January 2021

Global Macro Insights

Mapping the new abnormal

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Key points

- As vaccine roll-outs ramp up with varying speed (especially across the developed world), expectations are rising of a return to economic and social normality. As the post-pandemic macroeconomic landscape unfolds, it is likely to be shaped by some long-lasting abnormalities.

- We believe that maintaining debt sustainability in the context of extremely high debt burdens is becoming an important part of the objective function for key developed market central banks.

- We argue that quantitative easing (QE) programs being conducted by central banks in advanced economies are a reflection of growing fiscal dominance, which was not the case during and after the Global Financial Crisis, when the tool of QE was first introduced. In addition, among key central banks, the underlying aims of respective QE programs are also somewhat different.

- If we are correct in our assessment that the focus of monetary policy is changing, then maintaining the structural reality of negative real rates is becoming a policy goal, even in the face of any cyclical upswing in growth and inflation resulting from re-opening of economies and further fiscal support (especially in the US).

- As we move through 2021 and beyond, the risk of a 'taper-tantrum' type shock is among our greatest concerns, which would require central banks (especially the US Federal Reserve) to clarify the paradigm shift driving monetary policy making.

- With monetary policy already driving nominal interest rates towards the effective lower bound in a number of advanced economies, coupled with a regime shift in monetary policy thinking, strategic asset allocation frameworks which guide asset allocation over the long term need a significant re-think. Indeed, as new structural macroeconomic realities embed themselves over the coming years, the traditional approach to achieving diversification through combining equities and bonds is due a reassessment.

The age of quantum macro

It’s no secret that the practice of macroeconomics (unlike physics) has always been more strongly driven by prevalent schools of thought (directly or indirectly shaped by prevailing social and economic realities) than the pure pull of irrefutable evidence. Indeed, the concept of objective evidence is a luxury when it comes to the practice of global macroeconomics, both from a policy making and asset market research perspective. The past year, where governments, policymakers and market participants have processed the extraordinary events unfolding from the Covid-19 pandemic, is a good example of this observation, where we have seen expectations rather than objective realities playing a bigger role in the development of both policy and our understanding of its implications. Most importantly for investors, this has translated to an environment of improving sentiment in recent months, where global asset markets continue to ‘look through’ a number of risks as the pandemic develops.

Of course, explaining any evolving phenomena involves a balance between theoretical expectations and empirical evidence. We would take the field of physics as an example here. Despite being more strongly rooted in the underlying principle that any valid theory must be based on irrefutable evidence, physics faces sharp ‘split points’ when it comes to explaining all known natural phenomena. In the theory of relativity, what happens at a sub-atomic level (where sub-atomic entities can behave both like particles and waves) looks ‘abnormal’, and can be explained by a different theory with a different set of assumptions and underpinnings. Indeed, a grand unified theory remains the elusive goal of modern physicists looking to understand and predict the evolution of all known phenomena using a single explanation. If even ‘hard sciences’ such as physics can contain independent and yet credible theories to explain a given phenomenon, then a social science like macroeconomics is even more subject to frequent and important paradigm shifts as prevailing social, political and economic realities change.

As practitioners and researchers of global macroeconomics, we understand that the study of macro policymaking and the forces shaping market dynamics are undergoing important change. In this paper, we set out our thinking that a significant paradigm shift is underway and accelerating, profoundly influencing macro policy frameworks and their impact on economic reality, both in the short and medium term. Not for the first time in recent history, we are seeing significant shifts in the key assumptions which influence the way we must conduct macro analysis in order to assess implications on long-term investment frameworks.

Indeed, as in physics, where the theory of quantum mechanics came to the fore to explain phenomena which were once unexplainable by general theory of relativity, it appears that something akin to ‘quantum macro’ is required to understand a range of emerging ‘abnormal’ realities. We believe that a new approach is needed to map the consequent implications for long-term investment strategies as the dominant macro policymaking frameworks used in advanced economies change, especially when it comes to monetary policy. This piece sets out our assessment of the changing macroeconomic and policy landscape, and the impact we believe it has on building investment strategies to deliver long-term objectives. We look at three key emerging ‘new abnormal realities’ and assess how they should impact the way we design strategic asset allocation into the future.

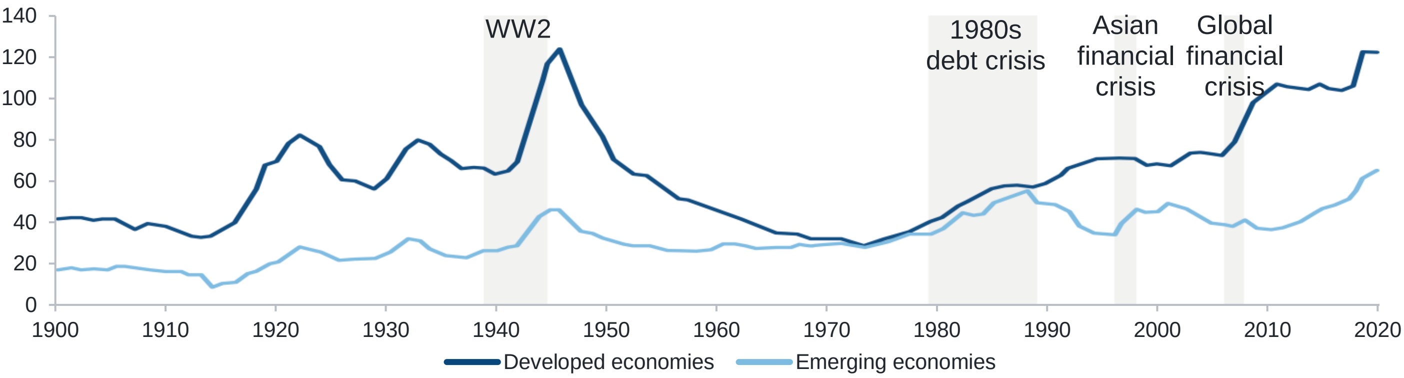
Abnormal world reality #1

Very high debt: the pandemic shock's most important macro legacy

Over the past year, fiscal deficits, debt issuance and debt levels have surged as countries have raced to ease the economic impact of the ongoing pandemic, with little sign of slowing down into 2021. For example, as the Democrats have regained control of the US Senate, albeit with the slimmest of majorities, we expect another dose of debt-financed fiscal stimulus. Our base case is $1tr as part of a $2 to 3tr plan over the next four years, which we expect to happen in the coming weeks after the latest package of around $900bln was passed in December 2020.

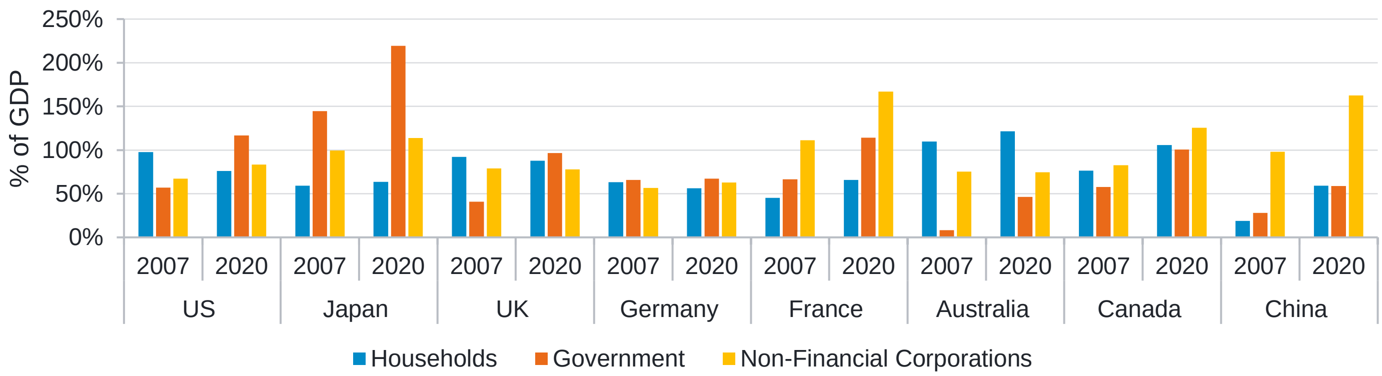
Indeed, the extraordinary nature of the pandemic shock and consequent economic policy actions mean that public debt ratios in developed markets are now surpassing World War Two levels (see Chart 1). More broadly, a similar trend is also visible in emerging markets, especially in China, where non-financial sector debt has increased sharply in 2020 (see Chart 2). Total debt had already been rising in developed and emerging market economies going into 2020, and has seen a dramatic shift up as public balance sheets were deployed to replace lost economic demand and mitigate the impact of insolvency and widespread social and economic pain in the wake of widespread lockdowns. Of course, these lockdowns look set to remain in place well into this year, and are still important in slowing the spread of Covid-19. In this context, the role of central banks cannot be underestimated: both in providing liquidity during the early days of the crisis (in order to short-circuit the fast-spreading financial 'doom loops'), and also continuing to purchase significant additional issuance of public debt (see Chart 3).

Chart 1: gross public debt (% of GDP)



Median debt-to-GDP ratio of country grouping based on G20 advanced and G20 emerging economies
Sources: IMF Historical Debt database, IMF WEO database, September 2020.

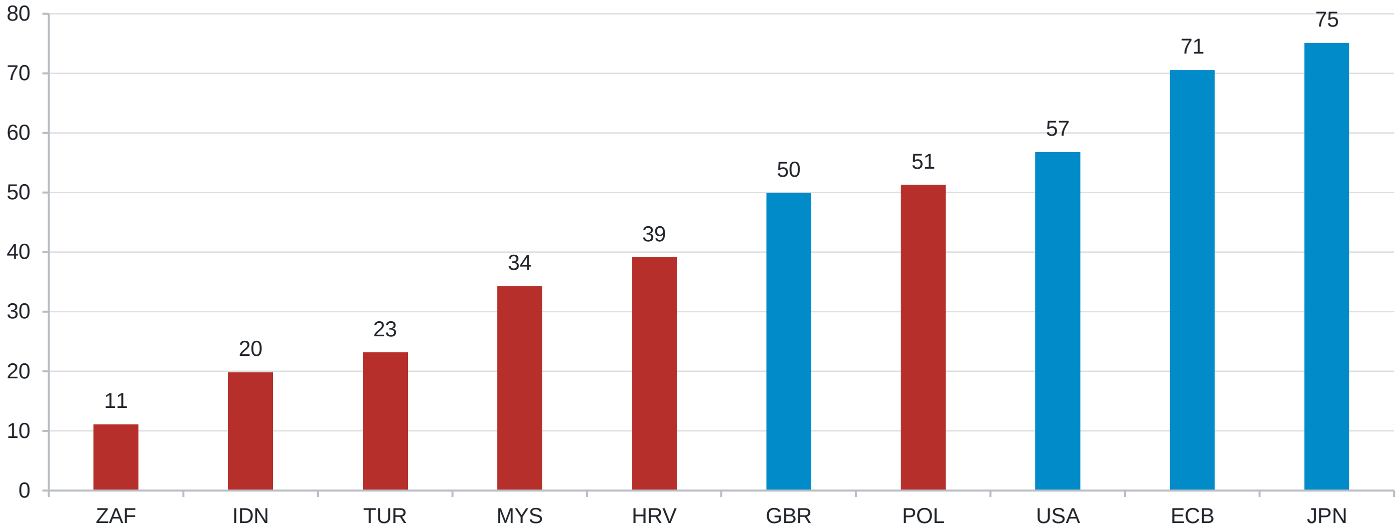
Chart 2: debt across economic sectors



Source: Fidelity International, Refinitiv DataStream, BIS, July 2020.

Chart 3: central bank purchases of government debt

(as a % of central government marketable securities or debt issued since February 2020)



Source: Fidelity International, IMF, October 2020.

Academic literature, such as work done by Reinhart and Rogoff[1] has highlighted a negative relationship between growth and very high debt levels, using empirical evidence from a number of countries over various time periods. This analysis identifies an empirical relationship which holds for both emerging and advanced economies, with different levels of problem thresholds. The jury is still out in terms of the direction of casuality: whether weak growth causes high debt or vice versa, or indeed whether it is the level of debt itself, or its change, that really matters. Of course, one dynamic is clear: higher fiscal deficits, at least in the short term, have the potential to create higher cyclical growth.

Looking ahead, credible and effective vaccines are already getting ramped up in advanced and some key emerging economies, supporting optimism around global recovery. There are still many risks linked to vaccine roll-out, distribution and uptake, but as herd immunity is attained, the question of debt sustainability will become increasingly pertinent. Indeed, related questions on medium-term growth and inflation, as well as the post-pandemic role of fiscal and monetary policy, will only become more important as the abnormal reality of very high debt burdens becomes apparent.

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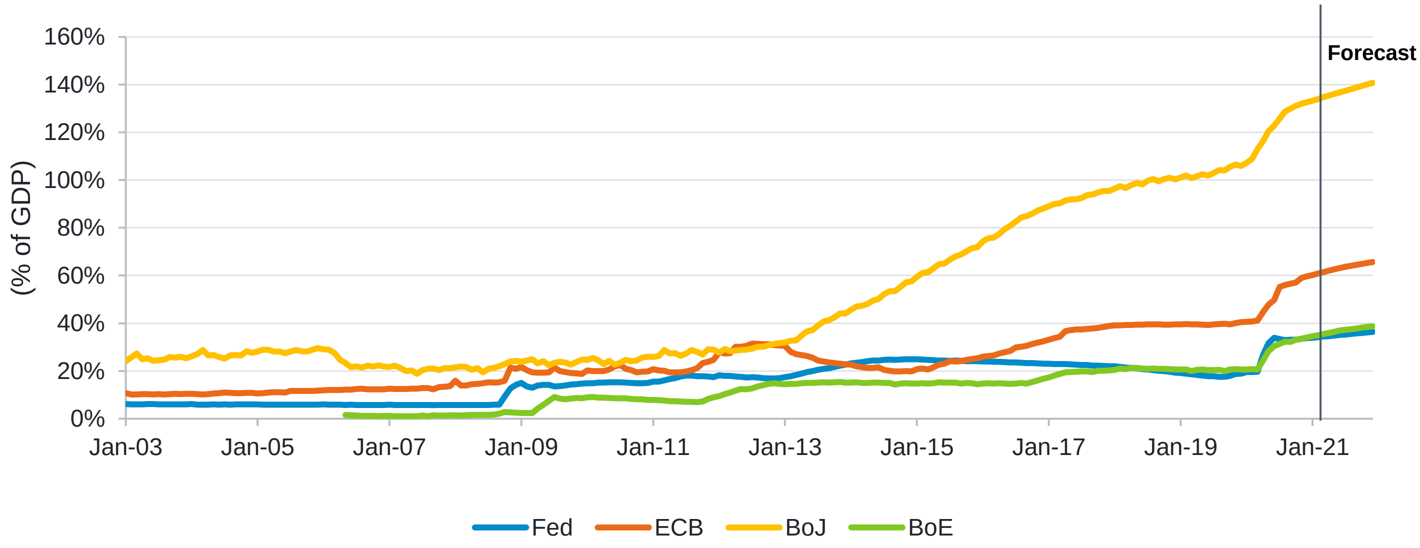
[1] Source: Growth in a Time of Debt, by Carmen M Reinhart and Kenneth S Rogoff. Published in American Economic Review: Papers & Proceedings 100, May 2010. Accessible via Harvard.edu.

Abnormal world reality #2

Central banks now play a critical role in ensuring debt sustainability

As already highlighted, an important way to see how central banks drove the dramatic increase in public debt in 2020 is to look at how strongly central banks have offset the sharp increase in issuance, which has arisen as a consequence of the much larger fiscal deficits. Even looking ahead using current central bank buying plans, more than 50% of net issuance (accounting for the already agreed and expected expansion of fiscal stimulus) is likely to be offset by the Fed in 2021. In the case of Japan and Europe, we are expecting more than 100% of issuance to be offset by central bank buying through 2021. Another way to look at the impact central bank policies have had in ensuring debt sustainability (which are primarily manifesting themselves in the sharp explosion in the size of balance sheets via government bond purchases - see Chart 4), is to look at the dynamics in public sector debt service costs since 2007. For example, in the US, public debt held by the public as a percentage of GDP has increased from 35% in 2007 to 100% in 2020 (see Chart 5), whilst the underlying debt service burden has remained broadly stable (see Chart 6), helped by the sharp fall in yields seen over the period.

Chart 4: central bank balance sheets



Source: Refinitiv DataStream, January 2021.

Chart 5: debt held by the public

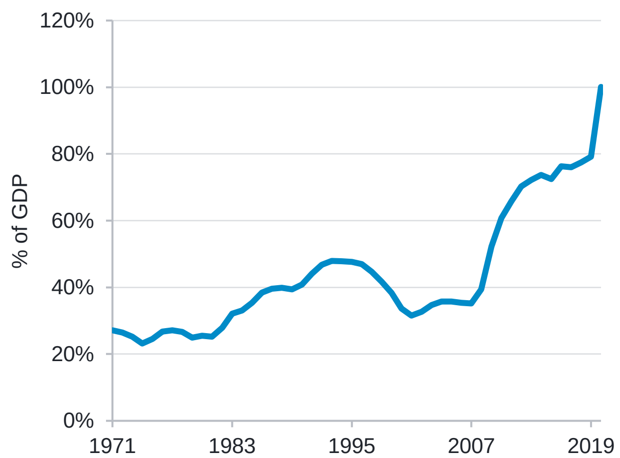
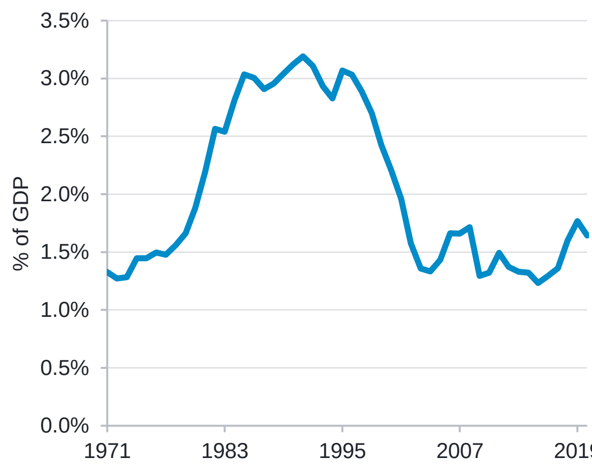


Chart 6: net interest outlays

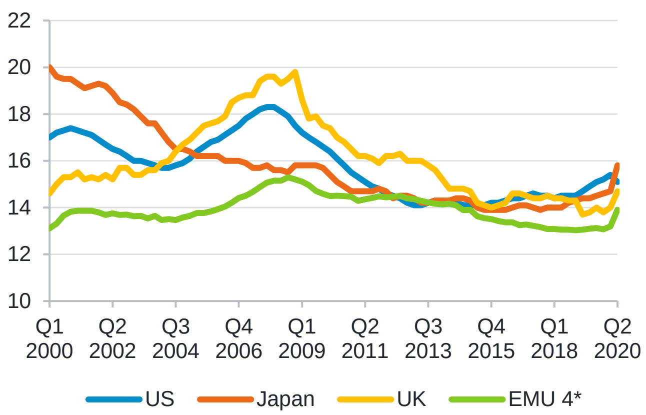


Source: Fidelity International, US Congressional Budget Office, December 2020.

Source: Fidelity International, US Congressional Budget Office, December 2020.

Looking at regional dynamics shows a similar trend, with debt service ratios for non-financial sector debt lagging the dramatic shift up in debt seen in recent years, as yields have fallen across the board (see Chart 7). This is especially apparent in countries where central banks have followed through with planned QE programs.

Chart 7: debt service ratios for the private non-financial sector



*Refers to: Germany, France, Italy, Spain.

Source: Fidelity International, Refinitiv DataStream, BIS, July 2020.

A simple way to see the impact of central bank policies on government bond yields is to dig deeper into the experience of the Great Depression. Specifically, during the 1930-1937 period, when despite the sustained reality of much weaker economic outcomes than today, US 10yr nominal yields bottomed out around a level of just below 2.5% in early 1937, at a time when the unemployment rate was still 12%.

Driven by the Fed, which last Autumn unveiled its new Flexible Average Inflation Targeting (FAIT) framework, we have seen additional communication and indications of policy framework changes coming through by other key central banks, also highlighting a shift away from the narrow inflation targeting frameworks that had dominated central banking since the late-1990s[2]. Specifically, key central banks are starting to commit to looking through cyclical rises in future inflation by requiring a much stronger threshold of evidence when it comes to assessing the sustainability of any future upswing, before any tightening of the extremely accommodative stance takes place.

The corollary of new monetary policy frameworks (which have a markedly weaker link to short-term cyclical developments than had been the case historically) is a sustained period of negative real rates. Despite explicit and frequent references to cyclical variables by monetary policy authorities when justifying the very accommodative policy stance, we believe the reality of negative real rates is also required to ensure that the very heavy debt burdens remain sustainable. Indeed, the current heavy debt burdens and the resultant need to maintain the debt load's sustainability is the main driving force behind why we believe we are seeing a strong break from the post-2008/9 regime[3]. We are now moving into a world of negative real rate targeting by central banks, which we think is likely to become clearer once reflation takes hold.

From a longer-term perspective, it remains unclear how this heavy debt burden will be resolved, with a system-disruptive de-leveraging still a tail risk scenario.

This implicit debt sustainability-driven objective function has already been followed by the ECB since the 2011/12 Eurozone crisis, where the lack of fiscal union meant that monetary policy had to play a direct role in keeping sovereign credit risks in check through ever-expanding QE programs. No doubt, this focus has become even more critical following the pandemic shock as any restraints on fiscal expansion due to differential debt burdens amongst the various member states could have amplified the disruptive forces seen in March and April last year.

Over the longer term, it remains unclear how this heavy debt burden will be resolved, with a system-disruptive de-leveraging still a tail risk scenario. That said, it is clear that central banks are helping to keep the 'death spread' (the difference between nominal growth and nominal interest rates) subdued. This will be important in buying time to generate a structurally positive shift in trend growth, which is needed to grow out of the current heavy burden.

[2] The Fed is an exception here, with a dual mandate of both unemployment and inflation.
[3] Note that the GFC itself heralded a regime break in terms of the conduct of monetary policy in advanced economies.

Abnormal world reality #3

Cyclical inflation risks have risen as fiscal dominance arrives

Another way to explain the focus on maintaining debt sustainability as a critical function variable for central banks is to note the changing nature of QE programs. It is worthwhile comparing the programs which were activated following the pandemic shock with those in 2008/9 when this tool was first unveiled by Ben Bernanke in the US in the midst of the Global Financial Crisis. Ben Bernanke was a student of the Great Depression, and justified the seminal policy shift of introducing QE as short-end rates reached the lower bound by invoking the role that very high positive real rates played in worsening the Depression - a reality which the monetary policy regime of that era had allowed to realise.

Ben Bernanke introduced financial QE to the world of developed market central banking: a program run independently of the fiscal policy stance of governments at the time. However, in recent years, even before the pandemic shock hit, debate had begun to focus on fiscal policy as the ultimate tool which could help address the issues arising from skewing income and wealth inequality.

By showing the limitations of monetary policy in dealing with what was essentially an income-led solvency shock, the nature of the pandemic forced the state to powerfully intervene, to act as the helper of last resort.

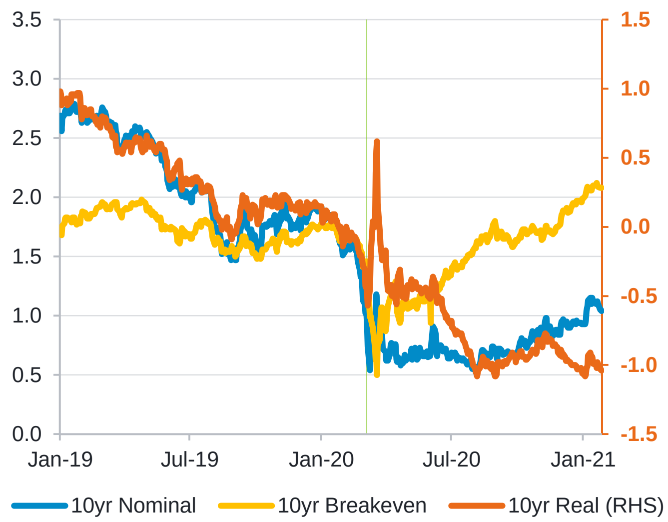
The arrival of fiscal dominance has kicked the risks of inflation higher - a phenomenon already in focus based on recent trends in US government bond market pricing.

As such, the QE programs deployed last year (beyond the ‘liquidity-flushing’ operations during the early days of March and April) have had a different purpose than those of 2008/9, given more explicit and open coordination with the conduct of fiscal policy.

In recent months, central banks in both the US and the Eurozone have been calling on their governments to do more on the fiscal front, whilst clearly promising that they are ready to keep monetary conditions easy for the foreseeable future. Agencies like the International Monetary Fund (IMF) have also called on the governments of advanced economies to take advantage of extremely low interest rates to keep spending high and add government investment to the public sector spending mix.

Our reading of the these shifts in macro policy thinking gives us confidence in our assessment that we are entering a regime of fiscally dominated QE. This shift in regime will mean that, for central banks, maintaining debt sustainability will be as important as reaching ‘substantial progress’ on key macro cyclical variables. This can already be seen in financial markets, with real yields now deeply negative (see Chart 8).

Chart 8: 10yr Treasury yield decomposition



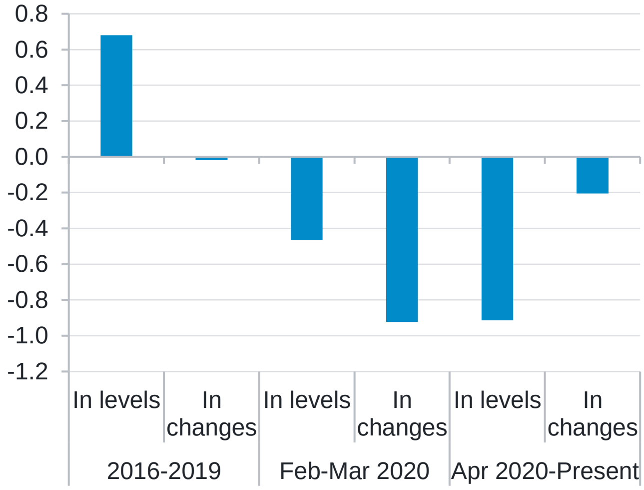
Source: Fidelity International, Refinitiv DataStream, January 2021.

The arrival of fiscal dominance, which we believe will accelerate further following the attainment of unified government under the Democrats in the US, has also kicked the risks of cyclical inflation higher. This is already in focus based on recent trends in US government bond market pricing: we need only look at the reversed correlation between US 10yr inflation breakevens and real rates from positive to negative (see Chart 9). We believe that this indicates a Fed which is now not only pro-cyclical, but also willing to be fiscally dominated.

Whether this arrival of fiscal dominance, led principally by the US, will lead to structurally higher inflation still remains to be seen. Indeed, there are a number of drivers at play here, given wider deflationary forces including demographics, technology, increasing levels of connectivity, and globalisation[4]. However, the cyclical inflation picture can see a strong push-up (as increasingly priced by markets) as government spending helps close output gaps and create supply-side distortions, driven by the non-uniform nature of spending.

Indeed, given the expected rise of cyclical inflation and strong move higher in growth, as we move forward in 2021 the risk of a 'taper tantrum' type policy-induced shock is at the top of our risk list. This is especially true given the vagaries of the new FAIT framework when it comes to defining parameters, which could drive the FOMC to adopt an unanticipated tightening stance.

Chart 9: correlation coefficients between real rates and breakevens



Source: Refinitiv DataStream, January 2021.

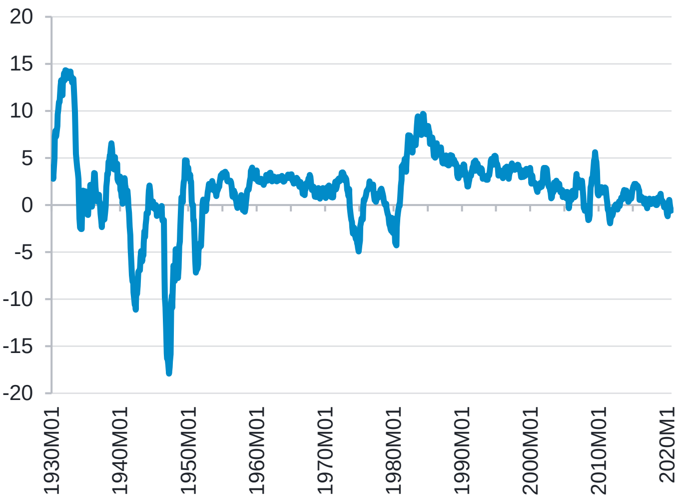
[4] Although it is important to note that we may have reached peak globalisation especially given the intensifying geo-economic conflict between China and the US

Strategic asset allocation in an abnormal world

The flip side of the changing focus of monetary policy (from being an independent policy arm of the state to facilitating fiscal dominance) has important implications for investors, especially as we reach effective lower bounds in key developed economies. Whilst it is still possible for US rates to enter negative territory in the event of an unexpected demand shock, central banks in Europe and Japan are already deep into territories where the risk of hitting the reversal rate boundary is no longer a theoretical possibility.

Long-term historical data suggests that the presence of sustained periods of negative real rates is an incredibly abnormal phenomenon, as illustrated in Chart 10. If our assessment is correct that maintaining debt sustainability has become a very important implicit policy goal (or using the analogy given previously of the new 'quantum macro'), then this reality is likely to be defended by central banks until debt sustainability is regained. In the medium-term, it is debatable whether such a 'printing press' driven defence would be seen as credible.

Chart 10: US 10yr real rate



Source: GFD, September 2020.

From an asset allocation perspective, for investors looking to maximise returns for a given level of volatility, the traditional 60/40 combination of government bonds and equities has seen phenomenal performance in real terms over the last 25 years, with a realised Sharpe ratio of 0.84. Indeed, 2020 turned out to be a great year for this widely-used benchmark in the US, with a 77th percentile[5] performance of 14.7% (albeit less so in risk-adjusted terms, given the steep draw-downs in March and April). On the other hand, 'pure[6] 60/40' portfolios barely managed to turn positive in Europe and Japan as the year ended. This regional disparity between the US and other major markets is linked to the proximity of the effective lower bound in Europe and Japan.

For instance, by analysing the link between bond yields and equity returns during extreme sell-off periods over the last 10 years, we see that the March/April 2020 sell-off shows that the defensiveness of government bonds to equity drawdowns is weakening. This is displayed in the much lower move in peak-to-trough bond yields per percentage point fall in equities during the sell-off period (see Table 1). Additional analysis highlights the trend of the decaying beta between bond and equity returns during equity down markets across different developed markets (see Chart 11). This can be particularly seen in countries where nominal rates are reaching the effective lower bound.

This reduction in beta and the cross-asset impact highlighted above is an important empirical signal about the weakening role of bonds in driving diversification at a time when real rates in developed economies are negative across the board.

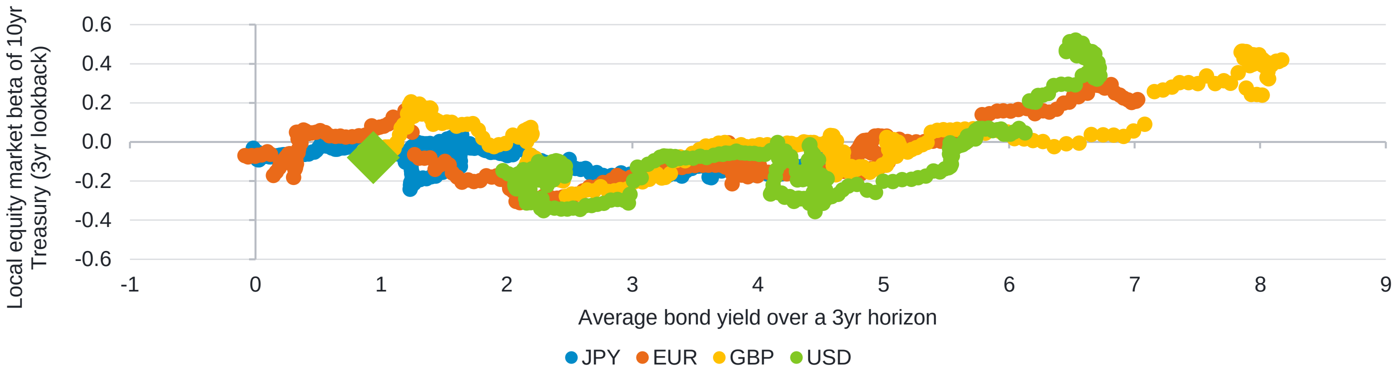
Table 1: basis points fall in bond yields per percentage point correction in equities

Bear Market	US	Germany	UK	Japan
Mar – Jul-10	8.2	5.8	6.3	2.5
Feb – Oct-11	10.8	7.9	13.7	1.8
May-15 – Feb-16	5.6	3.1	5.3	2.7
Sep – Dec-18	3.7	3.6	4.1	0.8
Feb – Mar-20	3.1	1.3	1.2	0.3

Note: Calculation compares peak-to-trough move in local 10yr yield to percentage drawdown in local equity market. Bear market dates refer to MSCI World and bear markets are defined as drawdowns greater than 15% in the MSCI World Index. The Europe ex. UK calculation uses German Bunds as its local rates market. Source: Refinitiv DataStream, January 2021.

[5] Using data since 1900.
[6] Using only domestic equities and bonds.

Chart 11: local equity market beta to 10yr government bonds (3yr lookback window)

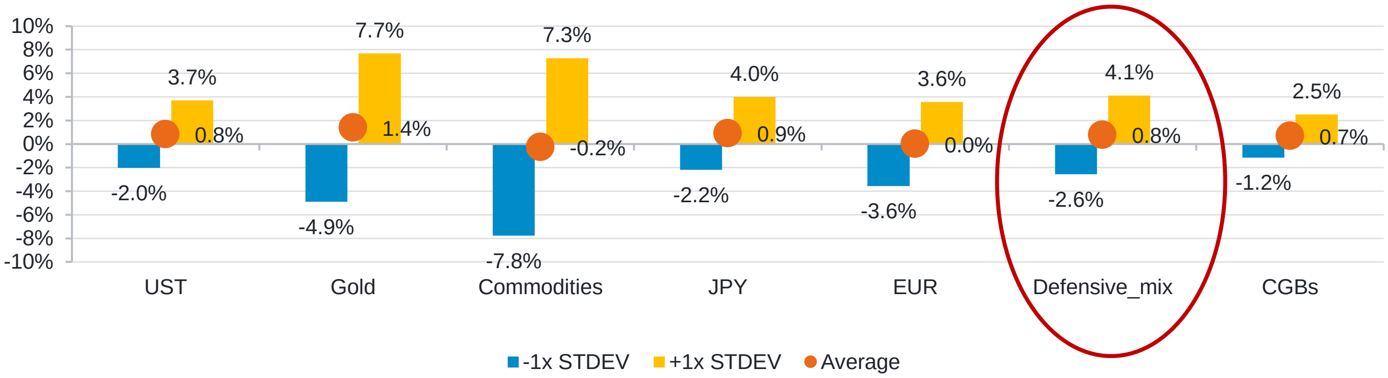


Period covered December 1991 to November 2020. Based on 3yr lookback horizon and monthly returns (beta of 36 observations). Comparing the excess returns (over cash) of domestic equity market vs 10yr domestic treasuries. "Diamond" on the chart shows the 10yr UST beta to SPX based on the 52 weekly returns ending 15-Dec-2020. Source: Bloomberg, November 2020.

Given the empirical signals consistent with the entrenching abnormal macroeconomic realities that we've discussed in this piece are strengthening, we think a new approach to strategic asset allocation and portfolio construction is required. In particular, the current reliance on mean variance driven methods (which assume by definition that risk is symmetrical) in standard strategic asset allocation frameworks makes them poorly suited to deal with a world where nominal interest rates are hitting the effective lower bound under central bank policy controls.

In addition, these existing frameworks ignore the monetary policy driven negative convexity and sharp downside risk that now comes with investing in what were once considered risk-free, return- and diversification-providing assets: particularly if the credibility of central banks comes into question. Overall, we believe the key foundation of strategic asset allocation, which assumes a world where risk-free bonds are still a return providing asset class, has been compromised. The monetary policy dominated reality is that the characteristics of bonds are starting to turn from an asset into a liability. We have already begun looking into how to solve, or at least mitigate, the impact of this severe return and diversification problem, which has been left in the wake of policy driven change in bond market behaviour. We are working with long-term, diversified investors to think laterally about the right exposures to deliver strategic investment objectives. For example, our initial analysis suggests the usefulness of China government bonds among a combination of other instruments (see Chart 12 below), especially for investors dealing with negative real rates and weakened diversification in the fixed income part of their portfolios in addition to the role private assets can play in helping generate excess returns by foregoing liquidity.

Chart 12: asset class return in down equity markets



Note: Defensive mix: 35% Gold, 35% JPY, 15% EUR, & 15% Commodities. Analysis based on monthly data for the period Dec-1968 to Aug-2020. Source: Fidelity International, Bloomberg. August 2020.

Conclusion

Ultimately, just as physics required a new theory to explain abnormal phenomenon occurring at the sub-atomic level, we believe today's changing macroeconomic landscape calls for a new 'quantum macro' analytical framework, which focuses on understanding the drivers of the change in policy application as multiple 'abnormal realities' emerge. In this new abnormal, shaped by the fall-out from the Covid-19 pandemic, important long-term shifts are at work in the management - and analysis of the global economy, and consequently, expected asset market return and risk behaviour (both over the short and medium-term).

In the context of extreme global debt burdens and sustained negative real rates bringing different risks and uncertainties, the imperative is clear for long-term asset allocators. We must re-think the current core asset mix, and in many cases accept that a traditional 60/40 approach may no longer meet the needs of investors over the coming years.

As investors, we must therefore also be open to designing portfolios using a different framework and developing new toolkits to build robust portfolios against this evolving backdrop. When it comes to designing strategic asset allocation, we must acknowledge the profound changes in the evolving macroeconomic landscape and move towards a more flexible approach to mapping the investment implications of the 'new abnormal'.

Fidelity Global Macro & Strategic Asset Allocation

This paper is written by the Global Macro & Strategic Asset Allocation team, which forms a key input into Fidelity Solutions & Multi Asset's investment process. This team conducts rigorous macroeonomic and investment analysis, studying the drivers of markets across time horizons. The team works with Portfolio Managers across tactical and strategic asset allocation, supporting decision-making across the investment process.

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