



Impact of Covid-19 on the global economy: Update

- Covid-19 is quickly becoming a global pandemic. Outbreaks in Italy, Korea, and Iran appear to be spreading rapidly, with more than 60 countries having been directly affected and deaths are being reported in New York and many other key cities around the world.
- Most recent data out of China say the economic impact is severe – the latest PMIs point to a record quarterly decline in output in Q1. Such impacts might occur on a global scale in the months ahead. At the same time, there are early signs that activity is starting to return toward something more normal in places like Hong Kong, Singapore, and even parts of China where people are becoming more familiar with the virus and its relatively low mortality rate, now viewing it as something closer to the seasonal flu than to SARS.
- For these reasons, we assume that the economic and financial effect of the virus will be sharply negative in magnitude as fear and social distancing disrupt activity, but relatively brief in duration as those reactions subside. In our new central baseline forecast scenario, we see China's GDP declining appreciably in the current quarter but beginning to recover significantly in Q2.
- This pattern will be delayed as much as several months as the virus spreads to Europe and the US. We expect US growth to drop to below zero in Q2 and the EA to show larger negative numbers before recovering in Q3. On balance, we expect the global economy to show negative growth in Q1 and to move gradually back into positive territory thereafter.
- The uncertainty attached to such projections is great. We have intentionally moved our baseline forecast to a path around which both upside and downside risks are present. A case can be made for a more manageable and less disruptive scenario than we are now projecting. We also consider a worse case scenario that has global activity falling a good deal further in Q2 and recovery delayed for another quarter.
- In the central scenario we see the Fed cutting rates 50 bps by the March meeting and twice more by 25 bps at subsequent meetings (for a total of 100 bps). We expect the ECB to react initially with a targeted policy (e.g., a special LTRO to support SMEs in affected regions) and also anticipate a 10bp deposit rate cut, though this will be contentious and will lag. In the worse case scenario, Fed rates are cut to zero and QE purchases commenced. Likewise, the ECB cuts further and uses more asset purchases. European fiscal policy is likely to react in both scenarios.
- Our central and worse case scenarios see the stock market falling 20% and 30% respectively from its previous peak, and bond yields remaining historically depressed for a time.

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Introduction

A month ago the novel coronavirus was causing a major disruption to economic activity in China that was beginning to spill over to other regions of the world. At the time, it was assumed that draconian measures being taken to contain the virus in Hubei province would succeed in limiting the spread of the virus globally. Under that assumption, we saw growth in China plunging to zero in Q1 (in quarter-over-quarter terms), and anticipated that spillovers to the rest of the world would cause global growth to fall by 2 percentage points in Q1, stocks to fall by 10% and the bond market to rally significantly (see "[Special Report: Impact of the novel coronavirus on global GDP growth](#)"). We also noted that the magnitude of the outbreak and impacts on global GDP growth were still highly uncertain, with risks skewed heavily to the downside.

In the past week, downside risks have clearly been realized. The virus is now morphing into a global pandemic, with infections reported in more than 60 countries, major outbreaks well under way in Korea, Italy, and Iran, and deaths reported widely including now in New York City and elsewhere in the US. Official numbers probably severely understate the true spread of the virus, in part because comprehensive (or even sporadic) testing is not being undertaken in most countries, including the US. Experts generally agree that public health and medical infrastructure outside of China are woefully inadequate to attempt to contain or deal with the scale of an outbreak that China has been struggling with for the past two months. A pandemic may only be only days or weeks away if not present already in much of Europe and the US, not to mention the rest of Asia, Africa, and Latin America. In many countries in Asia and Europe, schools are closed, public and private events with large gatherings are being canceled, and major transport hubs are seeing traffic plunge. Voluntary or government-imposed quarantines are disrupting work flow, in some cases severely.

If there is a less gloomy side of this picture, it is that in areas that have been hit the longest and hardest, economic activity is beginning to show signs of recovering. The paralyzing effect of fear of the unknown may be subsiding in Hong Kong and Singapore and even in some places in China. People are going back to work, shopping mall and restaurant traffic is picking up. The larger picture could very well be of a relatively short and sharp economic contraction in regions that are hit by the virus, with the full duration of the event globally depending on how long it takes to spread from one region to the next.

Attempting to predict the economic outcome of this crisis with any precision is fraught with uncertainty. Our approach is to consider a central scenario, which is now our new baseline global economic forecast, around which we see both upside and downside risks. In what follows, we also detail a more severe downside scenario.

Scenarios

At the optimistic extreme, we see some worsening of the status quo, but with spread of the virus limited to the relatively small number of the major urban areas in countries that have been hit. The lethality of the virus proves to be less than currently feared, and concentrated among people with existing health problems. The spread of the virus weakens substantially as winter gives way to spring in the northern hemisphere. People who have withdrawn from work and social functions out of fear become accustomed to it rapidly and reassess downwards the risks of

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returning to economic activities. Activity returns to norm within a month or two after outbreaks occur. Under this scenario, China is already on the mend and other regions of the world should follow in the months just ahead. Global activity returns fully to norm by mid-year.

At a pessimistic extreme, we see a major global pandemic, with a virus that proves resistant to warmer weather, and spreads via rolling outbreaks around the globe until late summer with every country experiencing a major outbreak. Most major urban areas around the globe are hit and economic activity disrupted commensurately. The virus eventually subsides, and activity, spurred in part by public policy measures, gradually picks up in the fall. One could readily imagine an even more dire scenario, but we have chosen not to go down that path because the lethality of Covid-19 appears to be significantly below that of other coronaviruses, such as SARS and MERS.

Our new central baseline forecast scenario lies between these two extremes. It entails a somewhat milder version of the global pandemic, and assumes roughly one-fourth of the major urban areas globally are hit in a big way. Disruptions to activity occur through the second quarter, especially in Europe and the US, and activity begins to normalize in the third quarter, with a more pronounced rebound occurring in the fourth quarter as the lagged effects of disruptions to supply chains and trade globally recede.

Given the information in hand, we assume in this scenario that Covid-19 will have a mortality rate well above the flu but also well below SARS or MERS, and that its spread will far more closely mimic the former. These assumptions help inform our view that geographic areas accounting for roughly one-quarter of economic activity in the US and Europe will be significantly impacted by the virus spread in the coming months. However, due to containment policies – both government orchestrated (as in China) as well as a more widespread practice of social distancing and self-quarantining – Covid-19 should lead to significantly fewer deaths than the seasonal flu while also producing a considerably larger disruption to economic activity. There is no doubt that evidence of the spread further in the US and Europe will heighten anxieties that will disrupt the day-to-day economic lives of a significant portion of the population. Our concern is that these dynamics could be more severe in the US where testing has lagged considerably. We have therefore reflected a more significant hit to near-term economic activity in the US compared to Europe. Ultimately, we expect that in our baseline scenario as these facts about the virus become better socialized, fears begin to subside, and the virus starts to dissipate, economic activity should begin to return to normal in the third quarter.

In the more severe scenario, we assume that geographic areas accounting for more than half of economic activity in the US and Europe are significantly impacted by the virus, with the effects spilling over into disrupted activity into the third quarter. In this scenario with rolling outbreaks that persist over a longer horizon, the virus spread will appear to mimic the seasonal flu more closely, with commensurately greater containment measures – again driven both by government policies and individual decision-making – implying a more severe contraction in activity in Q2 followed by a slower recover in the third quarter.

Economic impact

Until very recently, the global economic impact of the virus has been driven

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primarily by the severe disruption of activity in China. Most of the rest of the world has felt the wrath of the virus only indirectly, via the interruption of China's travel, transportation, and trade with the rest of the world, and the halting of production in numerous global supply chains that run through China. With significant outbreaks already in Japan, South Korea, Iran and Europe, we think a further spread to more cities in Europe and to some regions in the United States is all but inevitable. As this occurs, the rest of the world will feel the effects of this virus more directly. We expect Europe and the US will experience sudden drops in consumer spending and work stoppages brought on by fear of infection, uncertainty, quarantining (now more self-imposed than government-imposed), and wealth losses associated with sharp declines in asset values.

To gauge the possible quantitative economic impact of these disruptions under the scenarios we have outlined, we asked our economists globally to consider the impacts on a regional basis and our strategists for their views on the likely impacts on the stock, bond, and foreign exchange markets. The estimated impacts on GDP growth are presented in the charts at the end of this section. These charts show quarter-to-quarter growth rates at seasonally adjusted annual rates under four scenarios: (1) our pre-virus baseline forecast, (2) our initial post-virus forecast from a month ago (Feb.5), which was moderately more favorable than the "optimistic" scenario we have just described going forward, (3) our new central baseline forecast scenario, and (4) our pessimistic or "worse case" scenario. The scenarios are presented for a "world" aggregate represented by the G4 regions of the EA, US, China, and Japan. Charts are also included for each of these regions separately plus Germany. It must be stressed that the numerical paths presented here are unavoidably no more than educated guesses with significant uncertainty bands attached, especially given how much still needs to be learned about the epidemiological properties of Covid-19.

To derive these economic scenarios, our economists, particularly in Europe and the US, have appealed in part to the experience with SARS in 2003 and its impact on the economies of Toronto and Hong Kong. The central observations drawn from those experiences are that social avoidance, whether voluntary or mandated, can have a dramatically negative impact in the short-term but that activity can return equally quickly to something approximating the pre-virus norm as soon as people no longer feel threatened. Importantly, in 2003 this return to normality occurred long before governments declared the outbreak was over. Where social avoidance is mandated by governments, though, this recovery could be muted by a delay in government recognition that the crisis has passed.

China's recent experience provides a good example. We have tracked daily data on activity in Chinese ports, the movement of people around the country since the Lunar New Year holiday and some high-frequency indicators of consumption. All told, as dire a picture of the economy as the February PMI painted over the weekend (indicating a record pace of decline in output in Q1), these other data suggest the trough has been passed. Already there are indications of an easing of the economic freeze as the government encourages businesses to reopen in most parts of the country and people begin to return to work. We have also seen this dynamic of a plunge in activity in the early days of the outbreaks outside Mainland China in Hong Kong, Singapore and Seoul. Still anecdotally, it seems the worst may already have passed in Hong Kong and Singapore just as there is similarly anecdotal evidence of a thawing of the freeze in parts of China. Our expectation is that in the coming weeks similar patterns will be observed in parts of the United States and Europe as people react to emerging news the virus has spread there as well. In the euro area, the

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regions around the quarantined areas in northern Italy that have been afflicted account for about 5% of EA GDP; in our new baseline forecast, we assume that at least 20% of the EA will be similarly affected.

On this basis, our new baseline forecast sees the global economy in recession in the first half of 2020, with the EA and Japan recording two quarters of moderately negative growth, the US economy hovering near zero with a contraction in Q2, and China experiencing one quarter of decline in Q1. We expect Australia to fall into recession for the first time since 1991 due to the loss of exports to, and tourism revenues from, China. In this scenario of a brief spread of the virus outside China, by Q3 the global economy enters a period of above-trend growth as people return to work and the shops, and the virus has not had a significant impact on potential growth. Not all of the lost output in Q1 is regained this year, but we expect that by the middle of next year most major economies will be on close to their pre-virus trajectories.

This weakness and the shock to financial conditions that helped drive it will, we think, induce 100 bps of Fed rate cuts in the next few months, including a 50 bp cut at the March meeting and another 50 bps to follow in ensuing months. We expect the ECB to react initially with a targeted policy (e.g., a special LTRO to support SMEs in affected regions, complemented by easy collateral rules and flexibility on NPLs).¹ We also expect the ECB to cut the deposit rate cut by 10bp to -0.60%. This will be contentious, meaning it will split the Council and come with lag. The Council might need to see the virus spread further first (that is, the shock go from localised to generalised) and the deterioration in financial conditions broaden (that is, from an equity market correction to a broader sense of financial stress). We anticipate some targeted fiscal easing also, in the most affected member states.

Given the global nature of this shock and the hit to financial conditions, central banks could well try to maximize their impact by acting in concert, an approach not normally taken, but one which has been given some additional weight by the latest news that G7 officials will hold a call this week. We expect also a moderate easing of fiscal policy in these two regions. We expect the PBOC to cut its medium-term lending facility rate 40-50 bps and the government to pursue a significant fiscal stimulus via tax cuts. Other monetary authorities are likely also to follow with rate cuts although emerging market central banks may have to choose between lower interest rates or a stable currency. These moves would support the rebound in global economic activity in the second half of the year.

Our more pessimistic scenario assumes that the spread of the virus in the US and Europe is both broader and longer-lasting. We assume also that Asian economies that have not yet experienced an outbreak do, with economic consequences not quite as dire as in China. The global spread of the virus and its resilience in the face of warmer Northern Hemisphere weather slows the recovery even in places where the local outbreak is well and truly over.

This scenario results in a deeper recession well into Q3 – even China experiences two quarters of GDP decline – and a much more gradual recovery reflecting more profoundly damaged sentiment. The depression extends for a fourth quarter in

¹ At least initially the best way to buffer a localised virus shock should be to try and prevent the disruption to economic activity from being amplified through job losses and business failures. For more on how monetary and especially fiscal policy can do this, see "COVID-19: How to buffer a virus shock", DB [Focus Europe](#), 28 February 2020.



Japan as, in this environment, we expect the Olympics to be canceled.

In this scenario, G3 central banks pull out all the stops, with the Fed cutting rates to zero and engaging in significant QE, the BoJ and ECB cutting further their already negative policy rates and the PBOC cutting rates a total of 100 bps while fiscal authorities bring more substantial stimulus to bear via relief to consumers and strapped businesses. The augmented deficit of the Chinese government would likely rise to 11% of GDP from 8% in 2019 as the government shifts from tax cuts to increased investment expenditure to support the economy. This is probably not an environment, however, for emerging market central banks to be following suit as capital outflows will likely make exchange rate stabilization a priority.

Figure 1: World global growth scenarios

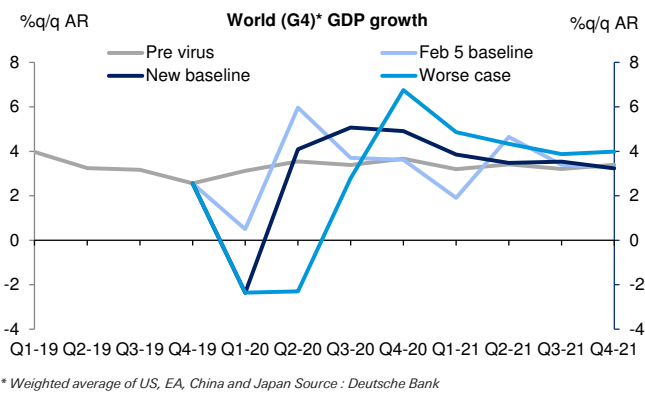


Figure 2: US GDP growth scenario

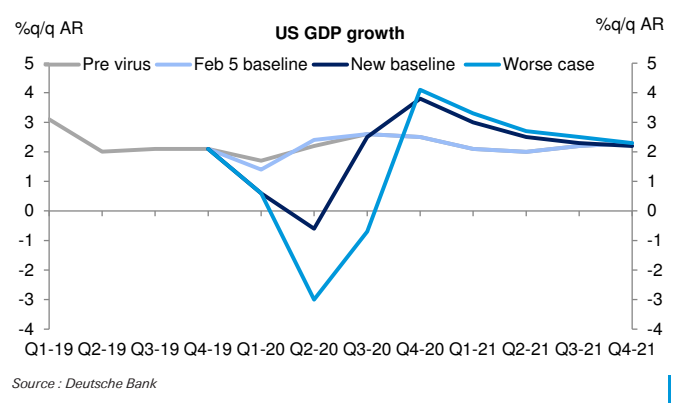


Figure 3: Euro area growth profiles

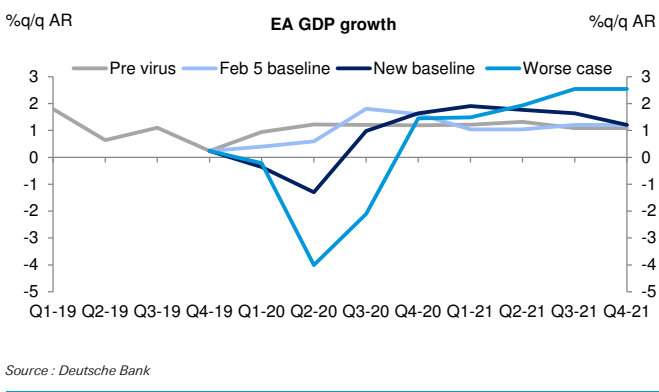


Figure 4: Germany growth scenarios

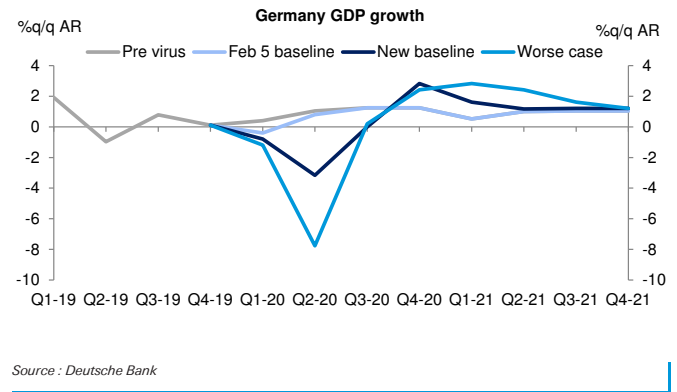
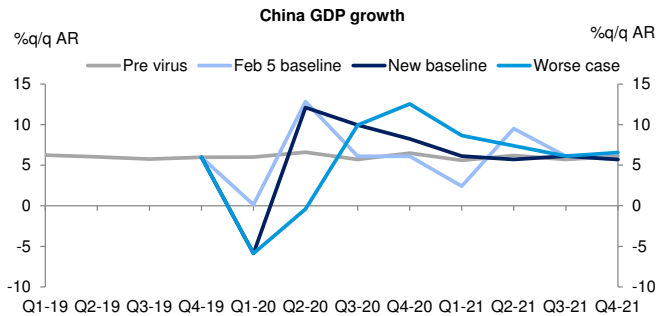


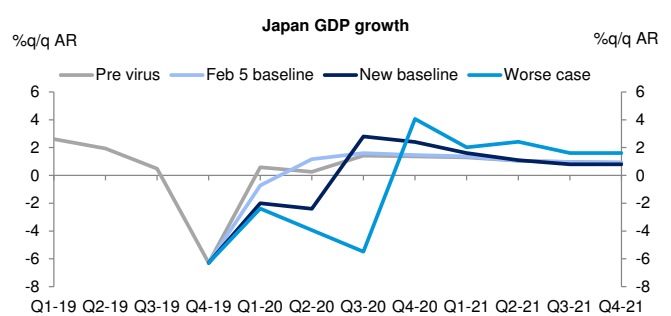


Figure 5: China GDP growth



Source : Deutsche Bank

Figure 6: Japan growth scenarios



Source : Deutsche Bank

Market implications

Stock market impact

Under our new central baseline and worse case scenarios, we see the stock market falling by 20% and 30%, respectively, relative to pre-crisis peaks. The severe reaction in equity markets this past week, with the S&P 500 putting in one of its fastest 10%+ corrections, reflected in our reading an initial condition of significant overvaluation and extremely long positioning. On the positive side, there has been a quick flush in equity positioning over the last week (97th percentile to 13th percentile). While we expect positioning to unwind further, the selling pressure should begin to slow ([DB: Positioning Flush, Feb 28 2020](#)). On the negative side, from a fundamental perspective, the market has simply moved from pricing in earnings growth of more than 20%, which would have easily been the fastest of this cycle, down to now pricing in flat earnings. It is yet to price in any drops in earnings from the expected slowdown in activity.

Consequently, we see the selloff as having further to go and in our central scenario we expect equity markets to be down by 20% from their last peak (S&P 500 at 2700). With the speed of the selloff seeing several technical indicators jump to extremes, many have been asking when and at what levels to buy back in. We note that we are only one week into the selloff. In episodes when vol got elevated historically (>1.5 sigma moves) as has happened, it has taken on average 6-7 weeks for vol to subside. The S&P 500 typically took another 4-5 months after that to recoup losses as investors raise exposure only slowly with trailing vol typically an input into risk management models. With our central scenario seeing a rebound in macro growth to above trend rates in Q3, we expect equity markets to bottom earlier, during Q2. In the more severe scenario, we see equity markets selling off by more, by around 30% from the peak (S&P 500 2370) corresponding to an average recession selloff.

Impact on rates

In the new baseline scenario the expected Fed easing is close to the cumulative cuts now being priced by the market, which makes current forwards a good reference point. As the easing is front-loaded in this scenario, rates should rally below the forwards in H1. As there is evidence that the virus propagation is contained in Q2, yields recover in Q3. However, they remain constrained by election uncertainty, which should be higher given the potential impact of the virus on the economy. Once the election uncertainty is resolved, yields partially converge towards our current baseline forecast.

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In the more severe scenario, we expect yields to remain persistently below the forwards. The term premium will be compressed by more QE, but supported by a more aggressive fiscal stimulus. The relative size of the two stimulus will determine the impact on the US term premium, increasing the uncertainty in this scenario. Moreover, we think the odds of Democrats winning the election will increase, which could lead to a reassessment of the term premium as well. Our analysis does not account for potential longer-term negative effects on aggregate supply as supply chains are restructured, which could give some lift to inflation and yields over time.

In Europe, the market is already pricing close to 20bp of cumulative cuts vs. 10bp expected by our economists. Unlike in the US, the policy space is fiscal rather than monetary in Europe. This is why we see less downside to EUR yields relative to the US.

Impact on currencies

As to the implications for major currencies, we see Covid-19 as an asymmetrically negative risk for the dollar against other major currencies as it likely leads to more easing by the Fed than by other major central banks and a greater decline in US rates (see ["FX Special Report: Time to sell the dollar"](#)). We had earlier identified 200bps as a key threshold in the front-end US-Euro interest rate differential that would start weighing on USD/EUR, and with a projected 100bps of Fed cuts for this year we see this threshold as being sustainably breached. The likelihood of greater fiscal expansion in Europe could contribute to this trend as well. At the same time, the dollar would likely move up against commodity and EM currencies as commodity markets are hit and flight to safety picks up. Overall, the dollar would probably weaken somewhat on a trade-weighted basis. With the Fed Funds rate at zero in the more severe scenario, we could see the euro back to the mid-1.20s and the yen near 90.

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Appendix 1

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