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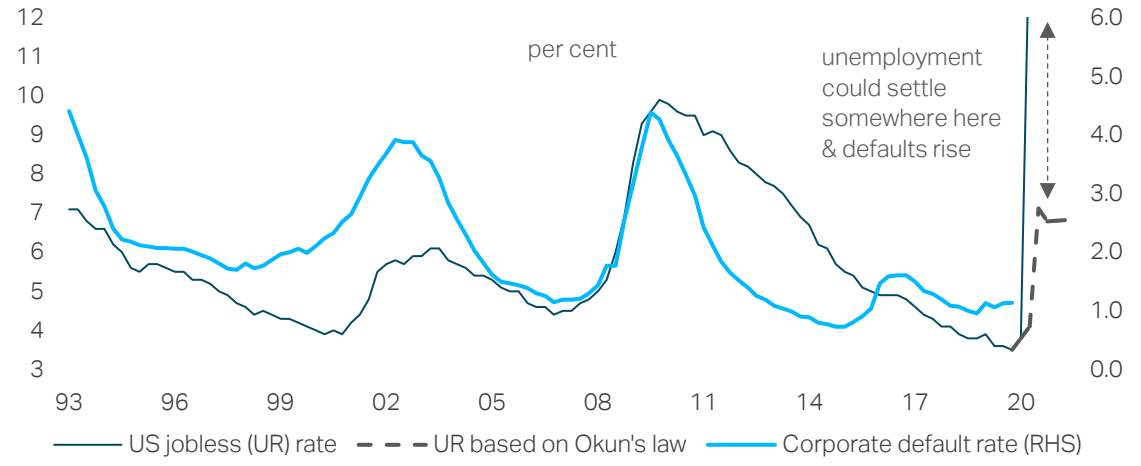
Macro Picture

HAS POLICY DONE ENOUGH?

Dario Perkins

Central banks prevented a financial crisis in March, by backstopping global markets and standing as lender-of-last-resort for the corporate sector. Governments have also eased short-term cash flow pressures by absorbing part of the wage bill. But the global credit cycle has turned and balance-sheet distress will only intensify in a sluggish recovery.

Chart 1: Recession will cause corporate distress



Source: TS Lombard, Okun estimate based on 1960-2019 data – this is probably the most conservative jobless est

CIRCUIT BREAKER

Central banks prevented a financial crisis in March. As COVID-19 spread to Europe and the US, there was a dangerous 'run' on the shadow banking system, which had been the dominant source of credit provision for the past decade. Remembering what happened in 2008, the authorities acted decisively to break the feedback loop between markets and the real economy.

WAGE BILL

The lockdown of the global economy has placed enormous strain on corporate cash flow. Most governments have eased these pressures by absorbing a substantial part of the wage bill. Though most companies still face large revenue losses in 2020-21, the policy response has encouraged equity investors to 'look through' massive near-term declines in economic activity.

CREDIT EVENT

While the aggressive policy response has eased the economic/financial fallout from COVID-19, many companies face persistent balance-sheet distress. Output and employment are likely to stay below pre-pandemic levels in 2021, which will cause a serious deterioration in the credit cycle. A sustained multi-year fiscal expansion will be needed to pull the world out of this rut.

HAS POLICY DONE ENOUGH?

The recovery in investor sentiment since March has been impressive (even puzzling…). Back then, as the global economy entered lockdown, a "flight-to-safety" rapidly became disorderly, leading to an outright "dash-for-cash". Equities experienced their fastest declines in history, commercial paper markets froze, global dollar funding evaporated, and some institutional investors dumped corporate securities in response to large fund outflows. Even the market for US Treasurys, among the most liquid in the world, displayed obvious signs of stress. Emerging Markets were particularly vulnerable, suffering capital losses that dwarfed previous EM crises. Many of the risks we had warned about before the pandemic – especially those associated with "market-based credit provision" or "shadow banking" – were materializing at the speed of a financial crisis. Fortunately, policymakers had a clearer understanding of these risks than in 2008, stepping in aggressively to break the dangerous feedback loop between markets and the real economy. The Fed's response was particularly important, marking a turning point for global financial conditions. The central bank took on the role of lender-of-last-resort for struggling US companies, squeezing spreads narrower, while providing a backstop for global dollar funding.

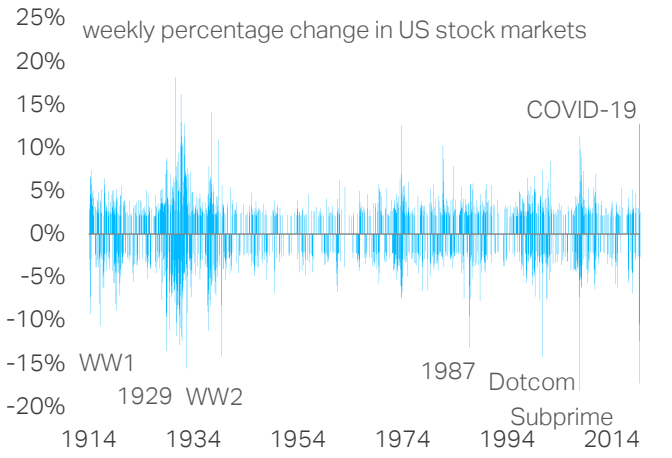
Thanks to the data released over the past month, including new 'real-time' statistics on activity, the scale of the pandemic's impact on the global economy is becoming clearer. The Bank of England, which has the longest historical database, suggests 2020 will see the largest decline in GDP since 'the Great Frost' of 1509 (-14% versus 2019). According to Opportunity Insights, US consumption is currently tracking around 20% down on its January levels. As consumers stay at home, COVID-19 is causing massive strains on corporate balance sheets, with a collapse in revenues and serious pressure on cash flow. The Bank of England's latest Financial Stability Report makes the first rigorous attempt to quantify these effects, estimating a "cash-flow deficit" worth 10% of UK GDP. The situation is similar all over the world – the BIS suggests most OECD companies will be operating at a loss in 2020, quickly running out of cash. So, Part (ii) of the global policy response (after Part (i), the efforts of central banks to calm financial markets) has seen the fiscal authorities attempt to plug the giant hole in corporate balance sheets by paying a chunk of their wage bill. This has temporarily pushed unemployment rates to Depression levels, but the authorities hope to prevent large-scale bankruptcies and permanent job losses.

With central banks backstopping markets and governments plugging corporate deficits, investors are happy to ignore the worst economic data they will see in their lifetimes. After all, is the largest decline in GDP for 300 years really so surprising when the global economy has been closed for 2-3 months? And since the authorities are encouraging businesses to temporarily cut their workforce to qualify for fiscal support, even Depression levels of unemployment are less remarkable than they seem. What matters is not the scale of the downturn, but rather how the global economy looks over the next 3-12 months (which is why Q2 data are irrelevant at this point). While the policies announced so far have helped to support macro fundamentals through the lockdown period, they will not be sufficient to prevent the global economy from settling on much a weaker post-pandemic trajectory. This will inevitably have implications for the corporate credit cycle, resulting in persistent balance-sheet distress. Current financial conditions – especially in equities, but to a degree credit too – do not reflect this reality. Since weak balance sheets will hold back the recovery, fiscal policy must do even more to support global growth. The measures that are now in place are only sufficient to deal with a short-term growth problem.

1. CIRCUIT BREAKER

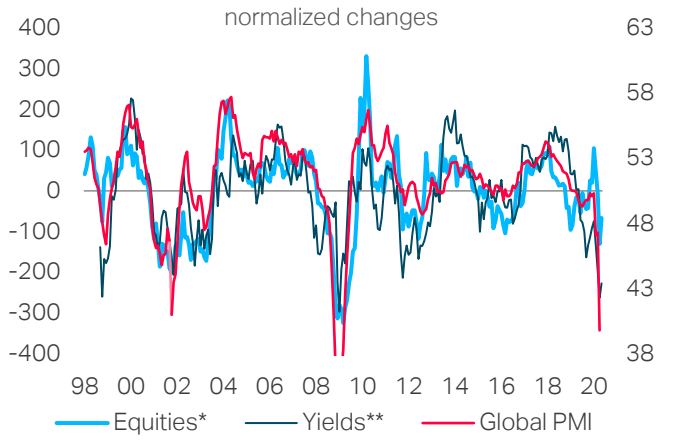
Remember all those blockbuster 'year ahead' publications from sell-side analysts last December? Suppose they had told you the global economy would suffer its steepest GDP decline in modern history, with 30 million Americans losing their jobs. What would have been your forecast for the major stock indices, or the spreads on investment-grade and junk corporate bonds? Chances are, you wouldn't have expected the S&P 500 to sit just 10% off its all-time high, or wider financial conditions to remain extremely calm. Yet, back in March – before the unprecedented interventions of global policymakers – the situation looked decidedly grimmer. As most nations entered a period of enforced "lockdown", risk sentiment had collapsed and there was a definite sense of "its 2008 again!" Global equities recorded their fastest ever bear market and a 'flight to safety' was rapidly turning into a 'dash for cash'.

Chart 2: Historic crash, historic recovery



Source: Bloomberg, TS Lombard

Chart 3: Divergence: macro<bonds<equities



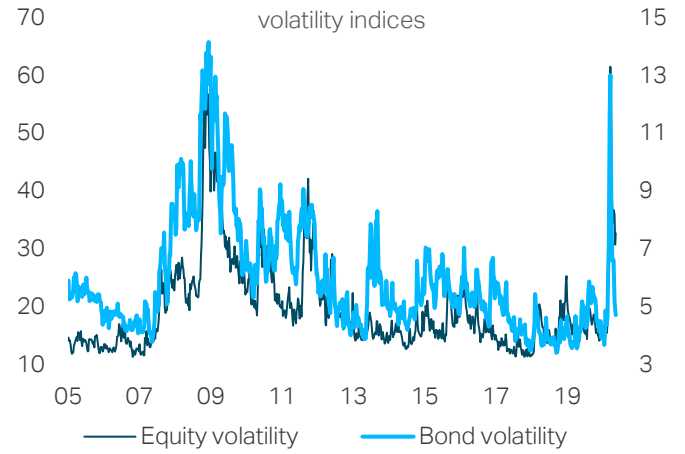
Source: Bloomberg, TS Lombard, **YoY, ** Yield minus two-year average

Near escapes

Recent Financial Stability Reports from the IMF, the Fed and the Bank of England provide an excellent overview of what was happening in markets and why the authorities had to intervene. In the broadest terms, the system of 'market-based finance' or "shadow banking[1]", which had dominated private sector credit provision over the past decade – replacing the traditional banking sector – suffered an acute panic. In this sense, the pandemic highlighted vulnerabilities that had been building in the financial system long before anyone had heard of COVID-19 (these were a reoccurring theme in previous Macro Picture, see e.g. here). The clearest problem was a gigantic 'carry trade' or 'search for yield', which had pushed institutional investors – especially in jurisdictions with negative bond yields – into riskier and longer duration assets, creating a huge appetite for USD-denominated securities (where interest rates were positive). US and EM corporates had been the main beneficiaries of this trend, issuing huge amounts of debt. Negative yields, massive BBB issuance and the 'dollar shortage' were all closely entwined.

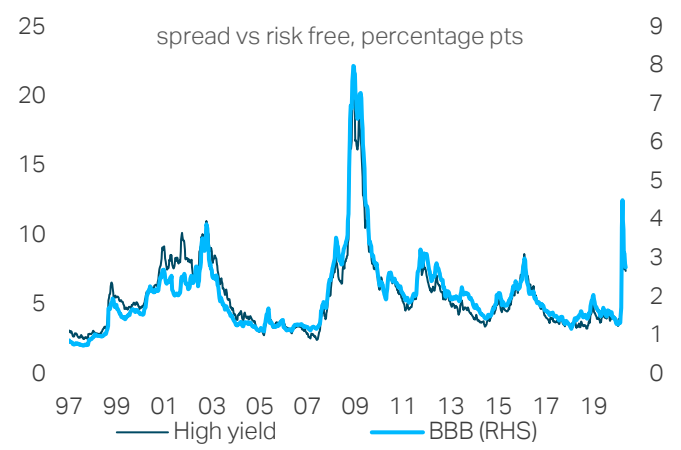
[1] This recent Kansas City Fed paper is a useful summary of the shadow bank run, as is this BIS Bulletin.

Chart 4: Calm has returned to markets



Source: FRED database, Bond volatility on RHS

Chart 5: Fed pulls credit back from extremes



Source: FRED database

Dash for Cash

As sentiment plunged in March, carry trades unwound and liquidity disappeared, essentially causing a 'run' on the modern credit system. The world faced an imminent financial crisis, similar to what happened in 2008 but involving a different set of players. Remember, the subprime crash had produced a run on the banks via global repo markets, which was itself a contemporary version of the classic bank run (where people queue around the block to get their money back). The 2020 version of this run developed through several main channels:

(i) Commercial paper froze: First, prime money market funds (MMFs) sought to reduce their commercial paper holdings to raise cash and build liquidity buffers in response to investor outflows. MMFs invest in short-term money market instruments and are key providers of short-term funding to financial institutions (particularly banks), corporates and governments. And second, dealer banks were reportedly less able or willing to intermediate these flows as they faced balance-sheet and risk-limit constraints. Commercial paper spreads widened dramatically. A similar dynamic occurred in the US municipal bond market, as dealers could not warehouse the surge in supply resulting from outflows from municipal bond funds. Short-term funding markets in Australia, Canada, and the UK experienced similar pressures.

(ii) Acute dollar funding tensions: The world's financial system has become even more reliant on USD funding over the past decade, which caused periodic 'dollar shortages even before the pandemic. These pressures intensified early in the COVID-19 crisis. The spread between Libor – the floating rate at which banks lend to each other – and the risk-free rate widened sharply. The cross-currency basis, a premium paid on the US dollar funding in exchange for local currency, widened for most currencies. Funding conditions became most severe for economies with large dollar funding demand but no Fed swap line. Many financial institutions, especially non-banks (pension funds and insurance companies) in Asia, had been playing the USD carry trade with no access to an ultimate 'lender of last resort'.

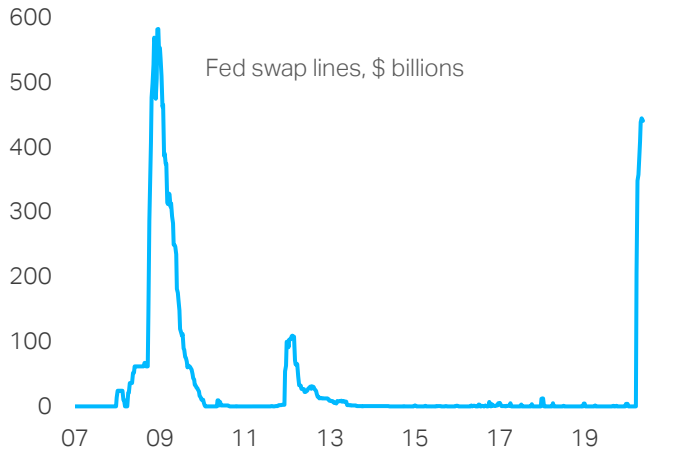
(iii) Fire sales: The sharp tightening in financial conditions put pressure on hedge funds and institutional investors, forcing them to close some of their positions in order to meet margin calls or to rebalance their portfolios—a dynamic that amplified the plunge in asset prices. For example, as volatility and correlations across asset

classes surged, volatility-targeting investors were forced to liquidate some of their asset holdings, contributing to the sell-off. Firesales of corporate bonds, perhaps in anticipation of mass downgrades (especially 'fallen angels' from the dominant BBB sector), caused credit spreads to blow out, amplifying the threat to corporate balance sheets (especially in the United States, the largest issuer in the 2010s);

(iv) Tensions in Treasury markets: Even the market for US Treasurys, one of the deepest and most liquid in the world, showed signs of stress. As Treasury yields fell sharply and intraday volatility increased, hedge funds that had engaged in the so-called 'basis trades' were forced to unwind their positions. This led to a substantial increase in dealers' holdings of Treasury bonds. With volatility surging, dealers' risk management practices constrained their ability to intermediate bond markets, adding to stress. Market functioning deteriorated and the world's 'risk-free' borrowing cost spiked higher, triggering worries about excessive UST issuance.

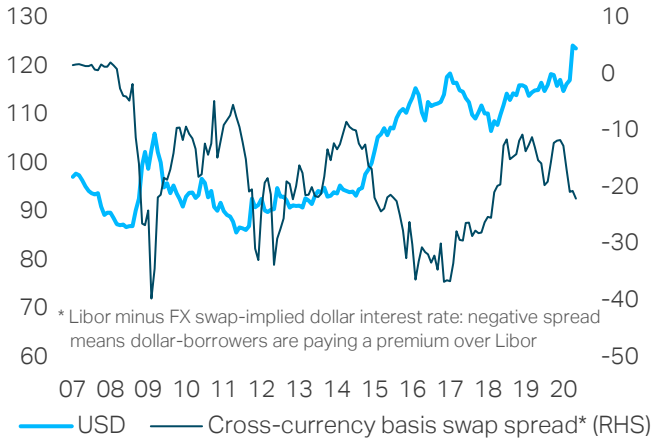
(v) Massive EM outflows: The combination of the COVID-19 pandemic, the collapse in oil prices and increased global risk aversion created a perfect storm for Emerging Markets, which suffered capital outflows on an unprecedented scale. Chart 8 shows EMs lost capital at a rate that dwarfed previous crises, including the 2008 crash.

Chart 6: Fed extends USD swap lines



Source: FRED database

Chart 7: Dollar shortage re-emerged

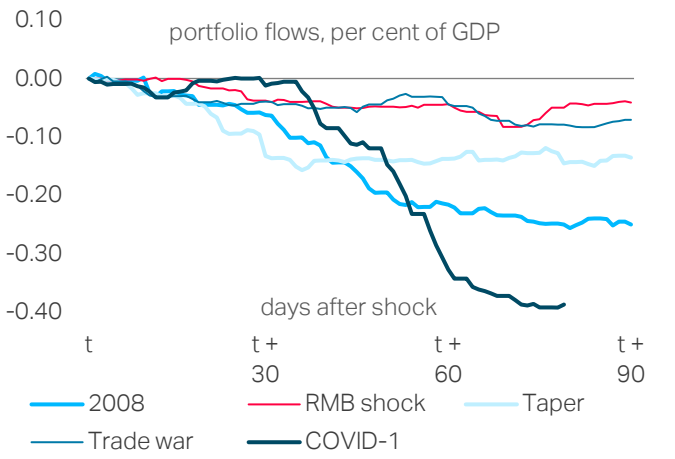


Source: Bloomberg, TS Lombard

Lessons learned

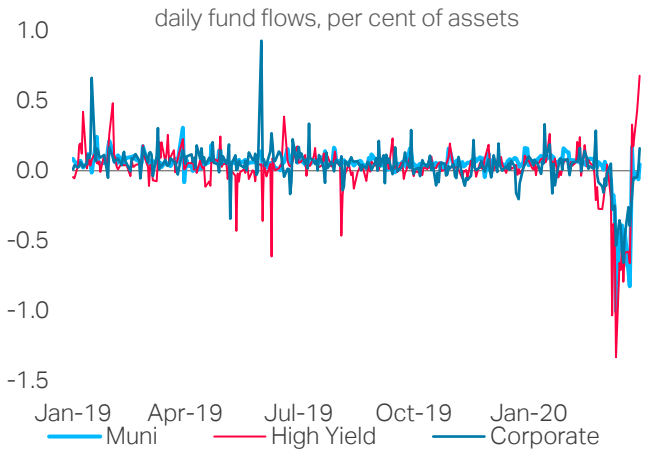
The rapid tightening in financial conditions threatened to amplify the impact of the pandemic, turning a health and economic emergency into an immediate financial crash. Non-banks tried to raise cash to meet margin calls on derivatives, leveraged investors withdrew from government bond markets, and dealers stepped back from repo markets. Investors' demand for cash and near-cash assets exploded and it became difficult to find buyers for even safe assets, such as long-term government bonds. Fortunately, unlike what happened in 2008, global policymakers were much more aware of these risks, stepping in immediately to short-circuit the powerful feedback loop between financial markets and the real economy (something they missed during the subprime crisis, when they assumed financial markets were a mere reflection of the real economy, rather than a critical amplifier). Even more important, they quickly identified the main vulnerabilities, targeting their interventions exactly where they were needed. Again, this policy response was a massive improvement on 2008, where the authorities initially floundered.

Chart 8: The worst EM crisis



Source: IMF Global Financial Stability Report

Chart 9: The Buy-side "Run"

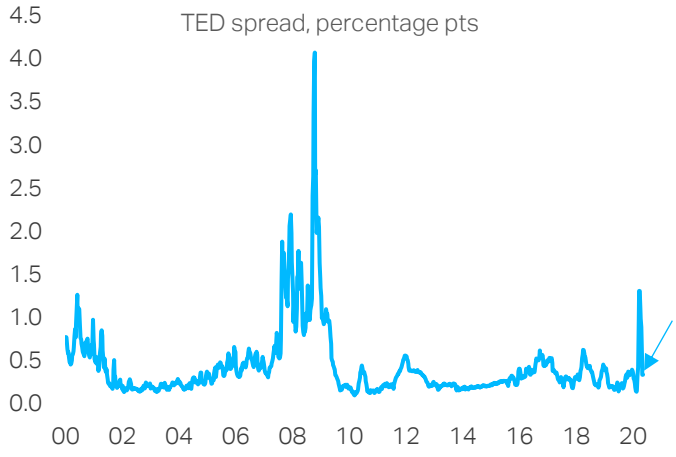


Source: IMF Global Financial Stability Report, Fixed Income Funds

Targeting the 'right' problems

The response from central banks was particularly important as the world economy entered lockdown. First, they significantly eased monetary policy by cutting policy rates by 50–150 basis points in 13 of the 29 jurisdictions with systemically important financial sectors, as well as by issuing forward guidance and expanding their asset purchase programs. Second, most central banks provided additional liquidity to their banking systems, including by lowering reserve requirements, easing collateral terms, upsizing liquidity repo operations, and extending the term of such operations. Some country authorities also activated or enhanced programs to provide funding support to banks. And third, a number of central banks worked together to enhance the provision of US dollar liquidity through swap lines in an effort to ease conditions in global dollar funding markets. Crucially, this ensured many non-banks now had access to Federal Reserve liquidity, albeit indirectly through domestic banks. EM central banks also took action to ease currency pressures and mitigate the damage from massive capital outflows – including FX intervention, reduced FX reserve requirements and enhanced liquidity provision.

Chart 10: Remember the TED spread?

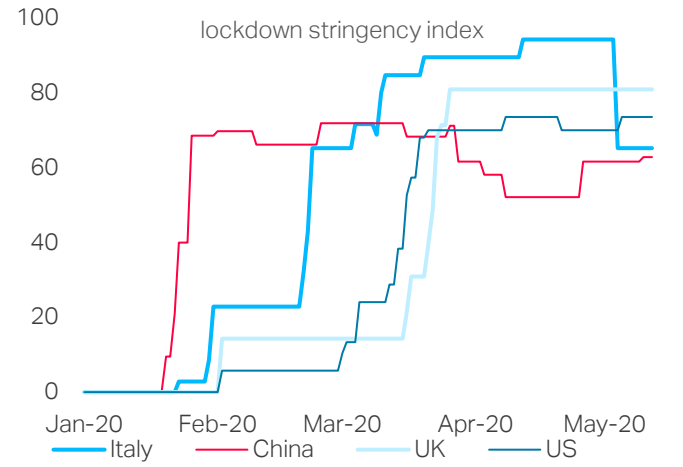


Source: FRED database

Chart 11: Financial conditions have eased again

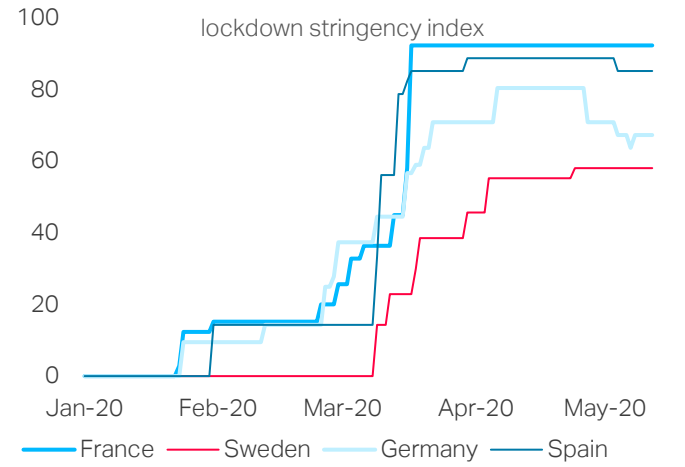
Source: St. Louis Fed Financial Stress Index

Chart 12: Lockdowns began in Q1



Source: University of Oxford

Chart 13: Strictness has varied – see Sweden



Source: University of Oxford

These efforts by central banks – largescale, prompt and targeted on the main vulnerabilities in global finance – have had a powerful impact on market sentiment. Equities have rebounded, volatility across all asset classes has declined, and credit spreads have narrowed. As a result, there has been no system-wide credit crunch, which means the global economy has avoided (so far) a 2008-style financial crisis. While these moves have probably gone too far – Section 3 will show why we think equity and credit valuations do not reflect the reality of what could still be a serious global recession – there is no doubt central banks have "bought time' by responding forcefully and breaking the feedback loop between financial markets and the real economy..

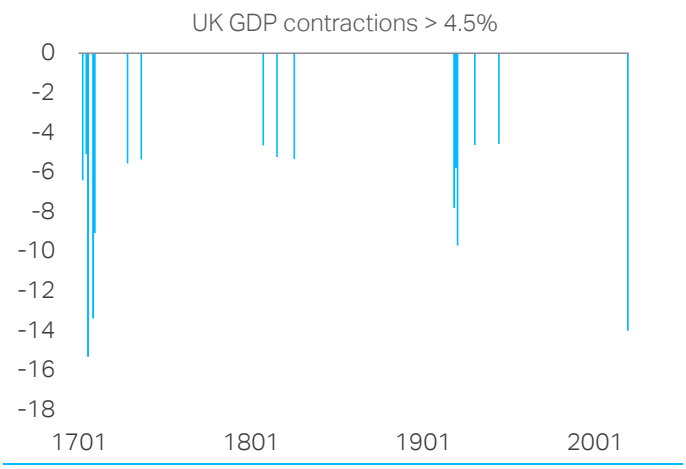
2. WAGE BILL

The effort central banks made to calm financial markets was decisive, but they didn't act alone. The other crucial part of the policy response, which has been just as important, has involved governments supporting businesses and households through the lockdown by providing guarantees, cheap loans and income transfers. Two months on and it is pretty clear why this support was needed – thanks to the release of the first macro data for March and April , we now have a much clearer idea about what the "lockdown" has meant for the global economy. It's not pretty – according to the Bank of England, which has published the most detailed 'official' assessment of COVID-19 to date, 2020 could see the largest decline in GDP since the Great Frost of 1509, with UK output dropping by an impressive 14% compared to 2019 (Chart 14).

Assessing the lockdown

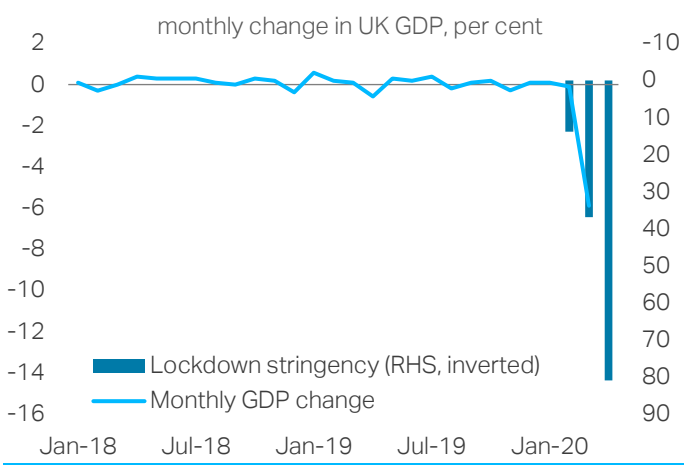
If there has been one good thing to come out of this pandemic (at least for economists), it is the availability of new, extremely high frequency data to assess the economy *in real time*. First we had Jim Stock's effort to estimate US GDP on a weekly basis, by combining various publically available data. Then, more recently, a team of researchers at Harvard University published the results of their 'big data' tracker for the US economy online, which allows us to follow a variety of economic trends on a daily basis. Charts 18 and 19 show their account of consumption and small-business revenue, which include data up to May. The impact of the lockdown is obvious, with consumer spending plunging 30% during the second half of March, leading to a decline in business revenues of around 50%. Their other statistics, which we haven't reproduced here, show 40% of small businesses closed and a 60% drop in employment at these establishments.

Chart 14: Some historical context



Source: Bank of England database, TS Lombard

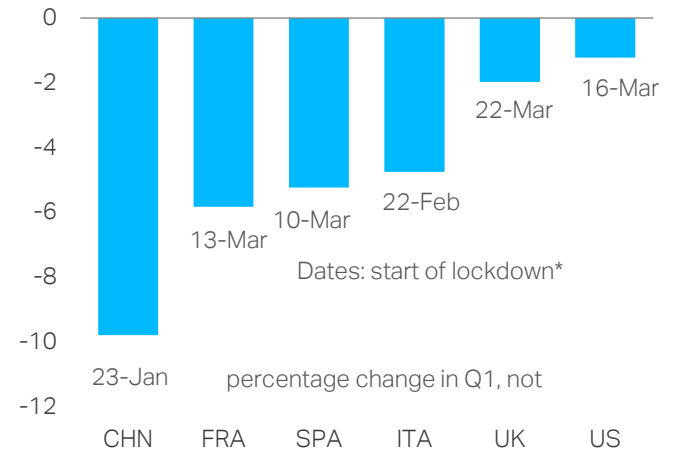
Chart 15: March GDP crash only the start



Source: ONS, Oxford University, TS Lombard

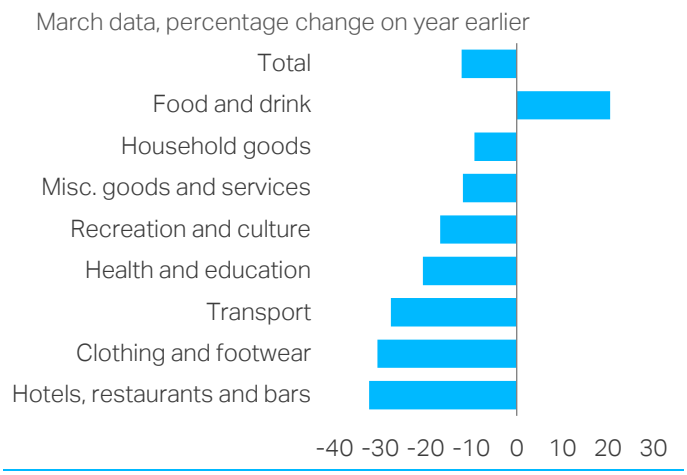
High frequency data will be useful in the weeks ahead, as we monitor the reopening of the global economy. The IMF is even planning to publish daily world trade data. But since these big data providers are new, we do not know how well they track GDP, the most comprehensive account of economic trends. National accounts statistics are infrequent – typically quarterly – and involve a long delay. In fact, we have only received seen international data for Q1. Though most countries didn't enter lockdown until the second half of March – meaning they were closed for less than a fifth of the period – most countries recorded large declines in output (Chart 16). But some countries publish monthly GDP, which provide a better account of what happened. UK statistics, for example, show a 6% GDP decline in March alone. This is remarkable because the government didn't introduce a full lockdown until 23 March, which means April will be worse.

Chart 16: Comparison of Q1 GDP



Source: National sources, TS Lombard, * when stringency exceeds 40

Chart 17: UK consumer spending

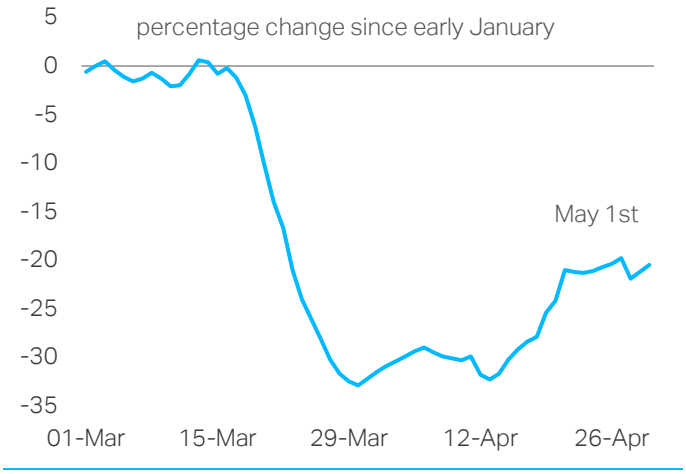


Source: ONS, Bank of England

As an aside, we also now have some data on inflation during the pandemic, which is important in the context of investors worrying about the impact of supply disruptions on consumer prices. US statistics were particularly noteworthy, showing severe deflation in April. But far from settling the inflation-deflation debate, it is important to question the reliability of these data. Remember CPI data assume a fixed consumer basket each year. During the pandemic, most people have not been buying the goods and services that have been falling in price (e.g. travel) but have

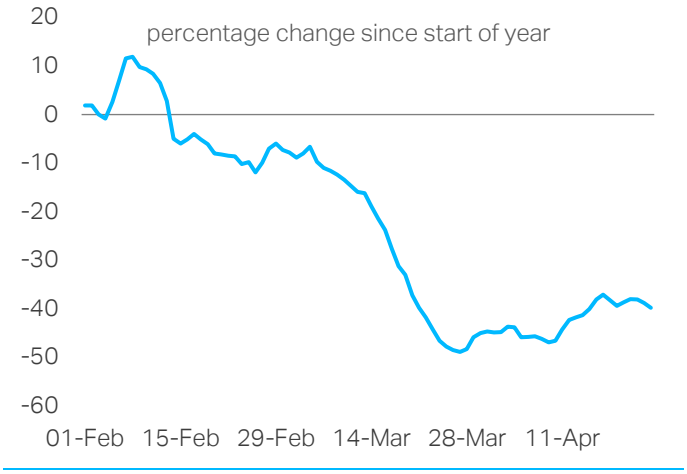
increased their purchases of things that have been rising in price (e.g. food). Large "relative" price shifts mean most aggregate measures of inflation are rather meaningless right now.

Chart 18: US consumer spending tracker



Source: Opportunity Insights (tracktherecovery.org)

Chart 19: Small-business revenue tracker

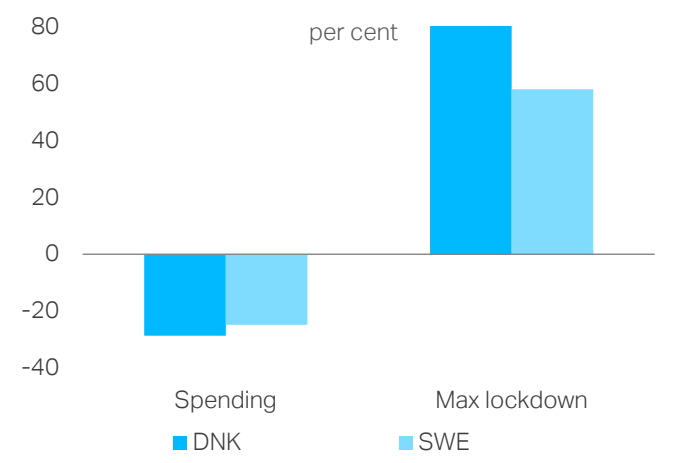


Source: Opportunity Insights (tracktherecovery.org)

Not just about formal measures

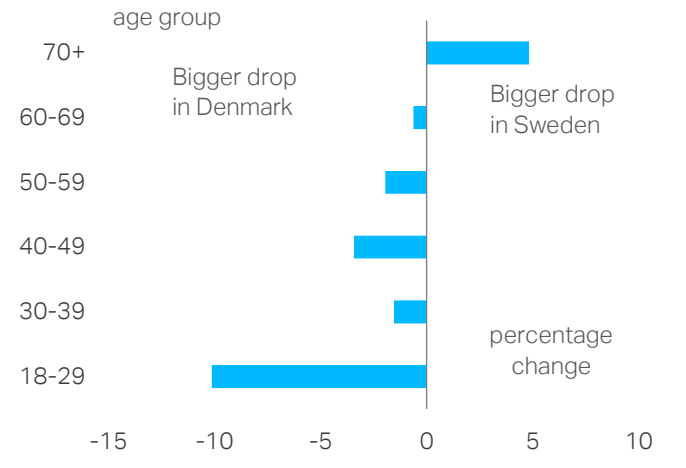
We have used "lockdown" as shorthand to describe extreme social-distancing measures. In many countries, governments have enforced these with severe 'stay-at-home' orders. Thanks to a new tracker from Oxford University, we can now follow the stringency of these measures on a daily basis, which will provide as useful monitoring device as countries try to 'reopen'. Still, it's important to remember that COVID-19 would have hit most parts of the economy hard even without government-mandated rules. This is an important point to emerge from the Oxford database. A recent Danish study, for example, highlights the comparison between Denmark (strict stay-at-home orders) and Sweden (where the government has been more lenient, offering advice rather than prohibition). Both countries actually experienced a similar decline in consumption (Charts 20-21). In fact, Sweden's approach was arguably better targeted, encouraging mainly the most vulnerable members of society to change their behaviour[2].

Chart 20: Denmark versus Sweden



Source: University of Copenhagen (link here)

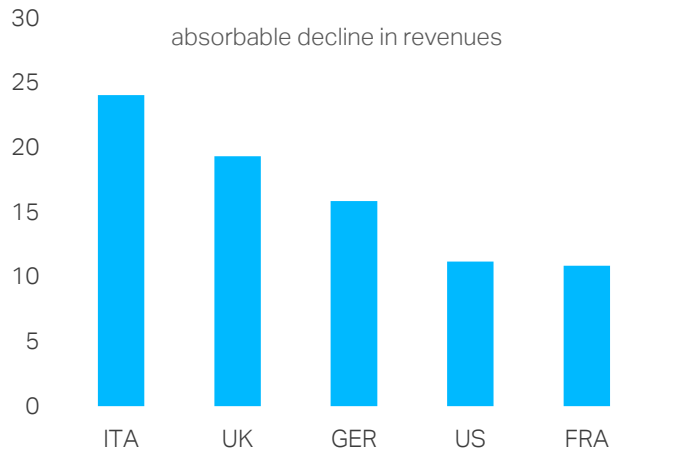
Chart 21: The non-lockdown better targeted?



Source: University of Copenhagen (link here)

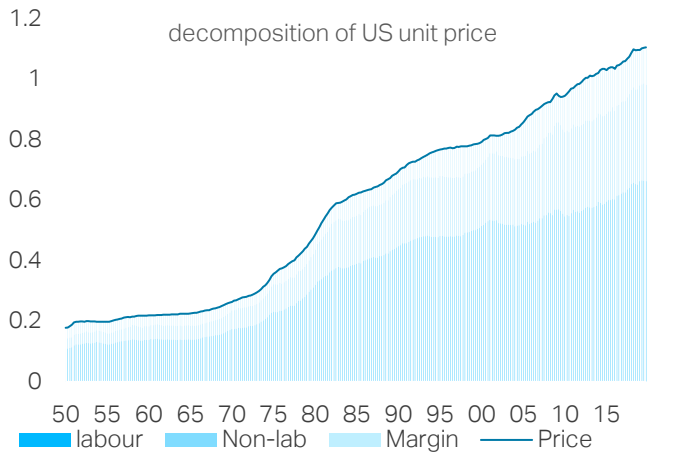
[2] For a Chicago Fed study of what happened in the United States, including differences across states, see here.

Chart 22: Profit margins



Source: BEA, ONS, EC. Note: EA data exclude non-labour costs!

Chart 23: Labour costs are two-third of costs

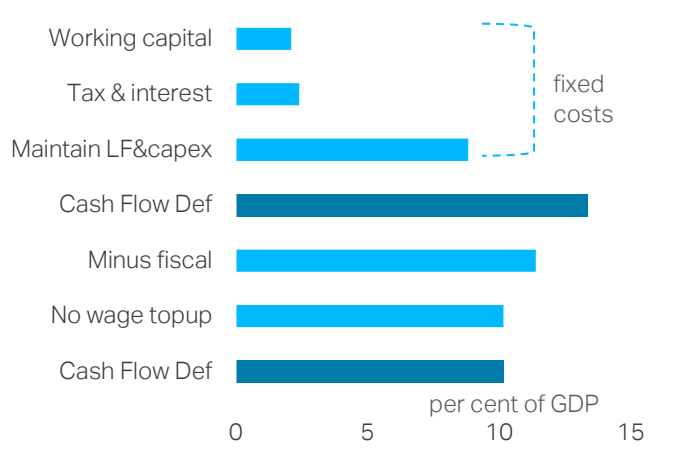


Source: BEA, TS Lombard

The fiscal priority – corporate solvency

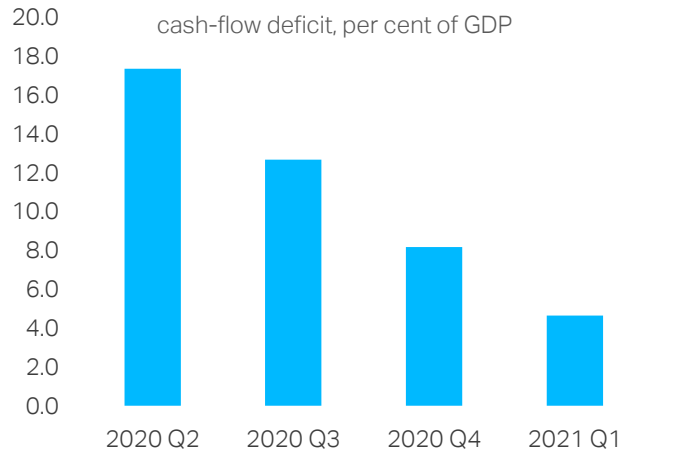
Extreme social distancing – formal or informal – has had a huge impact on corporate revenues, which have plunged during the pandemic. Some sectors have obviously suffered more than other. In broad terms, the fiscal policy response (beyond the immediate needs of the health emergency) has been all about trying to support business through this period. Early on, policymakers realized that how companies responded to this sudden deterioration in cash flow would have a huge bearing on the ultimate economic and financial consequences of the pandemic. In particular, the authorities wanted to stop the corporate sector from taking actions that would amplify the impact of this stress, such as making staff redundant or discarding productive capital. At the limit, they were worried these pressures would cause widespread corporate insolvencies, which would also generate huge losses for the banking system.

Chart 24: Companies running large deficit



Source: Bank of England May Financial Stability Report

Chart 25: Deficit narrows as lockdown eases

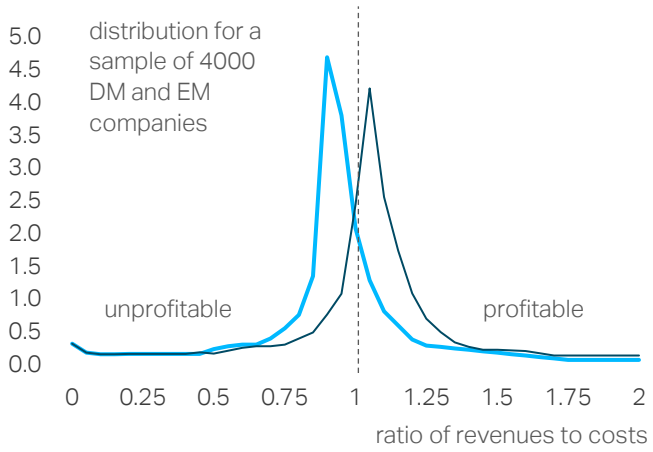


Source: Bank of England May Financial Stability Report

Going into lockdown, many companies faced an unprecedented cash-flow deficit. Revenues were plunging, while many of their costs (wages, rents, other operating costs) were much stickier. Providing cheap loans and credit was clearly important, especially as finance needs were increasing rapid. A recent BIS study, based on data for 4000 listed and unlisted companies across 26 DM and EM countries, found 50% of companies did not have sufficient cash to cover

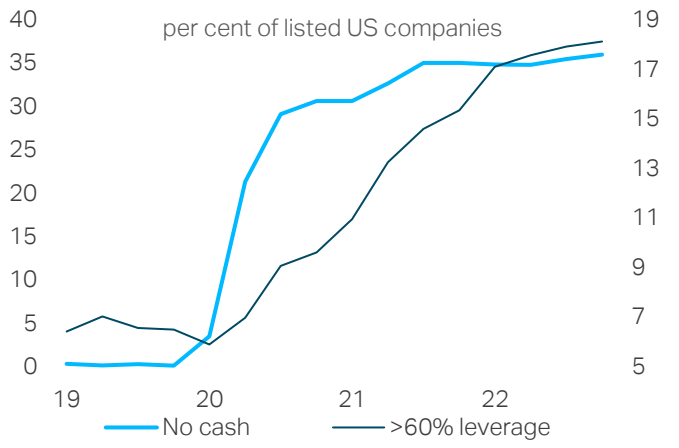
their needs. They highlight several pressure points: (i) firms struggling to sell inventory, which they need to finance; (ii) the freezing of trade credit, as other firms seek to defer payments; depriving the corporate sector of vital liquidity[3]; and (iii) many existing credit lines were short term and would need rolling over, which would be difficult in a stressed environment.

Chart 26: COVID-19 revenue shock



Source: BIS Bulletin "COVID-19 and corporate-sector liquidity'

Chart 27: COVID-19 hit to US corporate sector



Source: Chicago Fed simulations

Early on, it was clear the authorities needed to do something about wages – which account for two thirds of the corporate sector's total costs. After all, there was a limit to what companies could absorb in their margins. In the US and the UK, profits were around 10-15% of revenues, which means companies could only absorb a decline in revenues of a similar magnitude without reducing their wage bill. In reality, of course, many companies would cut their workforce well before they reached this point, either because their margins are weaker-than-average ("superstar" companies distort the aggregate picture) or because they must preserve the return on capital. So governments stepped in, in effect absorbing a large part of the corporate wage bill in an effort to plug the cash-flow deficit, keeping companies in business and protecting jobs.

Plugging the corporate deficit

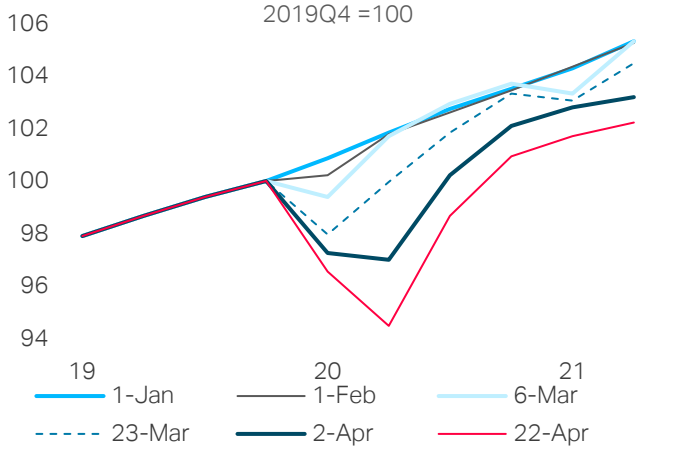
The details of these schemes differ across jurisdictions. In Europe, governments generally encouraged companies to furlough their workers while continuing to pay them – sometimes at a reduced rate (80% in the UK) – which the government would reimburse. In the United States, the authorities used the unemployment insurance scheme, topping up the payments so they reached – or even exceeded – most workers' monthly wage income. As a result of this policy, official unemployment rates have increased sharply, even though many of these furloughed workers are supposed to be temporarily unemployed and are not currently looking for work In reality, it is now difficult to assess the true state of most labour markets because we do not know how many of these job losses are permanent. Bears see "Depression-levels" of unemployment and predict a lasting slump. Bulls argue the rise in unemployment shows government policy "is

[3] To quote the BIS, "Businesses large and small need working capital, especially when they are part of a supply chain. A company's short-term assets, such as receivables - the money owed by other businesses in the production chain - constitute a substantial part of total assets. These receivables are matched by accounts payable on the liabilities side of the balance sheet. The interlocking chain of receivables and payables is the glue that holds businesses together in an economy, not to mention global supply chains. And businesses have increasingly turned to market-based funding for working capital, and in US dollars for global value chains."

working". The most detailed study, for the US, shows the truth is between these extremes. Fed staff suggest a third of job losses are permanent, though the situation in Europe is murkier[4].

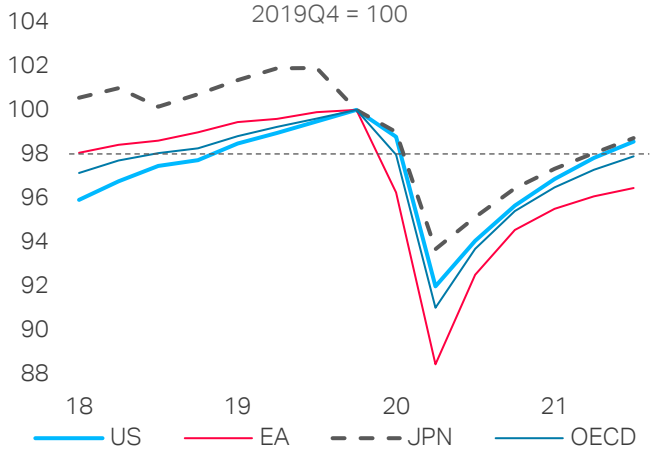
While government policy has eased the short-term pressure on corporate balance sheets, most companies have still experienced a large cash-flow deficit during the lockdown period. The most detailed assessment we have is specific to the UK, published in the Bank of England's May Financial Stability Report. Using 'micro data' covering around 50% of the UK corporate sector – dominated by larger companies (the situation is worse among smaller firms)– Bank staff estimated a cash flow deficit worth 10% of UK GDP during the second quarter of 2020. Though government policy would reduce the size of this deficit, it would not eliminate it. Unfortunately, we do not yet have such detailed analysis for other countries, but the situation is bound to be similar. BIS and World Bank simulations suggest a majority of OECD companies would make a loss in 2020. And a study by the Chicago Fed suggests the COVID-19 crisis could see 30% of US companies run out of cash within six months, with leverage ratios > 60% in a fifth of all firms.

Chart 28: Revisions to global GDP forecasts



Source: Dallas Fed based on consensus forecasts (paper here)

Chart 29: Bloomberg DM consensus



Source: Bloomberg, TS Lombard

3. CREDIT EVENT

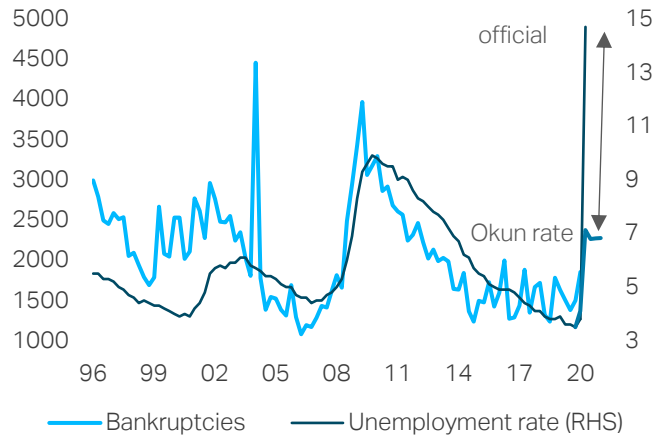
The global policy response to COVID-19 has had two main parts: (I) Central banks trying to break the feedback loop between financial markets and the global economy in an effort to prevent an imminent financial crisis; and (ii) Governments attempting to avoid bankruptcies and permanent job losses by absorbing a large part of the corporate wage bill. The obvious question is whether these efforts will be enough. Right now, of course, the macroeconomic data can't answer this question, which is presumably why investors are happy to ignore it. Sure, the stats show a collapse of historic proportions, but this was inevitable with large parts of the global economy effectively closed for 2-3 months. The crucial issue is obviously what happens next – how the pandemic evolves and how quickly the economy gets back to where it was in 2019.

[4] There is significant hysteresis in European labour markets, which means unemployment rises more slowly. Unfortunately, once euro-area joblessness has hit high levels, it can also take a long time to reduce it – as the response to the 1970s oil shocks showed. Remember also that there are big differences across European, with the South heavily reliant on tourism and other activities that can't tolerate social distancing – a clear vulnerability (see this Vox analysis).

The underlying macro state

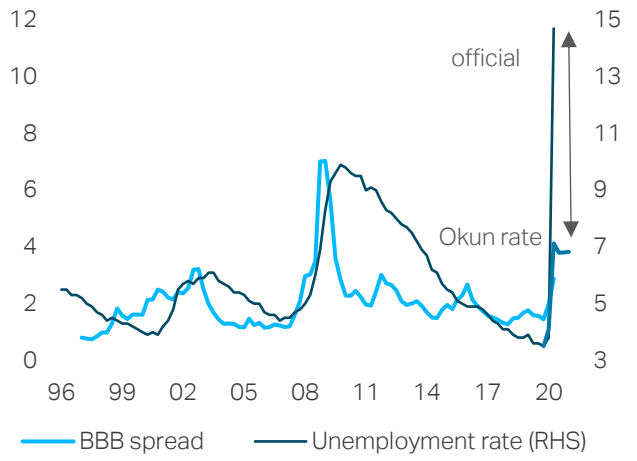
We have no specialist insight into how the pandemic will evolve, other than to remind our clients that COVID-19 is unlikely to disappear and a vaccine remains a long way off. Some degree of social distancing will be necessary, which means various sectors of the economy – airlines, tourism, food services etc. – will not recover quickly. Most economists have been assuming a gradual easing in the restrictions from May, as global infection rates trend lower. But the IMF recently explored two alternative scenarios – longer lockdowns and a second wave of the virus – which would make a massive difference to the global economic outlook. When dealing with exponential growth rates, the risks are naturally skewed to the downside. Weirdly, despite the rally in risk assets since March, most investors seem to agree. According to the latest BoAML, the majority of investors expect a 'W-shaped' recovery and even a second COVID-19 peak[5].

Chart 30: US bankruptcies to surge?



Source: FRED, TS Lombard

Chart 31: The risk to US credit spreads



Source: FRED, TS Lombard

Since lockdowns and government interventions are distorting all the current macro data, we will only be able to assess the 'true' state of the economy in the months ahead. As far as consensus forecasts are concerned, most economists think progress will be slow – there will be a technical bounce in activity as lockdowns ease, but most economies will not return to 2019 levels of GDP until the second half of 2021. Compared to where economists thought the world would be at the start of the year, this represents a large and persistent downgrade. This must also have important implications for corporate balance sheets because it means a substantial cumulative loss of income. In short, the large 'cash flow deficit' many companies have experienced during lockdown is likely to persist, which must naturally cause a deterioration in the credit cycle.

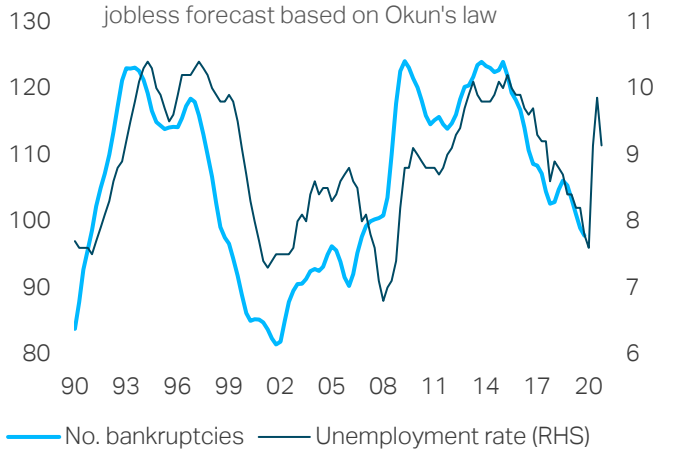
Credit cycle to sour

Economists think the pandemic will cause a global recession. In a recession, companies will default and credit-spreads will widen to reflect this risk. We can see this in the correlation between various signs of stress in credit markets – such as default rates and bankruptcy levels – and unemployment rates. Global jobless rates have already surged but it is difficult to know how much of this is permanent. Still, we can get a rough idea of the magnitude of the destruction in labour markets – and the resulting implications for credit markets – by looking at the traditional relationship between GDP and unemployment. Plugging consensus GDP forecasts into Okun's

[5] So why are they buying stocks? There is always a Fear of Missing Out (FOMO), but many of our clients cite TINA, There is No Alternative. Bond yields are zero and cash isn't exactly an "investment strategy". This is also consistent with the fact defensive sectors have been leading the recovery in global stock markets.

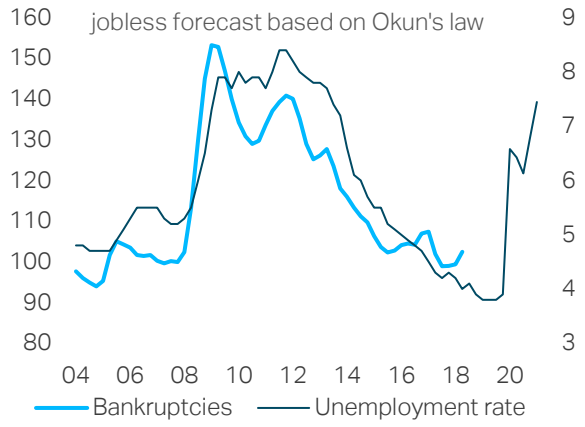
law – which measures the responsiveness of the unemployment rate to annual GDP growth – we can predict a large 'fundamental' rise in joblessness into 2021. And at those unemployment rates, we should also see a serious deterioration in credit and equities. But remember these forecasts are extremely conservative. We estimated average Okun coefficients over long periods but actually they tend to increase in recessions. The 2009 crash, for example, hit labour markets much harder than our models imply. And with COVID-19, the impact on unemployment could be especially severe. This is because the policy response has already encouraged many companies to lay off workers, albeit "temporarily". Now we only need companies not to hire back these workers, rather than take an active decision about making them redundant.

Chart 32: Similar story for France



Source: OECD, TS Lombard

Chart 33: And the UK

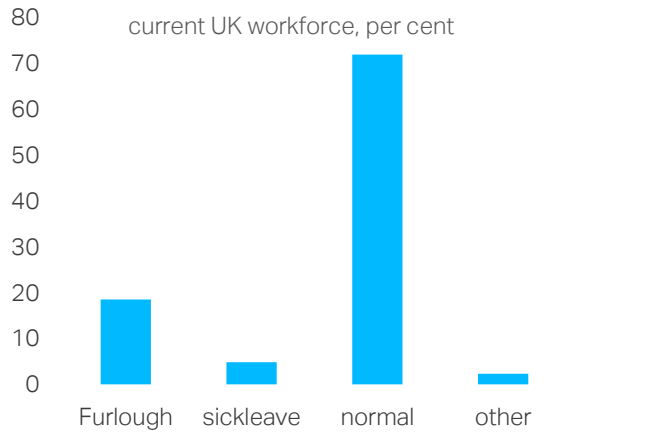


Source: OECD, TS Lombard

Credit markets not priced for recession

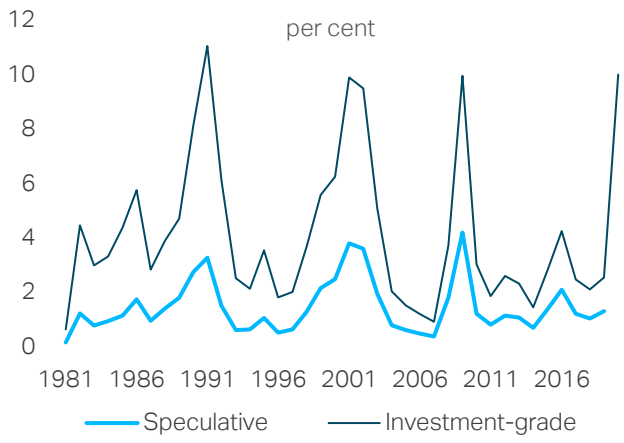
Back in March, there were two main risks to global credit markets (i) an abrupt tightening in financial conditions – even a credit crunch – that would stop many companies from issuing new debt or rolling over existing debts; and (ii) the balance-sheet distress associated with a deep recession and prolonged slump. Policymakers have been successful in addressing the first of these problems, especially after central banks stepped in to become the lender of last resort for non-financial corporations. The Fed's March 23 announcement, when it introduced its

Chart 34: 20% of UK labour force furloughed



Source: ONS survey of businesses

Chart 35: S&P expects HY default to hit 13%

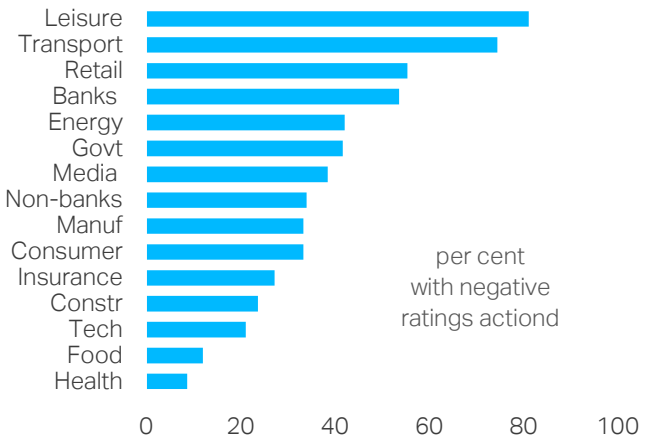


Source: Standard & Poor

Corporate Credit Facilities, marked an inflexion point in the crisis. But no policymaker has done enough to eliminate the persistent corporate deficit that will emerge in a recession.

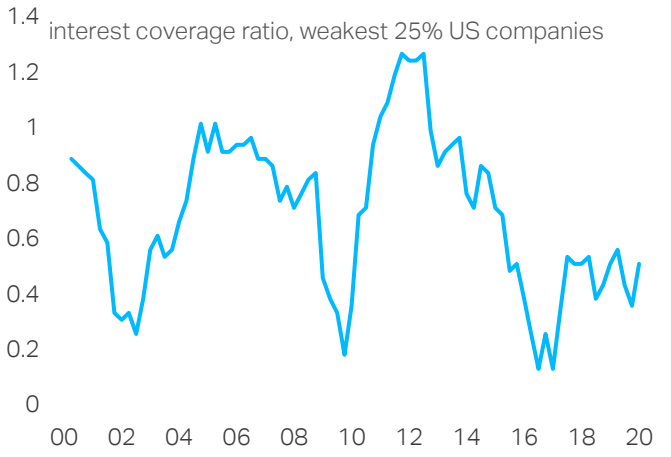
Remember, even if the authorities ensure all companies can rollover their debts during the next 12 months, that will not be enough to prevent defaults if corporate leaders believe their existing business models are no longer viable – in fact, the decision to default is rarely just about losing access to funding. And we are already seeing a definite change in tone. Back in March, a PwC a survey found that 69 percent of American CFOs said that it would take their companies less than a month to get back to "business as usual." In a follow-up survey last week, just 10% of CFOs still held this view. Even after the response from central banks, rating agencies are already starting to downgrade the credit prospects of many companies. Chart 36 shows most of the downgrades have been concentrated in the most at-risk sectors, but in a recessionary scenario – which is what the consensus actually expects – we should see much wider defaults.

Chart 36: Here come the downgrades



Source: Fitch COVID-19 Rating Watch

Chart 37: This was before revenues plunge



Source: Federal Reserve Financial Stability Report, May 2020

The good news is that we are now less likely to see firesales of BBB securities given that the Federal Reserve and other central banks stand ready to purchase these securities. There has been a Buyside Bailout for the Buyside Bubble. This is important because the scale of potential downgrades could easily have swamped high-yield markets. In 2009, when defaults reached record highs, the frequency of BBB downgrades was 11.4% in the United States and 16.3% in Europe. Under reasonable assumptions, a return to 2009 downgrade rates could force portfolio rebalancing in excess of daily turnover in corporate bond markets. To illustrate, according to the Securities Industry and Financial Markets Association, about $9,100 billion of US corporate bonds were outstanding as of Q3 2018, with a daily trading volume of about $25 billion (0.27% turnover). With an 11.4% BBB-to-junk downgrade frequency, assuming 10% of the downgrades occurred around the same time and that one third of the bonds were offloaded quickly, about 0.38% of outstanding BBB bonds would be sold (compared with 0.27% daily turnover). This is important because daily turnover is the liquidity the market can easily handle – "business as usual". Greatly exceeding this could overwhelm dealers' capacity and drive down bond prices.

Limits to the CB bailout

Without a strong recovery for the global economy, COVID-19 is likely to have a large and persistent impact on corporate balance sheets (and eventually banks):

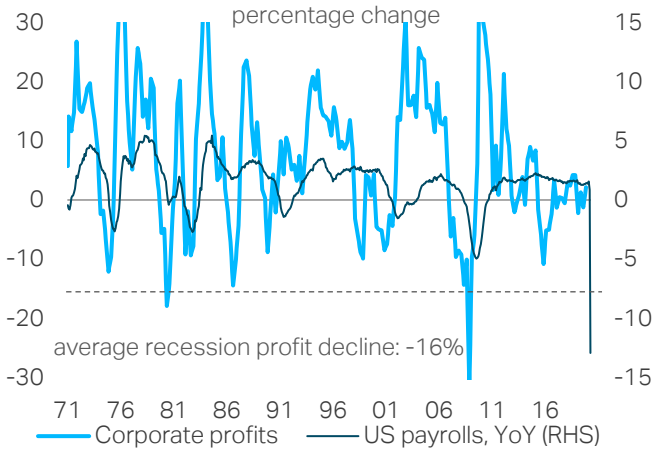
(i) Earnings will disappoint: As we explained in a previous Macro Picture, bottom-up earnings estimates that predict boom-like conditions in 2021 look totally implausible. With GDP unlikely to return to 2019 levels quickly, the profits shortfall (which is usually some multiple of the GDP gap) could be huge;

(ii) Leverage will increase: BIS analysis suggest COVID-19 will substantially boost corporate borrowing in 2020-21, adding 10% pts (or more) to most DM debt ratios. This is on top of the large increase in corporate indebtedness that has already occurred since 2008. While there is no simple metric for debt sustainability – especially when interest rates are likely to stay lower – we know from past cycles that the sectors of the economy that have binged on debt in boom times usually face a period of retrenchment, which weighs on their activity going forwards;

(iii) Zombification is unhelpful: Even before COVID-19, despite interest rates at record lows, a large proportion of companies were already 'zombies', in the sense they had earnings that barely covered their debt servicing. Federal Reserve and IMF analysis shows a fat tail of weak companies in the US and Europe. The situation will only get worse as companies borrow more in 2020-21. Even if the authorities can prevent mass bankruptcies, these companies are unlikely to invest and re-hire.

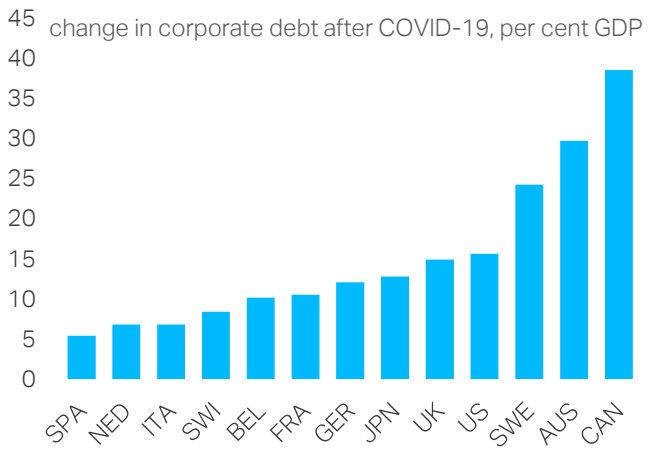
The underlying problem is that rising corporate leverage made an important contribution to the global expansion over the last decade, buoyed by historically low interest rates and a search for yield among institutional investors. Given COVID-19 is likely to cause a persistent slump and create enormous stress on balance sheets, you have to wonder what is going to drive the global expansion over the next 1-5 years. Even after running war-time budget deficits in 2020, governments might need to introduce further, multi-year stimulus programmes to pull the global economy out of its current funk. Will they be prepared to do this? Right now, nobody knows. But until they do, the answer to our title question – Has policy done enough? – is NOT YET.

Chart 38: Earnings always plunge in recessions



Source: BEA, TS Lombard

Chart 39: BIS predicts big rise in leverage

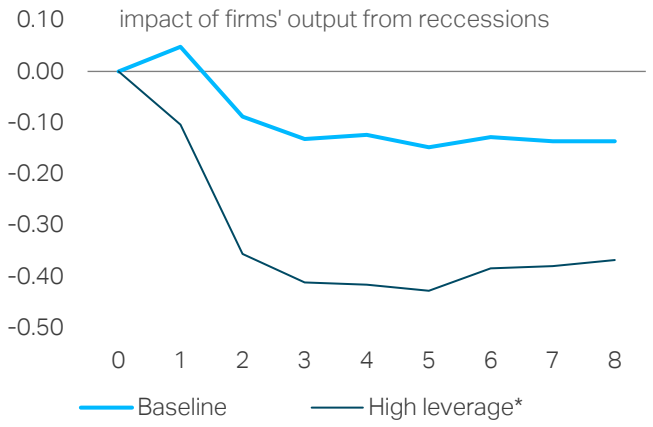


Source: BIS Bulletin "COVID-19 and corporate-sector liquidity"

Bottom line

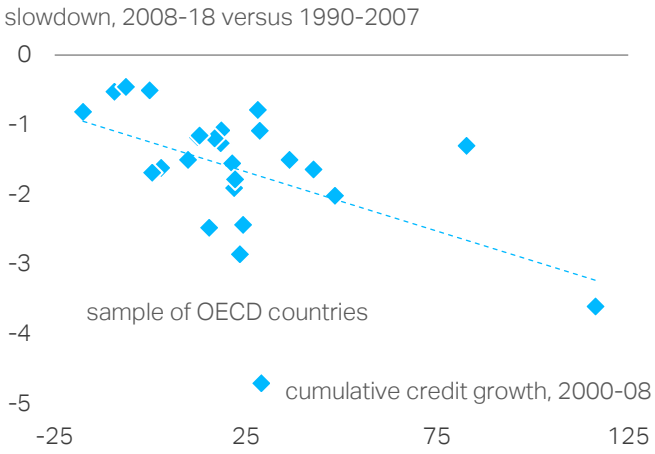
There have been two parts to the COVID-19 macro policy response so far: (i) Prevent an imminent financial crisis by intervening in markets to ease financial conditions (the main lesson from 2008); and (ii) support businesses by using the government's balance sheet to plug a large corporate deficit during the lockdown. So far, so good – the authorities averted a financial crash in March, markets conditions have improved remarkably quickly, and investors seem prepared to ignore some of the weakest macro-economic data in history. If COVID-19 infection rates immediately dropped to zero and stayed there, which means social-distancing rules could be relaxed, the policy response would surely be resounding success. The trouble is, nobody thinks this will happen and authorities are only planning to support their economies for a limited amount of time (though the lockdown). With a slow recovery and a corporate sector that will end up even more leveraged than before the crisis, policy will surely have to do more. A large, multi-year fiscal expansion might be needed to pull the world out of a post-pandemic rut.

Chart 40: Recessions hurt leveraged firms most



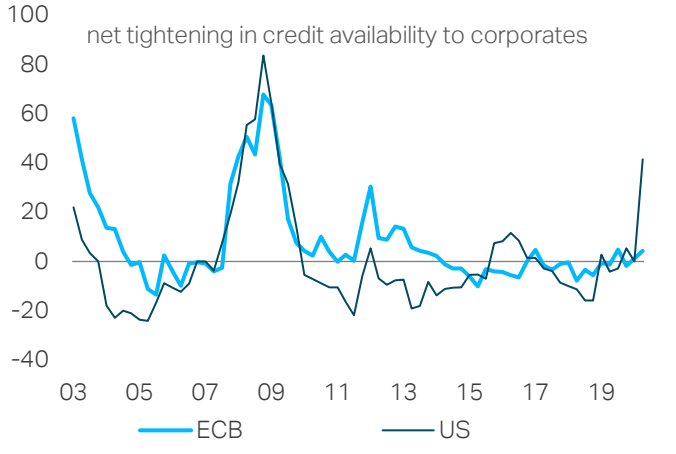
Source: BIS simulation

Chart 41: Private credit booms hard to repeat



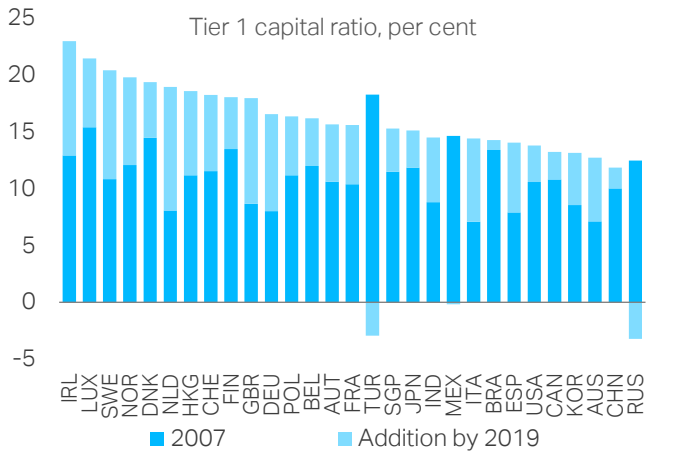
Source: Previous Macro Picture on sustainable debt levels

Chart 42: Banks face default pressures too



Source: ECB, Federal Reserve, Bank Lending Surveys

Chart 43: Though they are better capitalized



Source: IMF Global Financial Stability Report April 2020