

NAVIGATING A GRINDING RECOVERY

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This research has been commission by the Investment Management Corporation of Ontario (IMCO) through Oxford Economics, a leader in global forecasting and quantitative analysis.

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PREFACE

IMCO is focused exclusively on providing comprehensive investment solutions, including timely insights on global economic trends, to public-sector clients in Ontario.

One element of this is our long-term capital market assumptions. These assumptions are an input into the strategic asset mix advice we provide our clients and are intended to be a reading of the market and to offer neutral forecasts of expected volatility and correlations of returns on various asset classes over the next ten years. With the ongoing decline in market measures such as bond yields, credit spreads, and cyclically adjusted earnings yields, our expected long-term returns are also significantly lower than experienced over the previous 10 years.

As part of our recently launched research program, we engaged Oxford Economics, a leader in global forecasting and quantitative analysis, to develop a series of research papers focused on understanding the "low for longer" world. We are pleased to share the second research paper in this series. In the paper, which makes up the remainder of this document, Oxford looks at the range of possible policy maker responses, and the potential resulting macro-economic outcomes.

There is no crystal ball that accurately predicts the future and the views expressed on the following pages represent one potential version of the future. As a result, our clients' portfolios are not optimized for a specific market environment or potential path of future returns. Instead, we strive to help our clients build diversified portfolios that include strategies intended to work in different potential market environments.

NAVIGATING A GRINDING RECOVERY

- I The global economy faces one of the most severe downturns in modern times. Policy responses can help to limit further downside risks, but the real source of uncertainty is over the strength of the medium-term recovery.
- The COVID-19 pandemic has hastened a reassessment of the economic policy tools to combat downturns and strengthen recoveries. That reassessment has its origins in the slow recovery from the 2008/9 financial crisis when fiscal policy was largely shunned in favour of monetary policy for demand management in the economy.
- We find that although monetary policy has some space left to help stimulate growth, fiscal policy will be crucial to longer term recovery prospects. Negative interest rates, quantitative easing and funding for lending programs can all help to bring demand forward in time and help boost the recovery from the current crisis. In many cases there is more room for maneuver than is commonly acknowledged. But we doubt that monetary policy is the most effective tool for the job.
- Raising the level of demand in the medium term and ensuring that the global economy loses as little output as possible in the aftermath of the pandemic will depend mostly on the use of fiscal policy. A combination of tax cuts, spending and investment in longer-term infrastructure will be needed in order to manage downside risks from the current crisis and counteract the likely rise in private sector precautionary saving as a result of such a significant downturn.

- Because the medium-term outlook depends so much on policy maker actions, of which we know little about at this stage, we develop three scenarios to illustrate the uncertainty. The most likely scenario is that policymakers undertake the necessary action to get the economy back on its feet but do little to foster medium term growth, in part due to concerns over the lack of fiscal policy space. In the upside, medical advancements and greater support in the medium term allow the economy to largely catch up to the pre-pandemic trend. To the downside, a lack of policy support and lasting impact on the financial sector are likely mean that, in addition to a large immediate hit to the economy, the growth rate of the economy is weaker.
- I For financial markets, the implications are largely a reconfirmation of existing trends. Interest rates are likely to remain lower for longer in an environment of insufficient demand and excess savings combined with a shortage of safe assets. Inflation is likely to remain weak and procyclical, meaning that bonds and equities remain a natural hedge. And while equity markets continue to adjust from high valuation levels, the trajectory for corporate profits remains relatively weak.

PRE-CRISIS MONETARY POLICY ORTHODOXY TURNED ON ITS HEAD

Prior to the global financial crisis, the widespread view amongst economists was that business cycle management was the preserve of central banks and that this could be achieved with the use of a single policy lever – the central bank policy rate. It was assumed that central banks could control inflation because changes in the policy rate would be quickly transmitted via financial markets and the banking system to the wider economy. And by keeping inflation low and stable it was assumed that GDP would remain close to the economy's potential level of output.

Fiscal policy was seen as an inferior tool for demand management because it was subject to longer and more variable lags then monetary policy and it ran the risk of being used by the government for political gain. The role of fiscal policy was thus primarily to ensure public-sector debt sustainability while at the same time limiting distortions that might have negative repercussion for the supply-side of the economy.

This framework by and large worked well in an environment where output remained close to potential, real and nominal interest rates were positive and there was no tendency for long and sustained inflation undershoots. But over the past decade, the rules of the game changed and the orthodoxy has faced three broad challenges:

- Interest rates that are close to or below zero in many advanced economies, resulting in a lack of conventional policy space
- I reductions in the effectiveness of both conventional and unconventional monetary policy loosening
- I increased concerns about the negative side effects of very loose monetary policy

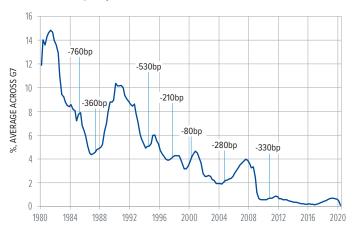
This is the background to the current coronavirus global pandemic and, hopefully, eventual grinding recovery.

A LACK OF CONVENTIONAL POLICY SPACE

As the current coronavirus induced crisis has shown, the ability of central banks in many advanced economies to loosen policy via interest rates cuts is limited because policy rates are either close to or below zero. The average policy rate reduction during a policy easing cycle since 1980 was around 350bps (or 300bps excluding the early 1980s), but the average G7 policy rate easing in this crisis has been just 60bps (Figure 1).

FIGURE 1: Policy rates are already close to their lower bound

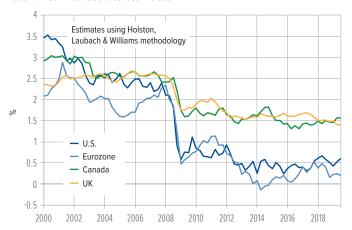
G7 central bank policy rate



Source: Oxford Economics/Haver Analytics

FIGURE 2: The natural interest rate has also fallen

Natural real interest rate estimates



Source: Oxford Economics/New York Fed

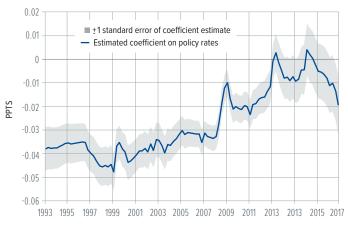
To a large extent the lack of room for policy rates to fall was not surprising. Even if the crisis had arrived later in the economic cycle and policymakers had been able to return interest rates to a level that is neither contractionary or expansionary (the natural or neutral interest rate), central banks would still have struggled to provide much stimulus to the economy.

That is because estimates of the natural rate of interest in advanced economies show that it has continued to fall, continuing the pre-crisis trend. Indeed, estimates suggest that the natural real rate in eurozone is around zero and that it is not that much higher in the US (Figure 2). The declines largely reflect structural factors (which include the decline in potential GDP growth) which are expected to persist. Since there remain question marks over how negative interest rates can be pushed or to the extent to which negative rates are effective, the decline in the neutral interest rate has effectively reduced the degree to which policymakers can loosen policy, assuming that rates are close to their neutral level at the beginning of the cutting cycle.

The prevailing view is that the secular rise in global indebtedness has made economies more sensitive to interest rates. But research suggests the opposite - over time, output has become less responsive to interest rate moves (Figure 3). Economies with higher average interest rates in the post crisis period have also on average been more sensitive to changes in the policy rate (Figure 4).

FIGURE 3: Output has become less sensitive to policy rate changes

Global: Sensitivity of output to policy rates



Source: Oxford Economics/Haver Analytics

FIGURE 4: Level of interest rates appears to affect their potency

Global: the level and effectiveness of rates



Source: Oxford Economics/Haver Analytics

This loss of interest rate potency may reflect a variety of factors. Banks' marginal financing has been affected by regulation that have increased capital and liquidity requirements and may have limited banks' ability or desire to provide additional loans to firms and households.

Second, the level of interest rates is a crucial factor in bank profitability (lower rates mean lower returns on loans while banks' funding is much less rate sensitive). In a low interest rate environment, lower bank profitability can limit the ability of banks to generate capital to absorb future losses, and thus their willingness to extend loans - particularly for weakly capitalised banking sectors.

NEW MONETARY POLICY TOOLS HAVE HELPED, BUT THERE ARE LIMITS AS TO HOW FAR THEY CAN BE **SCALED UP**

Policymakers have overcome this lack of conventional policy space during the crisis using two broad approaches. First central banks have taken broader action to try to lower longer term interest rates. A key element of this strategy has been via bond purchases under various quantitative easing programmes. Central bankers have also sought to push down long-term interest rates by providing greater forward guidance on the timing and speed of future monetary policy normalisation. These policies have effectively helped to flatten the yield curve.

More controversially, the Bank of Japan and some European central banks have also pushed the yield curve lower by charging banks to hold deposits at the central bank, which has helped to push short-term market interest rates (as well as some longer-term bond yields) below zero.

Finally, in a bid to enhance the effects of conventional and unconventional policy support, some central banks have adopted targeted actions designed to ensure that the transmission of monetary policy to the real economy via the banking system functions efficiently. In the eurozone in particular, the ECB has provided unlimited liquidity to the banking system, while a number of central banks have experimented with funding for lending schemes in which banks are provided with cheap loans under the condition that they increase lending to firms.

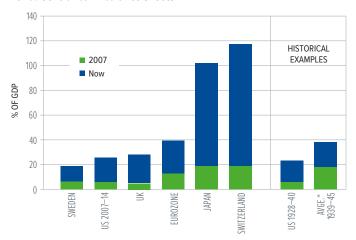
While these unconventional policy measures have been used with a degree of success, both GDP growth and inflation has typically been persistently weaker than central banks have anticipated. This suggests that unconventional policy may not have been a perfect substitute for conventional interest rate cuts. What's more, there remain reasons to believe that the economic boost provided by these unconventional policy measures will be subject to diminishing returns in the future, while the negative side effects will continue to mount, potentially at an accelerating pace.

QUANTITATIVE EASING

In recent months, major central banks have shown that they have ample scope to adopt the previous go-to unconventional policy measure - QE - aggressively now and in the future. Work by Gagnon imply asset purchases of about 20% of GDP would be needed to match the past 'typical' 350bps policy easing by central banks. As recent events have shown, central banks have proven themselves willing to be flexible in both the scope of purchases and how they are conducted in order to continue to expand their balance sheets (Figure 5).

FIGURE 5: BoJ and SNB show balance sheet expansion can go much further

World: Central bank balance sheets



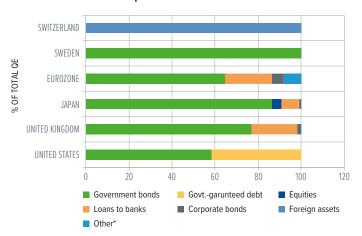
Source: Oxford Economics/Haver Analytics/St.Louis Fed/Ferguson et al.

Nonetheless, there are three broad reasons why substantial further government bond purchases may not be feasible or effective.

First, concerns already exist about central banks hoovering up long-dated safe assets and creating safe asset shortages. Buying even more government bonds would only exacerbate these problems (Figure 6).

FIGURE 6: Central banks hold a big share of domestic government bonds

World: Central bank asset purchases



Source: Oxford Economics/Haver Analytics

I Second, bond yields in many economies are so low that it is debatable whether lowering them further will encourage greater borrowing in the wider economy.

^{*} Major central banks of WWII participants

^{*} Inc. covered bonds in eurozone

Third, QE also works by also compressing risk spreads and raising asset prices. But risk spreads are already low and asset valuations high in the advanced economies. Wealth effects may thus be smaller than in the past via this channel. High valuations may also reduce the marginal propensity to consume from any wealth gains.

A lack of government bonds can be overcome by purchasing other assets such as:

- Corporate bonds or packages of loans
- Equities
- Foreign currency/asset purchases

These forms of QE could provide the economy with a boost via a combination of positive wealth effects and greater liquidity to financial markets, firms and households. In theory they could also boost to competitiveness via a weaker exchange rate; however, this transmission channel is currently not working given the synchronized nature of this crisis. More generally, these assets' values have already been boosted indirectly by prior government bond purchases and as with further government bond purchases, the spill-overs to the real economy may be small.

Buying such assets may also create other problems for central banks. The purchase of equities and corporate bonds opens questions about corporate governance and efficient capital allocation. In the extreme, encouraging banks to issue loans to package up and sell straight on to the central banks could sow the seeds of a crisis similar to the US mortgage-backed-security crisis that was the catalyst for the global financial crisis. Exit from such policies might be politically difficult too.

In an environment, such as the current one, where there are indiscriminate asset price sell offs, QE is likely to remain an effective policy for placing a floor under asset prices. However, in a world where asset prices are high, bond yields are low and spreads are compressed, the positive effects of QE on the real economy may be limited.

NEGATIVE POLICY RATES

The most controversial post-crisis policy innovation has been the use of negative policy rates. Until a few years ago, negative nominal interest rates were considered impossible. A key reason for this is that depositors can effectively side-step negative interest rates by switching to cash, so the thinking was that negative rates would simply be avoided by savers. In reality, lending and deposit rates can fall below zero. It is not costless to store large amounts of money safely and some transactions are either not practical with cash (e.g online shopping) or are time consuming and inconvenient.

Prior to the use of negative rates, there were also concerns that small moves in interest rates from just above to just below zero could trigger large shifts in behaviour. If firms and households think about money and wealth in nominal terms (so-called money illusion), negative rates may have unexpected and damaging consequences. For example, rather than encouraging

households to bring forward spending, negative rates may lead them to save more to preserve their wealth.

The experience of recent years in Japan and Europe suggests that by and large modestly negative deposit rates are tolerated and have not caused drastic changes in behaviour. For that reason, we think that in the short term, central banks are unlikely to go beyond levels of negative rates previously experienced (around -1% to -2%) and therefore in the short term we believe that this is the effective lower bound for policy rates. If this is the case, then from here, many central banks such as the ECB and SNB would be unable to implement the scale of interest rate cuts seen in prior loosening cycles if a major policy loosening was warranted. In the longer term, as central banks are able to study the effects further and governments are able to pass the required legislation, we think that there are no insurmountable reason rates could not be pushed further into negative territory.

Negative side effects from negative rates may also be sensitive to the length of time that policy rates remain below zero. The limited adverse consequences so far may partly be because there has been a general expectation that negative rates would prove short lived. If firms, households and banks start to anticipate sustained and/or deeply negative rates, their adverse effects may grow.

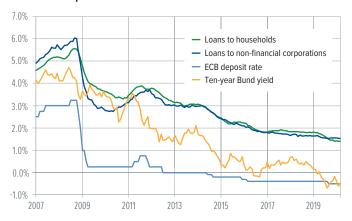
One issue with negative deposit rates is that banks have been reluctant to pass on the negative deposit rate 'tax' imposed on them by central banks to their customers, for fear of losing their deposit base. While large corporate deposit accounts have often had negative rates imposed on them, rates on household deposit accounts have generally been held at zero. This may have limited some of the feared adverse spill-overs, but it has undermined one channel via which negative interest rates might have encouraged increased spending.

This rigidity has also lowered banks' net interest margins, reducing banks profitability at a time when banks have faced other considerable hits to their profitability. This has been an important reason for negative rates getting sustained criticism in the media. However, net interest rate margins are one of many channels via which monetary policy affects banks' profits. Studies which have examined the effect of negative rates on 5,100 banks in 27 economies found that when factoring all the various channels, negative interest rates have not hit banks' profitability, even though the sample included potentially more vulnerable smaller banks with a heavy reliance on deposit funding.

This conclusion is supported by other empirical evidence. True, in Switzerland, negative policy rates were accompanied by an increase in mortgage rates, with larger increases generally associated with banks most exposed to the effects of negative rates. But the experience of the eurozone and Sweden is more positive. Eurozone bank lending rates to households and non-financial corporations have fallen more sharply than the ECB deposit rate since the deposit rate fell below zero. This is consistent with other analysis which shows no material change in interest rate pass-through after the introduction of negative rates in the eurozone (Figure 7). Similarly, evidence from Sweden suggests that there has been full pass-through to mortgage lending rates although banks were slow to pass on later rate cuts.

FIGURE 7: Eurozone lending rates fell as deposit rates moved below zero

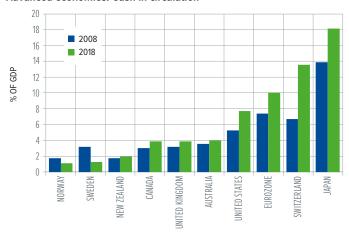
Eurozone: Composite interest rate on new loans



Source: Oxford Economics/Haver Analytics

FIGURE 8: Cash in circulation continues to rise

Advanced economies: Cash in circulation



Source: Oxford Economics/Haver Analytics

The use of modestly negative deposit rates has also raised the possibility of imposing deeply negative rates on the economy to encourage households and firms to bring forward spending and investment.

As things stand the key constraint on adopting deeply negative interest rates is the ability to convert electronic money which would be subject to a negative interest rates into cash, which earns a yield of zero in nominal terms. There are at least three broad mechanisms via which this constraint could be resolved:

- I Eliminating cash:
- I Creating a dual currency system such that when the interest rate on electronic money was negative, the electronic currency value of cash would decrease over time;
- I Charging a fee to convert electronic currency into cash.

All three methods would effectively ensure that a negative deposit rate on electronic money could not be avoided by holding cash. This would make it easier for banks to pass on negative deposit rates to their own depositors, leading to the effects of negative rates to spread more widely around the economy and lessening the profit squeeze on banks from the drop in net interest margins. But, the above options are likely to be deeply unpopular with the public, suggesting that governments are likely to be reluctant to pass the required legislation. Cash is still widely used and the amount in circulation has not fallen this decade in most economies, despite the rise in cashless payments (Figure 8).

On balance, we think that deeply negative interest rates are an unlikely development especially in the short term, until the impediments to banks passing on negative deposit rates to their customers are removed. This makes deeply negative rates more of a medium term possibility.

FUNDING FOR LENDING

The above policy actions have all been designed to push down interest rates at the short or long end of the curve. But some policy measures during the current crisis have been designed to effectively ensure that the transmission mechanism remains well lubricated and that lower policy rates are passed on to the real economy and thus encourage less saving and more borrowing.

One such scheme has been funding for lending in which cheap loans are provided to banks that commit to increase lending to firms and households. However, we are skeptical, as has so far proven the case, that this type of programme could be scaled up dramatically to replace other policy levers currently being used by central banks.

The first issue is that this measure focuses solely on enhancing one transmission mechanism – new lending. As a result, it has less bang for its buck than a policy shift that works via a range of channels. For example, while lowering the policy rate is likely to lower borrowing cost for new and existing borrowers whose debts pay a floating interest rate, funding for lending will do nothing to reduce debt servicing costs on outstanding debts until they are refinanced. And to the extent that the outcome of the measure is for borrowers to refinance their existing debt at lower rates, the result would not be new lending.

Second, funding for lending schemes may not be that effective at boosting lending. If cheap financing is scarce and stopping banks from lending, providing cheap loans may have some benefit. Conversely, if it's a lack of demand for bank lending that is the hurdle, funding for lending schemes are unlikely to do much to boost aggregate lending. In addition, while attractive central bank loans may in theory encourage banks to lend more, in practice the scheme may just result in banks using the funds to make pre-planned lending decisions more profitable. The policy may turn out to be merely a subsidy to the banking system.

Finally, banks cannot be forced to use the scheme – if it is not in their best interests to take up the loans, the funding for lending facility will remain unused. By contrast other policy measures such as QE provide the central bank with much greater control over how they expand their balance sheet.

LIMITS TO MONETARY POLICY

On the whole, unconventional policy measures aim to support the real economy by reducing short and long term interest rates and raising asset prices. While we have already identified why the benefits of lower rates will diminish, the experience of the past decade shows the costs associated with lowering rates are also magnified when interest rates are already at very low levels. Similarly, protractedly low but stable interest rates may also prove troublesome for the wider economy.

As a result, concerns have grown that interest rates in some economies may be close to or perhaps even below the so-called reversal rate of interest – the point when the gains from lower interest rates are less than the costs.

In addition to the potential negative side effects of low rates on banks set out above, low interest rates and bond yields are problematic for pension and insurance funds too. For instance, pension funds and life insurance companies tied into providing guaranteed high returns may face solvency issues.

More generally, rather than encouraging firms and households to bring forward spending, low or negative rates may encourage them to save more to fund pension shortfalls and build up a big enough retirement pot. In essence, persistently low or negative rates may actually incentivize more saving among households.

Conversely, low rates may encourage a search for yield and more risk taking by investors, adding to the risk of future financial instability. Another problem is that the decline in low interest rates has been associated with a rise in the share of persistently unprofitable 'zombie' firms. A failure to cleanse the economy of zombies may have led to an inefficient allocation of resources within the economy, lowering productivity and inflation. On balance though, we are sceptical that zombie firms are the key contributor to the low growth, low inflation environment that advanced economies currently face. In addition, the zombie share could be reduced without tightening monetary policy — e.g by forcing banks to stop the ever-greening of loans to insolvent firms.

A related issue is that in addition to keeping weak companies afloat, low rates may encourage other firms to invest in low return projects leading to an inefficient use of capital. That said, the fact that one widely blamed factor for low productivity growth of the past decade has been weak investment, suggests that this has perhaps not been a major issue.

The reversal interest rate cannot be measured with any precision and on balance we doubt that the reversal rate has yet been breached. Nonetheless, with the costs of low interest rates becoming clearer and the growing perception that ultra low rates have been ineffective growing, central banks with near zero or negative policy rates may be nervous about implementing an aggressive policy loosening. This does not mean that they will not. But it may make the bar for making policy more accommodative higher and increases the likelihood of central banks acting cautiously in response to adverse shocks.

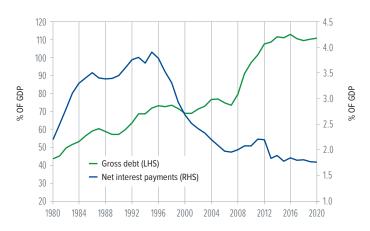
FISCAL POLICY TO COME IN FROM THE COLD

Against this backdrop, it is perhaps no surprise that authorities have looked more swiftly during this downturn to fiscal policy to do more of the heavy lifting in terms of demand management. Within months of the coronavirus spread outside of China, authorities have announced plans for stimulus measures in 2020 that now surpass those set out in 2009. There are several reasons why making greater use of fiscal policy makes sense at this juncture.

First, governments have more fiscal space than is commonly acknowledged and traditional rules of thumb, such as the public debt to GDP ratio, imply. The collapse in bond yields has lowered government's debt servicing costs substantially (Figure 9) and interest payments are likely to remain relatively low given that bond yields are unlikely to rise to their pre-crisis norms for the foreseeable future. In addition, governments' debt servicing costs have fallen further in the shorter term. Currently, governments have the capacity to lower their average borrowing costs and extend the maturity of the debt as existing bonds mature due to the low level of longer-term government bond yields.

FIGURE 9: Government's debt servicing costs point to more fiscal room

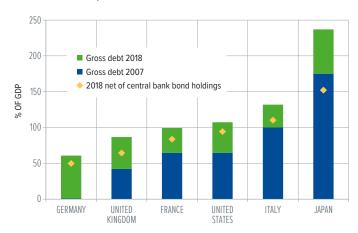
OECD: Debt and interest payments



Source: Oxford Economics/Haver Analytics/OECD

FIGURE 10: Debt levels are lower when adjusted for central banks' QE purchases

G7: Public debt adjusted for QE



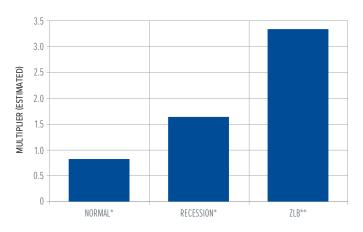
Source: Oxford Economics/Haver Analytics

In addition, measures of the sustainability of the public finance normally treat debt bought by the central bank as part of their QE programmes as identical to the remaining stock of debt. In reality though, interest paid to the central bank is subsequently paid back to the government, so the debt held as part of the QE programme has at least temporarily been 'retired'. If central bank held government debt is excluded, public debt to GDP ratios are substantially lower (Figure 10).

Second, while monetary policy becomes less effective as interest rates reach the lower bound, fiscal policy may become more potent. A range of studies suggests the fiscal spending multiplier (the rise in GDP for a given rise in government spending) may be double its normal size in recessions and perhaps four times as high with rates at the zero lower bound (Figure 11).

FIGURE 11: Fiscal loosening may provide a bigger boost when rates are low

Spending multipliers across the business cycle



Source: Oxford Economics/Batini et al. (2014)

FIGURE 12: Government investment is weak

Advanced economies: Government investment



Source: Oxford Economics/Haver Analytics

Third, while loose monetary policy is unlikely to be able to raise advanced economy and global potential GDP growth, increased government investment in infrastructure has the capacity to boost potential supply as well as demand. The current low ratio of government investment to GDP strengthens the case for an investment-driven fiscal boost. Government investment in the advanced economies has fallen from over 5% of GDP in the early 1990s to just 3.5% or so in 2019 (Figure 12). The fall may be exaggerated by the effects on public investment from privatisation, private finance initiatives and contracting out the provision of services to the private sector. Nonetheless, there is evidence of persistent and widespread underinvestment in infrastructure in the advanced economies, implying that a burst of government investment would be beneficial.

True, there is a risk that higher government borrowing could 'crowd out' private borrowing. But given the global savings glut has chased bond yields to record lows this is not currently a concern. Studies of previous major pandemics have shown that the lingering impact on private sector confidence and associated rises in private sector precautionary saving have only further added to the downward pressure on real interest rates. In that sense, the need for higher government bond issuance by advanced economy governments would help alleviate the shortage of global safe assets.

Finally, as many, including Rachel and Summers, have argued, more expansionary fiscal policy may raise the neutral interest rate and thus increase the available monetary policy space and help to make the limited firepower central banks have more effective.

^{*} average of 7 studies for advanced economies, ** average of 3 studies

WHAT KIND OF FISCAL POLICY LOOSENING WOULD WORK BEST?

The best form of fiscal loosening largely depends on the key aim of the policy. In order to prevent or lessen a recession, spending increases are typically more effective than tax cuts since the latter may be saved in times of uncertainty. While investment tends to have larger multipliers in the long-term, government spending typically has more positive effects in the short term, implying that the latter may be better if an economy is close to or has already fallen into recession.

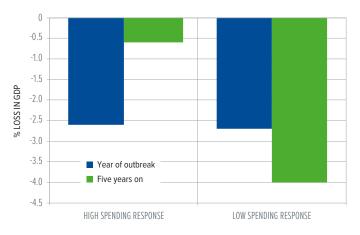
The depth and sudden nature of the current recession clearly calls for a combination of policies:

- Tax cuts are needed to help with the initial hit to household incomes and firms' revenues. While they are quick to enter the economy, they are most likely to be saved rather than spent.
- I Spending increases in the form of better welfare provision and targeted to relief to certain sectors of the economy are likely to be less timely but probably more effective.
- Government led investment will be needed to raise output back to a pre-pandemic trajectory and help to bolster private sector confidence after such a major shock to the economy.

Evidence from past pandemics suggests that fiscal policy is very important to the eventual strength of the recovery (Figure 13). There is a clear divide in long-term economic outcomes between those where governments spent aggressively early on to counter them and those where they did not. In the former case, output losses were contained to under 1% after five years, in the latter, long-term output losses were around 4%.

FIGURE 13: Government response is crucial to medium term growth

Effect of policy responses to epidemics/pandemics



Source: Ma, Rogers, Zhou (2020)

One issue with implementing a major investment driven fiscal splurge is that it is easier said than done. True, experience during the global financial crisis and announcements in the wake of the pandemic suggest that government investment can be increased sharply in the short-term. For the advanced economies as a whole, average annual growth surged in 2008 and 2009, peaking at 5.2% in the latter year. The UK, Korea, Australia and Ireland recorded annual government investment growth of around 20% or more.

But these short-term spurts were followed by falling investment. Some of the falls may reflect governments choosing to cut spending. Another contributory factor may have been that bringing forward "shovel-ready" projects, speeding up routine improvements and accelerating planned project completions dried up the pipeline of investment, necessitating a fall back in investment thereafter. Across the advanced economies,

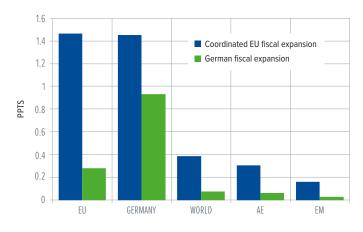
the sectors that registered the sharpest rises in government investment during the GFC typically registered the largest falls subsequently, suggesting the latter contributed to the slowdown in public investment.

Indeed, while cost overruns of major public projects are common place and well publicized the evidence suggests that governments are actually surprisingly bad at meeting their capital spending plans. An IFS study looking at UK government capital spending between 1992 and 2015 found that most years the government undershot its target, even during periods in which capital budgets were shrinking. Over recent years, the German government also has consistently struggled to spend the money allocated to capital and infrastructure spending, reflecting construction bottlenecks, including a lack of engineers and planners.

The effectiveness of fiscal loosening will also depend upon the degree to which it is coordinated across economies. The more open an economy the higher share of the boost that is likely to leak out of the economy to the benefit of trade partners, limiting the domestic benefit of policy loosening. For instance, using the Oxford Economics Global Economic Model, we find that a 0.5% increase in German government spending raises German GDP by less than 0.5% - the fiscal multiplier is less than one. By contrast, a coordinated EU wide increase in government spending of 0.5% raises German GDP by 0.7% (Figure 14).

FIGURE 14: Fiscal multipliers rise when action is coordinated

Fiscal multipliers and spillovers



Source: Oxford Economics/Haver Analytics

The upshot is that coordinated fiscal policy action at this juncture across the major world economies would be optimal. Nonetheless, the likelihood of such an occurrence is probably reasonably slim. The most resilient economies may prefer not to loosen fiscal policy, or at least not to the same degree as the weaker economies. Similarly, those with less fiscal space might hope to free ride.

True, during the global financial crisis there was a coordinated fiscal policy loosening. But this mainly reflected the fact that downturn was so severe and widespread that most major governments felt that they had to loosen fiscal policy. Were the global economy to see another broad-based easing of fiscal policy over the next couple of years, the chances are that this would be a knee-jerk response to a nasty global slump rather than a cross-economy effort to lift potential growth.

ARE EMERGING MARKETS AN ANSWER TO THE SEARCH FOR YIELD?

A natural question for longer term investors, given the structural headwinds affecting advanced economies, is whether emerging markets might provide a high growth, high return alternative for investors. Even in the current crisis emerging markets have proven more resilient to the spread of coronavirus, and to a certain extent the initial impact on the economy. This remains a complex question but there are three key factors that are worth noting:

- Although there are some signs that the economic cycles among emerging markets have become more independent of emerging markets, there is no escaping the reality that advanced economies play a major part of the EM economic and financial cycle;
- Many of the structural headwinds that currently affect advanced economies are set to take hold in emerging markets over the coming decade; and
- Differentiation remains very high between emerging markets with some regions failing to show any evidence of catch up to advanced economies while others appear set to make significant gains over the decade.

EMS ARE MORE RESILIENT NOW THAN IN THE PAST

The share of intra-EM exports has risen steadily and in 2012 China became a bigger destination for EM exports than the US. The share of AE-bound exports from EMs has fallen from 69% at the beginning of 1980s to 56% today. The nineties were a difficult decade for EM-bound exports, largely due to the dissolution of the USSR and the eastern bloc. Although these kinds of reversals are significant – the last one coincided with the 2015 slowdown in China – the long-term trend of more intra-EM trade is probably here to stay. Interestingly, the US-China trade war has reshuffled some of the EM foreign trade but hasn't altered the larger trends in the EM/AE split.

EMs have become better at dealing with a stronger dollar and, in the last decade the effects of real dollar appreciation have dragged considerably less on EM growth. This is largely due to the composition of debt, which is shifting more toward local currency denomination thus relieving the high dollarization and related currency risks. In recent years investors have tolerated the currency risk because currency volatility has fallen substantially as EM central banks have become much more credible inflation targetters. In addition, generally higher risk appetite due to loose policy in advanced economies has promoted the increased risk appetite among investors. More prudent monetary and fiscal policy, better inflation expectations anchoring, and subsequently lower FX volatility are also playing a role.

Overall our analysis suggests that the rising share of EM-bound exports has translated into higher contributions to growth. In parallel, the contribution of AE imports (and underlying growth trends) is decreasing. Commodity prices (based on the non-fuel commodity price index built by the IMF) have lost prominence in the last decade. Dollar strengthening still drags on EM growth but less so than in the 2010s, when the high real trade-weighted dollar exerted a strong downward pull.

STABLE, BUT LOWER GROWTH

Alongside rising resilience, EM growth has become considerably less volatile, especially when compared to the 1980s and 1990s. The growth rate has also slowed down. Growth among the top EM percentile has fallen the most, largely due to the Chinese slowdown, but median growth has also shifted lower in the last decade (Figure 15). This is largely a consequence of slowing labour productivity observed in the last two decades (Figure 16).

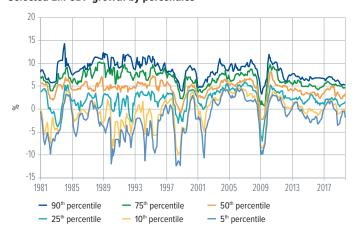
Finally, we have examined debt, both foreign and domestic, to gauge its significance for growth and its sustainability. Whereas EM debt as a share of GDP has increased steadily since the GFC (while AEs have been deleveraging), a shift in composition has also been underway with domestic sources, especially domestic banks, taking a more prominent role. This boosts

resilience to foreign shocks and guards against the vicious cycle of currency depreciation and rising inflation that many EMs have struggled with in the past. High debt levels in some EMs remain a risk though.

In the long run, demographic trends in EMs and their ability to maintain high levels of labour productivity growth will determine EM growth dynamics.

FIGURE 15: Growth is less volatile and slower

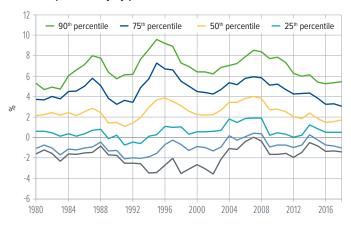
Selected EM GDP growth by percentiles



Source: Oxford Economics/Haver Analytics

FIGURE 16: Fastest EM productivity growth is slowing but median is flat

EM labour productivity by percentiles



Source: Oxford Economics/Haver Analytics

NOT ALL EMERGING MARKETS ARE EQUAL

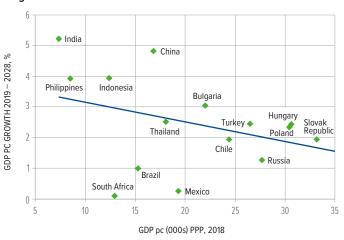
It is tempting to treat emerging markets as a uniform asset class but as the differing productivity experiences imply, the outcomes are likely to be very different. For example, we expect very limited catch up growth from Latin America over the decade while Asia is set to continue along its development trajectory.

Latin America, may be set to disappoint more than is widely expected due to a range of factors including the debt overhang, poor demographics, insufficient savings and long-term austerity which are set to undermine growth in the long run. Absent a surprising and unprecedented surge in productivity, some Latin American countries may get old before they get rich, leaving them stuck in the "middle-income trap".

In contrast, Asian economies score well on the factors that explain sustained long run growth. In particular, domestic saving is sufficient to finance investment on a sustainable basis and total factor productivity can grow solidly due to a substantial focus on innovation and R&D (figure 17).

FIGURE 17: Asian economies are set to grow quickly over the next decade

EM growth forecast



Source: Oxford Economics/Haver Analytics

In that context EM fixed income could present a useful alternative asset class for longer term investors looking to diversify away from advanced markets. Whether that is on a hard or local currency basis will depend on risk preferences and, crucially, on the relative stage of the monetary policy cycle locally and the US. Emerging market inflation has largely been tamed in recent years with the combined effect of broader global disinflationary forces and relatively robust inflation targeting regimes proving to be very powerful. In addition, the ongoing productivity slowdown in emerging markets and weakening demographic profile mean that interest rates should continue on a broad downward trend over the next decade.

THE OUTLOOK FOR THE ECONOMY AND MARKETS

The immediate outlook for the economy is dire. 2020 will see falls in output across almost all major advanced economies and many emerging markets as the impact of lockdowns dominate any impact from monetary and fiscal policy stimulus. We expect global GDP to fall by more than 3% in 2020 making it by far the worst year for global growth since the Great Depression. Realistically, given the lack of monetary policy room and the lag by which both operate, there is little that policy stimulus can do to offset the immediate downturn.

Instead, the degree to which policymakers undertake more concerted policy stimulus or not is likely to determine the path of the medium-term recovery. On this point there remains a great deal of uncertainty and as a result a very wide range of medium-term outcomes. To illustrate this uncertainty we spell out the medium term

Under our baseline scenario, what we deem to be the most likely, lock downs persist during Q2 2020 and the economy is gradually reopened during Q3 as testing and tracing technologies allow a gradual resumption of day to day activities. Governments and central banks make good on current stimulus plans which produces a strong bounce back in activity at the end of the year and in early 2021. Nevertheless, as in the wake of 2008/9, large deficits and high levels of government debt force fiscal authorities to shift from a stimulative stance to a more neutral setting on fiscal policy and fiscal aggregates begin to gradually improve as a result. However, in the aftermath of such a major shock to activity (for the second time in just over a decade) private sector saving remains high and the dearth of investment, both public and private, weighs on activity in the medium term. Although supply chain pressures may mean that there are some temporary pockets of inflationary pressure, the overriding influence on inflation is demand and therefore inflation is set to remain weak. Central banks will maintain inflation's weakly pro-cyclical behaviour.

As a result, the economy does not manage to catch up to the pre-pandemic trend. Despite higher debt levels, the glut of global

savings grows, keeping real interest rates remain low for an extended period.

Medical advancements remain a key uncertainty for the economy in the near term and a plausible upside revolves around the quicker than expected advancement of therapeutics, testing for instances of COVID-19 and antibodies and a vaccine. Should faster progress be made in any or all of these areas it would allow the economy to re-open more quickly, limiting the economic scars from the downturn in terms of lost human and productive capital. In addition, if governments decide to aim for a growth trajectory closer to the pre-pandemic baseline and continue to invest beyond 2021, this could foster private sector confidence and help to limit the rise in precautionary saving. The result would be a more limited downturn and a faster pace of medium-term growth. However, the extent of a plausible upside over the baseline remains relatively limited, at least compared with downside risks, as the plausible reaction of policy makers is muted due to the perception of constrained fiscal policy space. Even in this scenario, by historical standards, real interests remain low, although still higher than under the baseline scenario. In effect the rise in private sector savings even in the upside scenario still dominates any rise in the issuance by high quality advanced economies.

To the downside the risks are clearly greater. As well as the nearterm risk of a deeper downturn due to longer lockdowns and/ or a second wave of the virus, such is the depth of the downturn that a full-blown financial crisis and reduction of credit supply to the economy over many years is a real possibility. This is the basis of our downside scenario. As well as an even steeper near term recession – world GDP falls by more than 8% - the associated hysteresis effects and reduction in credit supply to the economy mean that the rate of growth after the crisis is lower than the pre-pandemic baseline. Governments, worried about the deteriorating in public finances attempt to implement austerity measures, further slowing the recovery and limiting any improvement in the public finances. As a consequence, the level of GDP continues to diverge from the pre-pandemic baseline so that the level loss of GDP continues to grow even in the medium term - similar to the recovery from 2008/9. This implies not only very low real interest rates but also a weaker medium term trajectory for corporate earnings.