

Market Bulletin

3 April 2020

Monitoring the global impact of COVID-19

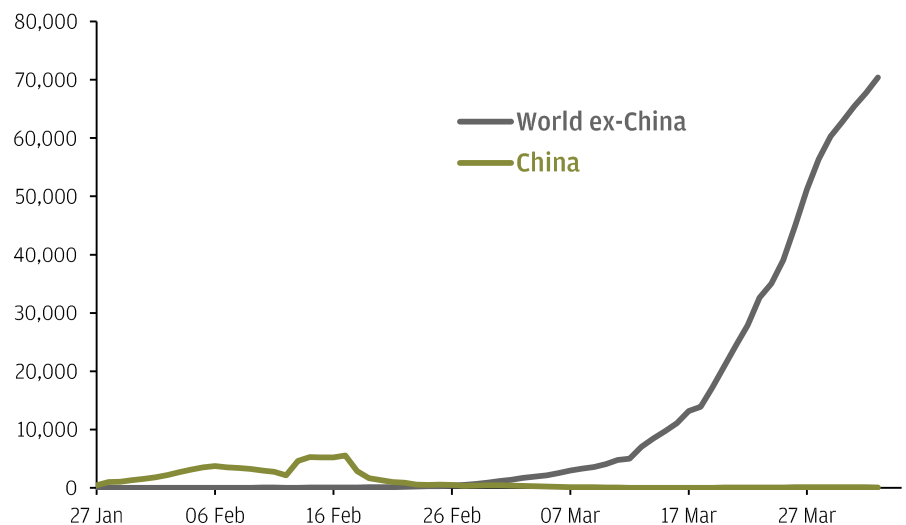
The spread of the coronavirus and its impact on global economic activity has materially changed the investment outlook for 2020. Trying to predict the precise outcome for the global economy is a fool's errand. Instead, in this piece we provide a framework for tracking infection rates globally and monitoring the impact on economic activity, using high frequency or daily data. We consider how government and central bank interventions might support the households and firms affected and facilitate an economic recovery, and then review the market reaction to date.

The clear investment implication is that, even more than usual, a well-diversified portfolio is essential. This includes diversification by region but also by asset class. Core government bonds have performed strongly. However, further upside for US Treasuries and UK Gilts will be more limited from here unless these central banks shift their guidance that they do not intend to take interest rates into negative territory. Investors may wish to consider alternative diversifiers such as macro funds, or real assets if liquidity is not a requirement.

What are the latest virus statistics?

Exhibits 1-3 provide the latest data on the spread of the coronavirus. China and South Korea have made substantial progress in controlling new infections, following the significant restrictions on activity. Whether a loosening of lockdown measures leads to a resurgence is yet to be seen. Of clear concern is the speed with which infections have increased outside of Asia, with the number of cases in the US, Italy and Spain now having overtaken those in China.

EXHIBIT 1: COVID-19 DAILY INCREASE IN CONFIRMED CASES
Five-day moving average



Source: Johns Hopkins CSSE, J.P. Morgan Asset Management. Data as of 2 April 2020.

AUTHORS

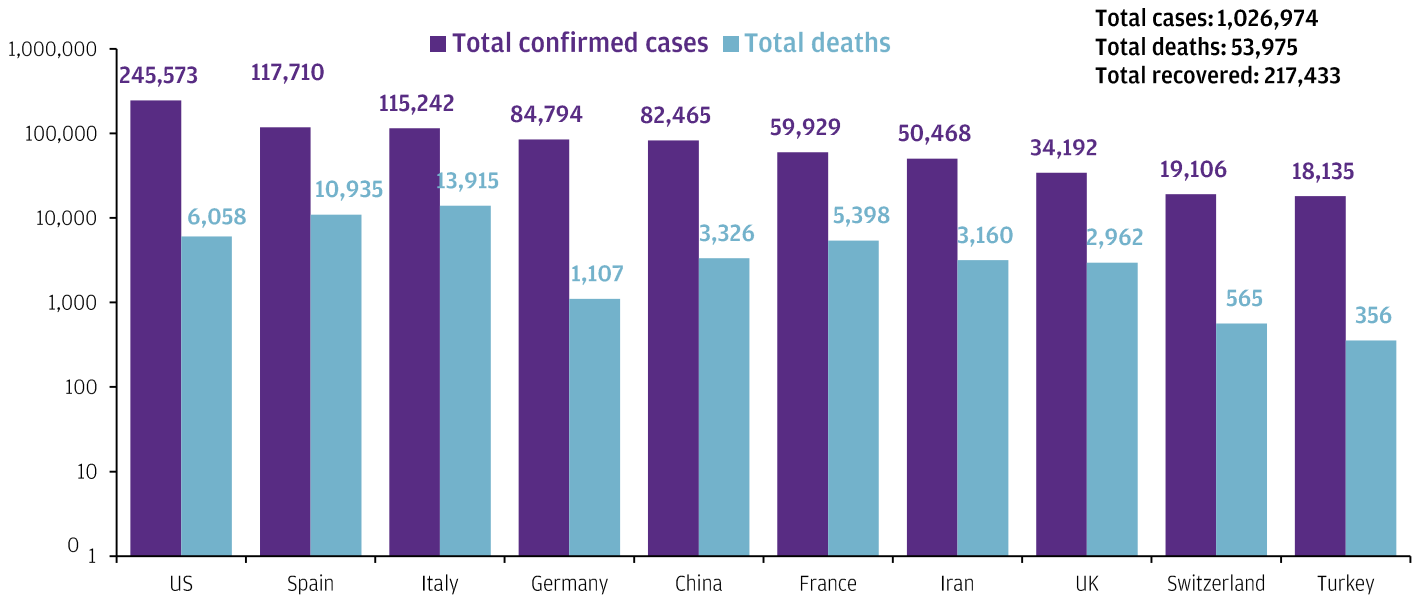


Karen Ward
Chief Market Strategist for EMEA



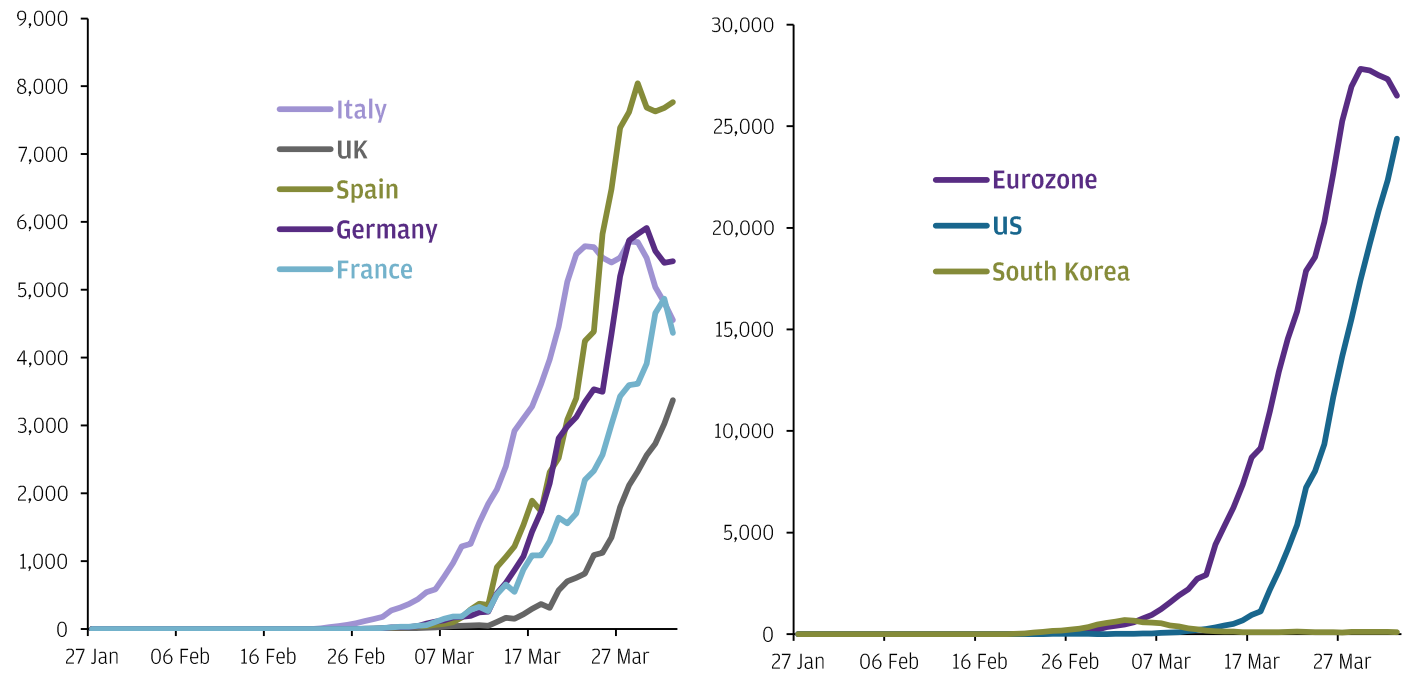
Tai Hui
Chief Market Strategist for Asia Pacific

EXHIBIT 2: COVID-19 CONFIRMED CASES AND DEATHS BY COUNTRY
Log scale



Source: Johns Hopkins CSSE, J.P. Morgan Asset Management. Data as of 3 April 2020.

EXHIBIT 3: COVID-19 DAILY INCREASE IN CONFIRMED CASES
5-day moving average

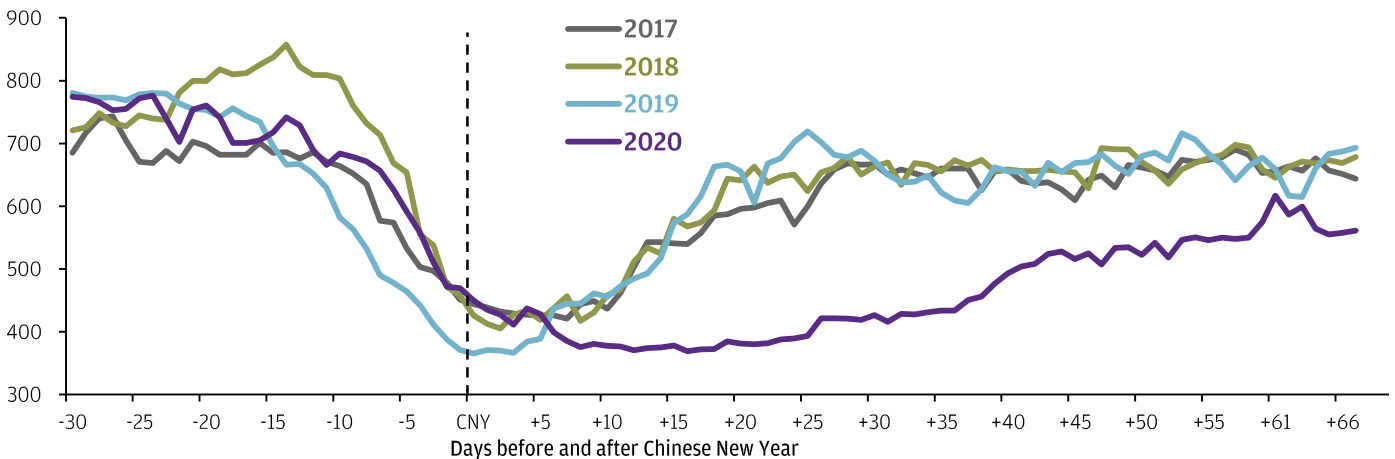


Source: Johns Hopkins CSSE, J.P. Morgan Asset Management. Data as of 2 April 2020.

How is current production being affected?

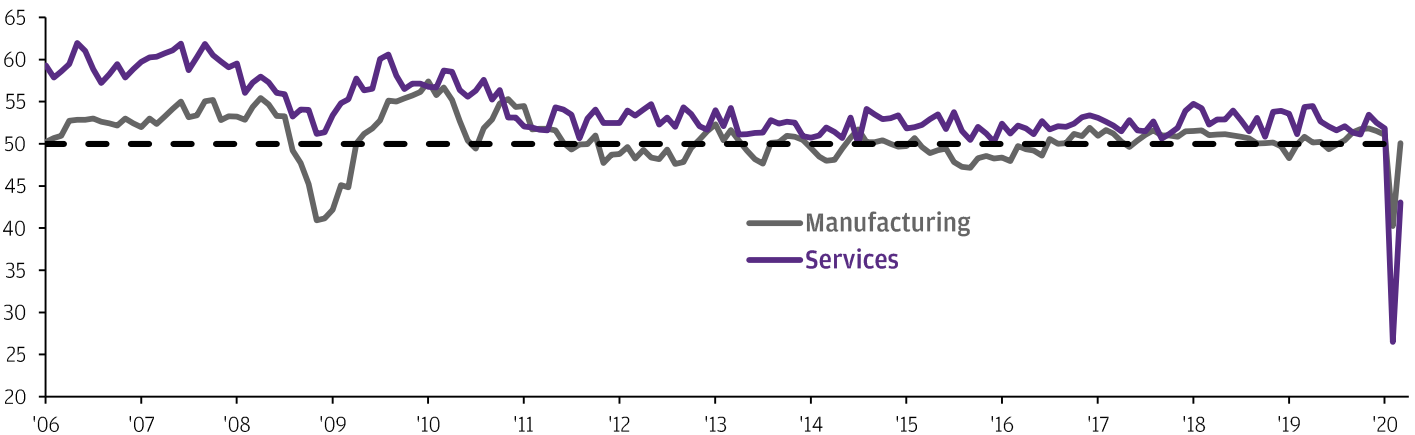
Activity in China is normalising steadily (**Exhibit 4**). But the implications of shutdowns and social distancing are still yet to be fully realised in the developed world. The impact on the global economy will be large and broad. The manufacturing sector will be affected by lasting supply chain disruptions but the effect is likely to be most strongly felt in the services sector (**Exhibit 5**). Airlines, hotels, restaurants, cinemas and concert venues are amongst those most likely to be affected.

EXHIBIT 4: COAL CONSUMPTION IN CHINA
 Thousand tons per day



Source: Wind, J.P. Morgan Asset Management. CNY = Chinese New Year. Data as of 31 March 2020.

EXHIBIT 5: CHINA MANUFACTURING AND SERVICES PURCHASING MANAGERS' INDICES
 Index level



Source: Markit, J.P. Morgan Asset Management. Data as of 3 April 2020.

How long the restrictions on activity last depends on the spread of the virus, and the scale and duration of preventative measures required to reduce the rate of infection. This is something we cannot predict. What we can assess are the measures policymakers are deploying to support businesses during the period of production shutdowns and weak revenues. If the measures are effective they will reduce the likelihood of a vicious cycle whereby firms make lasting cuts to staff, business investment, inventory orders and so forth. If firms are given this near-term support they will be well placed to return to business as usual when the infection rates peak. A recovery by year-end would be feasible.

What might effective stimulus look like?

In our view, the answer lies with targeted fiscal measures. This can happen via subsidies - helping a firm meet rent and wage costs. Similarly tax breaks (such as temporary relief from business rates) can allow firms to cope with a period of weak profitability. The commercial banks may also have a role to play in allowing a period of forbearance and short-term relief on debt and interest repayments.

The German short shift programme, established in the global financial crisis, was an excellent example of a policy designed to limit the medium-term fallout of a demand shock. 1.5 million German workers were moved to a short shift. But companies were subsidised by the Federal government so that the net wage loss to the end employee was reduced with no burden on the company's balance sheet. The end result was a very limited rise in overall unemployment. These short-shift regimes are being rolled out increasingly across Europe (**Exhibit 6**).

EXHIBIT 6: FISCAL AND MONETARY POLICY RESPONSES BY COUNTRY*

Country	Fiscal response	Monetary response
US	<ul style="list-style-type: none"> • USD 1 bn in loan subsidies, enabling USD 7 bn in low-interest loans to be provided to small businesses • USD ~100bn (~0.5% of GDP) of stimulus that includes paid sick leave, unemployment insurance, funding for food stamps and waivers to allow coronavirus testing to be covered by insurance and federal government programmes • USD ~2trn (approx. 9% of US GDP) including: <ul style="list-style-type: none"> • USD 500 bn fund to help hard-hit industries • USD 500 bn for direct payments to U.S. families • USD 350 bn for small-business loans • USD 250 bn for expanded unemployment aid • USD 220 bn in business tax breaks • USD 150 bn in direct aid to state and municipal governments 	<ul style="list-style-type: none"> • Federal Funds Rate cut twice by a total of 150 bps down to a target range of 0.0 - 0.25%. First rate cuts since 2008 to take place outside of a scheduled meeting • After initially relaunching QE with a plan to buy USD 500 bn of Treasuries and USD 200 bn of mortgage-backed securities (MBS), the Fed will now purchase Treasuries and MBS “in the amounts needed to support smooth market functioning and effective transmission of monetary policy to broader financial conditions and the economy” • Establishment of multiple funding facilities to support the flow of credit to employers, consumers and businesses (including through the purchase of investment grade corporate bonds and ETFs via Special Purpose Vehicles) • Six major central banks agreed to lower the pricing on standing U.S. dollar liquidity swap arrangements by 25bps and to increase the frequency of operations. This is to ensure there is sufficient U.S. dollar funding available internationally
Europe	<ul style="list-style-type: none"> • European Commission is creating a EUR 37 bn fund directed at vulnerable parts of the economy 	<ul style="list-style-type: none"> • Interest rate on the TLTRO loan programme will be lowered from June 2020 for one year to encourage favourable lending conditions to small and medium size businesses. Extra funds have also been made available to draw down • An additional EUR 120 billion to be deployed as part of the asset purchase programme by the end of 2020 • Introduced a new emergency pandemic asset purchase programme of EUR 750 billion to be used in 2020. This will cover both sovereign and corporate purchases. The ECB stated they can revise their self imposed purchase limits too
France	<ul style="list-style-type: none"> • EUR 45 bn stimulus package (1.9% of GDP): <ul style="list-style-type: none"> • EUR 35 bn to fund reduced social security contributions • EUR 8.5 bn to fund state insurance to cover forced part-time employment by eligible businesses • EUR 2bn as a solidarity fund for self-employed and shopkeepers • EUR 300bn guarantee for bank loans to companies, and housing and utility payments suspended 	
Germany	<ul style="list-style-type: none"> • Ministers are seeking authorization to suspend the “debt brake” that has limited government borrowing to 0.35% of GDP • Government set to pass a EUR 156bn supplementary budget (~4.5% of GDP) and aiming set up a EUR 500bn bailout fund to take stakes in struggling companies • Government has committed to provide unlimited credit and liquidity support for all businesses in need • German companies to gain access to government funds, when 10% of workers are affected by work stoppage, in order to help continue paying staff 	
Italy	<ul style="list-style-type: none"> • Preparing EUR 25bn (~1.4% of GDP) aid package including subsidies to workers, tax suspensions, utility payment postponements, renegotiation of bank loans (for companies) and mortgages (for households) and special measures for companies that lose 25% of revenues 	
UK	<ul style="list-style-type: none"> • GBP ~90 bn (~4% of GDP) of measures to support households and small businesses, including government subsidies for workers who have lost their jobs due to the virus and the self-employed, more widespread sick pay, reduction or exemption of business rates, deferral of VAT payments, a new temporary loan scheme with government guarantee of up to 80%, and cash grants of up to GBP 25k for eligible businesses • GBP 330bn made available for government loan guarantee and credit scheme, with more if needed • UK banks to offer mortgage holidays for customers affected by the virus 	
China	<ul style="list-style-type: none"> • Various government fees and charges waived or delayed (contributions to social security, medical insurance) • State Taxation Administration announced to delay the tax declaration date of March from Mar 16 to Mar 23 • VAT waiver for small business inside Hubei Province, and rate cut from 3% to 1% for small business outside of Hubei during March 1 to May 31 	<ul style="list-style-type: none"> • People's Bank of China lowered 1-year Loan Prime Rate by 10 basis points (bps) • Non-performing loan recognition temporarily relaxed • Targeted RRR cuts of 50 bps to 100 bps, to support inclusive financing, namely SMEs, releasing RMB 550 bn • RMB 800 bn re-lending loans to SMEs, with interest subsidy
Hong Kong	<ul style="list-style-type: none"> • HKD 10,000 (~1,300 USD) to be given to each permanent resident aged 18 and over as part of HKD 120 bn (~4% of GDP) relief fund 	<ul style="list-style-type: none"> • Hong Kong Monetary Authority cut its base rate twice in March by 114 bps in total to 0.86% following the Federal Reserve move to maintain currency stability under the USD-HKD currency peg
Japan	<ul style="list-style-type: none"> • JPY 430.8 bn (~0.08% of GDP) fiscal package (including improvements to medical facilities and subsidies to working parents and remote studies) • JPY 1.6 trillion yen of business financing support measures (including lending and guarantees for SMEs) • Additional stimulus measures of 4-6% of GDP are being prepared 	<ul style="list-style-type: none"> • Introduced one year, zero-rate repo operation against corporate debt • Outright buying of commercial paper and corporate bonds • Doubling of annual purchase limits of equity ETFs and REITs
New Zealand	<ul style="list-style-type: none"> • NZD 12 bn fiscal package (~4% of GDP) which includes: <ul style="list-style-type: none"> • NZD 5 bn in wage subsidies covering a 12-week period • NZD 2.8 bn in household benefits / transfer increases, and NZD 2.8bn in corporate tax changes 	<ul style="list-style-type: none"> • Policy rate cut by 75bps to 0.25% • NZD 30bn secondary market purchases in government bonds, although current pace suggests that purchase targets will be increased

Source: Bloomberg, J.P. Morgan Asset Management.*Note that this table does not include government spending to support health services, but focuses on measures to support private sector activity. Fiscal measures are those announced to date. Data as of 2 April 2020.

Overall our assessment is that the governments are so far responding with appropriate fiscal policies. The magnitude still needs to increase in some countries, particularly in Europe, for us to feel confident that the necessary support for the economy is in place. Yet with few remaining doubts about governments' willingness to spend, our focus is shifting towards monitoring the effective implementation of the announced measures.

Much larger fiscal deficits will of course lead to much larger bond issuance. This is where the central banks have been required to show willing to buy government debt to ensure the market can absorb this additional issuance without undue stress. Again we're encouraged by the speed with which the central bank community has reacted and the magnitude of the asset purchases and liquidity schemes that have been announced. In many cases including the Fed, ECB and BoJ the packages that have been announced exceed those delivered during the financial crisis. The Fed's commitment to buy an unlimited amount of US Treasuries and mortgage-backed securities is particularly striking.

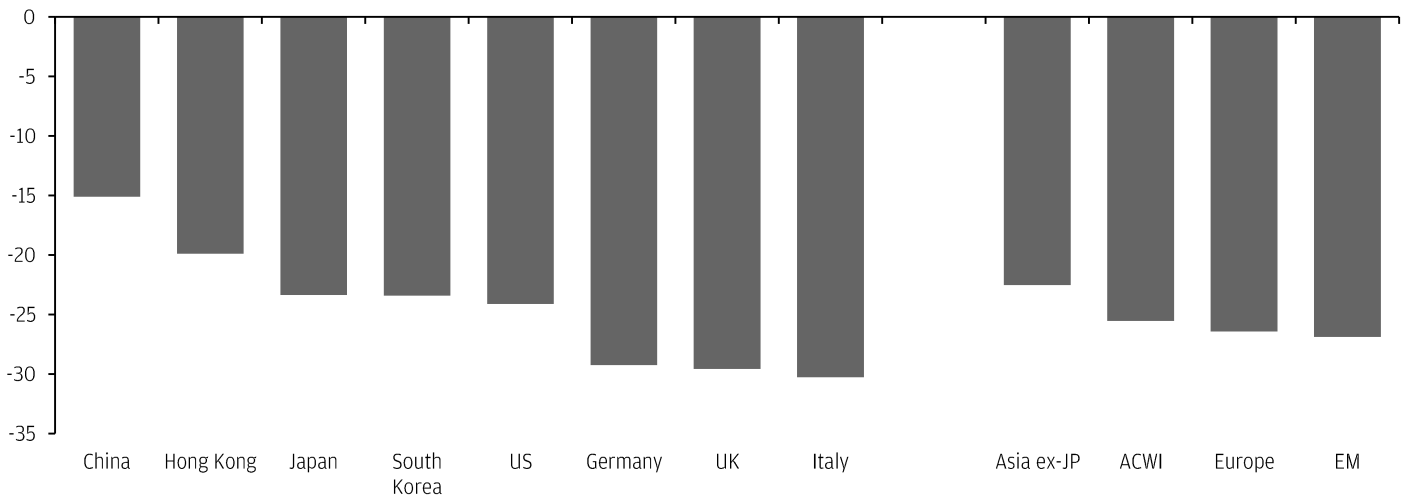
In summary, policymakers have acted decisively. The economic data in the developed world in the coming months will be truly dreadful. The market is largely priced for this near-term shock. What will be critical are signs that the policy response is working to facilitate a bounceback later in the year once the disease is contained. Chief amongst the indicators to follow are those of hiring intentions to assess whether policies are serving to shore up the labour market.

How have the markets reacted?

Markets have rapidly repriced given the deterioration in the outlook. Indeed this sell-off is not remarkable in its magnitude but it is in terms of speed. Energy heavy benchmarks including the UK market - have been hit especially heavily, given the collapse in oil prices. Some markets are showing tentative signs of recovery but it is too early to confidently call the bottom while the duration of the hit to activity remains so uncertain.

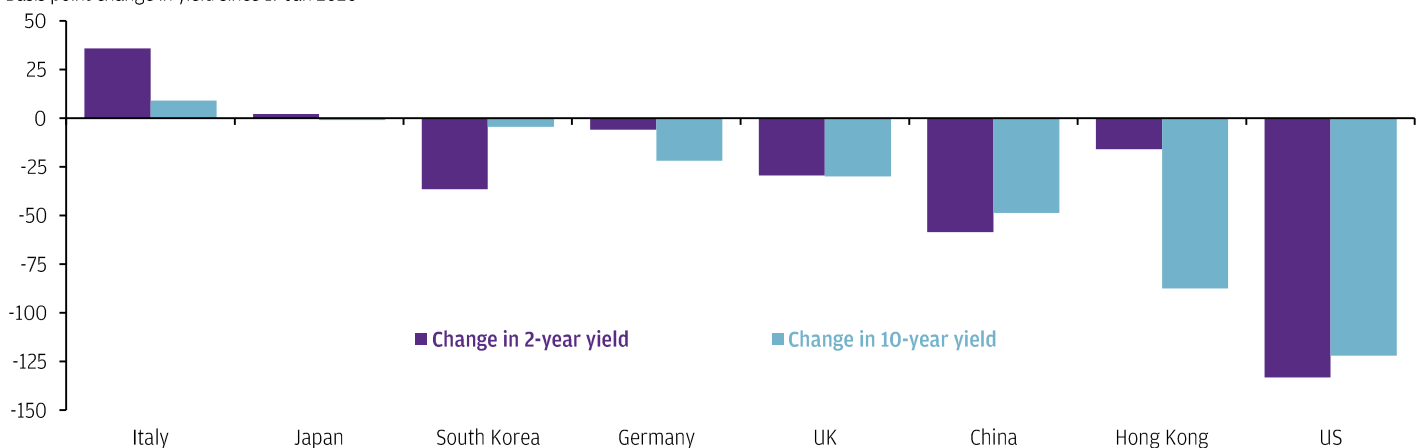
EXHIBIT 7: MARKET REACTION EQUITY MARKETS

% stock market price returns since 17 Jan 2020, local currency unless specified



GOVERNMENT BOND MARKETS

Basis point change in yield since 17 Jan 2020



Source: (Top) Bloomberg, DAX, FTSE, Hang Seng, MSCI, Standard and Poor's, TOPIX, J.P. Morgan Asset Management. MSCI indices are used for China, S. Korea, Europe (EUR), ACWI (USD), Asia ex-JP (USD), EM (USD). Other indices used: Germany: DAX; Hong Kong: Hang Seng; Italy: FTSE MIB; Japan: TOPIX; UK: FTSE-All Share; US: S&P 500. (Bottom) Bloomberg, J.P. Morgan Asset Management. Past performance is not a reliable indicator of current and future results. Data as of 2 April 2020.

Conclusion

It is still too early to accurately predict the ultimate impact of the coronavirus on economic activity and corporate earnings. The sooner the virus is confidently contained, the quicker the recovery in economic activity will be, particularly given governments and central banks are acting decisively to shore up the economy and support the prospects for recovery. However, the longer the period for which social distancing measures are required, and the longer the period of reduced travel to restrict the transfer of the infection, the greater will be the impact on corporate earnings. For now, investors should maintain a balanced approach to asset allocation, and may consider modest underweights to equities on a very short-term horizon.

Within both equities and credit, we favour an “up-in-quality approach”, focusing on those companies with robust balance sheets who have the financial flexibility to survive this shock.

Core government bonds have performed strongly. However, significant further upside for US Treasuries and UK gilts will be more limited from here unless these central banks shift their guidance that they do not intend to take interest rates into negative territory. Investors may wish to consider alternative diversifiers such as macro funds, or real assets if liquidity is not a requirement.

The Market Insights program provides comprehensive data and commentary on global markets without reference to products. Designed as a tool to help clients understand the markets and support investment decision-making, the program explores the implications of current economic data and changing market conditions. For the purposes of MiFID II, the JPM Market Insights and Portfolio Insights programs are marketing communications and are not in scope for any MiFID II / MiFIR requirements specifically related to investment research. Furthermore, the J.P. Morgan Asset Management Market Insights and Portfolio Insights programs, as non-independent research, have not been prepared in accordance with legal requirements designed to promote the independence of investment research, nor are they subject to any prohibition on dealing ahead of the dissemination of investment research.

This document is a general communication being provided for informational purposes only. It is educational in nature and not designed to be taken as advice or a recommendation for any specific investment product, strategy, plan feature or other purpose in any jurisdiction, nor is it a commitment from J.P. Morgan Asset Management or any of its subsidiaries to participate in any of the transactions mentioned herein. Any examples used are generic, hypothetical and for illustration purposes only. This material does not contain sufficient information to support an investment decision and it should not be relied upon by you in evaluating the merits of investing in any securities or products. In addition, users should make an independent assessment of the legal, regulatory, tax, credit, and accounting implications and determine, together with their own professional advisers, if any investment mentioned herein is believed to be suitable to their personal goals. Investors should ensure that they obtain all available relevant information before making any investment. Any forecasts, figures, opinions or investment techniques and strategies set out are for information purposes only, based on certain assumptions and current market conditions and are subject to change without prior notice. All information presented herein is considered to be accurate at the time of production, but no warranty of accuracy is given and no liability in respect of any error or omission is accepted. It should be noted that investment involves risks, the value of investments and the income from them may fluctuate in accordance with market conditions and taxation agreements and investors may not get back the full amount invested. Both past performance and yields are not a reliable indicator of current and future results. J.P. Morgan Asset Management is the brand for the asset management business of JPMorgan Chase & Co. and its affiliates worldwide. To the extent permitted by applicable law, we may record telephone calls and monitor electronic communications to comply with our legal and regulatory obligations and internal policies. Personal data will be collected, stored and processed by J.P. Morgan Asset Management in accordance with our privacy policies at <https://am.jpmorgan.com/global/privacy>. This communication is issued by the following entities: in the United Kingdom by JPMorgan Asset Management (UK) Limited, which is authorized and regulated by the Financial Conduct Authority; in other European jurisdictions by JPMorgan Asset Management (Europe) S.à r.l.; in Hong Kong by JPMorgan Asset Management (Asia Pacific) Limited, or JPMorgan Funds (Asia) Limited, or JPMorgan Asset Management Real Assets (Asia) Limited; in Singapore by JPMorgan Asset Management (Singapore) Limited (Co. Reg. No. 197601586K), this advertisement or publication has not been reviewed by the Monetary Authority of Singapore; in Taiwan by JPMorgan Asset Management (Taiwan) Limited; in Japan by JPMorgan Asset Management (Japan) Limited which is a member of the Investment Trusts Association, Japan, the Japan Investment Advisers Association, Type II Financial Instruments Firms Association and the Japan Securities Dealers Association and is regulated by the Financial Services Agency (registration number “Kanto Local Finance Bureau (Financial Instruments Firm) No. 330”); in Australia to wholesale clients only as defined in section 761A and 761G of the Corporations Act 2001 (Cth) by JPMorgan Asset Management (Australia) Limited (ABN 55143832080) (AFSL 376919); in Brazil by Banco J.P. Morgan S.A.; in Canada for institutional clients’ use only by JPMorgan Asset Management (Canada) Inc., and in the United States by J.P. Morgan Institutional Investments, Inc., member of FINRA; J.P. Morgan Investment Management Inc. or J.P. Morgan Alternative Asset Management, Inc. In APAC, distribution is for Hong Kong, Taiwan, Japan and Singapore. For all other markets in APAC, to intended recipients only.

Copyright 2020 JPMorgan Chase & Co. All rights reserved.

LV-JPM52615 | 02/20 | 0903c02a8281ec1b