5% in the first two months of 2020 compared to the same period last year. This was the first decline since 1990. There were big contractions in such sectors as transport equipment (28.2%), machinery (24.7%), and textiles (27.2%). In addition, industrial exports were down 19.1% y/y. The latter figure is consistent with reports of disruption of global supply chains in manufacturing. Finally, retail sales were down 20.5% in the first two months of 2020 compared to a year ago. This compares to an increase of 8% in December 2019. The partial lockdown of many cities, as well as the complete lockdown in Hubei Province, prevented Chinese households from engaging in much discretionary shopping outside the home.

Capital Markets

In late February 2020 it became clear that the rate of new cases in China were slowing by the day but in the rest of the world, the number of new cases were accelerating, particularly in South Korea, Italy and Iran. By the middle of March 2020, the epicentre of the new virus cases were Western Europe and the US. The short-term economic fate of China is unknown but it expected to be severe, and with the rapidly accelerating global spread of the virus, fears of a deep and

protracted global recession rose. Investors fear that the economic impact of the virus will affect global supply-chains, in particular “just-in-time” manufacturing, creating greater affliction upon an already struggling industry and the lock-downs of citizens in many countries will disrupt all non-essential consumption and retail/leisure type services such as bars, hotels and restaurants. In developed countries, consumption is often the largest component of GDP but with supply shocks such as those created by the virus, actions taken by monetary policy makers, which effects demand will be impotent in the fact of these shocks. Hence why markets continued to crash after the announcements of significant monetary policy actions.

1. Equities

As shown by the chart on page 1 of this report, the fall in global equity prices has wiped out all gains since January 2016. Some of the daily price change movements have been incredibly large and some of the largest recorded in history. For example, using Dow Jones Industrial Average the largest crash in history occurred on Black Monday on 18 October 1987 with a single-day fall of 22.6%. The second largest in history occurred on 16 March 2020 with 12.9% crash. This is a little bigger than the 12.8% crash that occurred on 28 October 1928 in the build up to the great depression. The largest single-day crash during the Lehman Crisis was only 7.9% in 15 October 2008.

As stated earlier, equity markets the world over have fallen into bear market territory (falling at least 20% from a record high). As the table below shows, many which reached recent highs or record highs in February 2020 just before the global spread of the virus, have experienced significant falls in their headline indexes. The worst among them being the European countries, particularly Italy and Spain which have among the highest number of cases in the world and the US.

ASX 100	CAC 40	DJIA	FTSE 100	MIB	Hang Seng	IBEX 35	KOSPI	NASDAQ Composite	NIKKEI 225	S&P 500	Shanghai Composite	DAX 30
-34.8%	**-35.9%**	**-37.1%**	**-33.7%**	**-38.9%**	**-25.3%**	**-38.2%**	**-31.7%**	**-30.1%**	**-29.3%**	**-33.9%**	**-14.6%**	**-36.6%**

The obvious exceptions to the above the Shanghai Composite which had been affected by the implications of the virus from late January 2020. From 20 January 2020, the Shanghai Composite lost 14.6%. The reason why the response may be muted is that owing to China’s response, there are no new cases in China other than people returning to China from overseas, or people in contact with these people. There have been no new cases cropping up domestically.

2. Interest Rates

By 9 March 2020, the yield on the 10-Year US Treasury bond fell to an all-time low of 0.387% during intra-day trading as investors chased safe haven assets following the rising fears that the impact of the COVID-19 on the global economy. Previously, the record low had been 1.32% and that, as recently as one year ago, the yield had been close to 2.8%.

Risk spreads have increased, with the gap between yields on junk bonds and high-quality bonds rising as investors seek the safety of investment grade bonds at a time when corporate earnings could be expected to fall with the spread of the virus effecting supply chains and demand.

Source: https://www.reuters.com/article/china-health-bonds/COVID-19-outbreak-curbs-typically-immune-investment-grade-bond-issuance-idUSL5N2AS922

3. Commodities

From late February 2020 and over the course of March oil prices have fallen more than 50% through a combination of supply and demand forces (see the chart below) to the point that price are lower than they were during the oil price declines following the oil glut in 2014 and 2015 when US shale production lead to a global over-supply of oil.

Due to both supply and demand factors, oil prices fall to decade lows

Source : investing.com

In early March the Organization of the Petroleum Exporting Countries (OPEC) and Russia planned to meet to discuss supply cuts as demand for oil had fallen, given the impact of the COVID-19 and the shutdown/quarantine of important cities and regions in China affected industry but these talk collapsed on Friday 6 March 2020 as countries failed to find an agreement to cut oil production. Instead, Saudi Arabia pushed ahead with plans to cut prices in an attempt to increase the demand for oil. The failure signalled the end of a four-year collaboration between OPEC's member nations and 10 non-members led by Russia.

In response Russia said that it can withstand low oil prices for up to ten years. Such a display sets the stage for a prolonged dispute with Saudi Arabia and a long period of low oil prices. Russia indicated that it could dip into its sovereign wealth fund of USD 150 billion in order to ease the effects of the lower oil prices. Although Russia lacks the financial resources of Saudi Arabia, it will persist with this strategy. Russia's Energy Minister said that the country has the resources to "remain competitive at any predicted price range and keep its market share." One Russian oil executive said that production cuts are meaningless given the increased competition from US shale producers. Russia is betting that, by contributing to a sharp decline in prices, it will push many US shale producers out of business, thereby setting the stage for a rebound in prices – especially when global demand revives after the virus is ultimately contained. Russia is also betting that the Saudis will be convinced to reduce production if they believe that Russia will not budge.

However, Saudi Arabia indicated that, starting in April 2020, it will dramatically boost production yet again, raising output to 12.3 million barrels per day. This is 2.5 million more barrels than previously expected. The market did not immediately react given that Saudi Arabia said it will wait until April. Perhaps investors see this as a negotiating tactic but since then oil prices continued to fall as the spread of the virus continued to worsen and investors expect demand to continue falling over the foreseeable future as the economic crisis worsens globally.

Useful Resources

Investing	Economic Data	Economic Analysis
• investing.com	• United States: Bureau of Economic Analysis	• Deloitte Insights: Economics
• MarketWatch	• United States: Bureau of Labor Statistics	• Deloitte Weekly Global Economic Update
• Yahoo! Finance	• Cabinet Office of Japan	• International Monetary Fund
Central Banks	• European Commission: Eurostat	• Project Syndicate
• Federal Reserve Board	• United Kingdom: Office for National Statistics	• Organization of Economic Cooperation and Development
• Bank of Japan	• National Bureau of Statistics of China	• Central Intelligence Agency: The World Factbook
• European Central Bank	• Federal Reserve Economic Database	• Aon: Political Risk Heatmap
• Bank of England	**News**	
• People' Bank of China	• Reuters	

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