# 🔆 GlobalData. TS Lombard

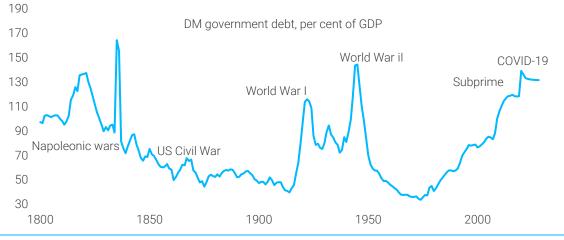
# **Macro Picture**

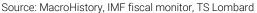
# **FISCAL PROMINENCE**

#### **Dario Perkins**

We are in a new regime of activist fiscal interventions and persistently larger budget deficits. While some investors are concerned about what this means for debt sustainably, they are missing the potential benefits to economic growth. Regardless, the fiscal-monetary policy mix has certainly shifted, which will have profound implications for financial markets.

Chart 1: Public debt is at historical highs but a fiscal crisis is not imminent





# **BOND ROUT**

For the first time in years, investors are worried about the sustainability of the public finances. The recent historic rout in bonds has obviously contributed to this mood, especially as higher yields are no longer a pure reflection of recession risk being priced out. Thanks to unexpectedly heavy bond issuance and global QT, "supply" issues are now investors' main concern.

# **NEW REGIME**

There is no doubt we have entered a new fiscal regime. Demands on the public finances are only going to increase over the next 5-10 years, thanks to (i) climate change; (ii) demographics; (iii) geopolitics; (iv) strategic industrial policy; and (iii) political polarization. There will be no return to austerity, but pundits are too gloomy about the market's ability to absorb this extra bond supply.

# **PAYING FOR IT**

Debt sustainability depends on future income growth, not just interest rates. The new policy regime is likely to deliver faster GDP growth and higher inflation – particularly compared with the 2010s, which central banks will tolerate (up to a point). While the risk of a debt crisis has been wildly exaggerated, we are still looking at a very different environment for global asset prices.

# **FISCAL PROMINENCE**

For the past month, the financial press has been full of stark warnings about the risks to the public finances, both in the US and elsewhere. A recent article in the *Wall Street Journal* summed up the mood: "Investors ignored deficits when inflation was low. Now they are paying attention and getting worried." Since there is nothing that drives market narratives more than price action, there is no doubt that the recent rout in global bond markets – one of the worst in history – has contributed to this shift in investor sentiment. Back in the summer, it was easy to attribute the selloff in bonds to the repricing of recession risk. With the recessionistas abandoning their yearlong call for an imminent crash, real interest rates jumped to their highest levels in a decade. This was a vote of confidence in the resilience of the economy and a sign that central banks might achieve their "higher for longer" policy ambition. (Perhaps the mythical r\* had moved higher.) But the autumn price action in bond markets has looked a little less benign. Recently it has been the term premium driving yields higher, which most pundits have linked to unexpectedly heavy bond issuance (i.e., "supply") and the continuation of central-bank QT. This could be a sign that investors' appetite for public debt securities is starting to waver, which would signal trouble –not least since governments everywhere are still running their largest-ever peacetime fiscal deficits.

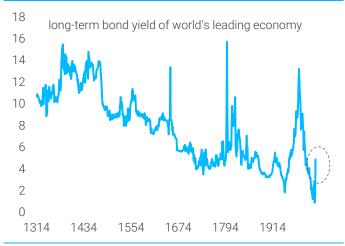
The focus on the public finances makes sense because we have certainly entered a new policy era of more government interventions and larger deficits. This is a transition that seemed inevitable years ago, long before the pandemic and the Ukraine war. Indeed, the demands on fiscal policy are only going to intensify over the next 5-10 years, for various reasons. First, politics has become increasingly fractious, which makes it impossible to target fiscal support where it is needed. Every bailout is now an "everybody bailout". Governments have already used fiscal policy to help their citizens during the cost-of-living (i.e., inflation) crisis and are now looking to insulate homeowners from higher mortgage costs (i.e., tighter monetary policy). At some point there will be another recession, which will cause a further budgetary deterioration. Second, the 2020s will make a number of specific demands of the public finances, with climate change, decarbonomics and ageing demographics set to trigger a significant further increase in government debt. Secularly higher interest rates will compound this dynamic, forcing the public sector to spend more on debt servicing. But the broader story here is that the role of the government is starting to shift - for the first time since the early 1980s. Neoliberalism is in retreat and the state will have a more active influence on economic management, rather than leaving that job to central banks. The sudden popularity of strategic industrial policy is a key barometer.

While fiscal deficits are likely to remain large, the current focus on bond "supply" looks misplaced. The relationship between issuance and the term premium has always been sketchy, especially in periods where bonds retain some insurance properties (which will still be the case, at least most of the time, in the 2020s). And there is no real danger of a public debt crisis, despite increasingly popular claims to the contrary. Although the new fiscal regime is likely to raise equilibrium interest rates, it will also boost nominal GDP growth, which will help to keep the infamous "r-g" differential in check. Investors should not forget that it was a highly deflationary policy mix (tight fiscal policy and loose monetary policy) that contributed to the low-productivity, perma-lukewarm economy of the 2010s, and we are now looking at a policy regime that will start to reverse those trends. Even strategic industrial interventions, once derided by mainstream economics, could prove beneficial, with history providing many examples where these policies generated positive spillovers to the wider economy. It is true, however, that we are looking at a different environment for financial markets. The world of permazero interest rates is gone, which means investors can no longer rely on the constant rerating of all asset prices. And that will take some getting used to.

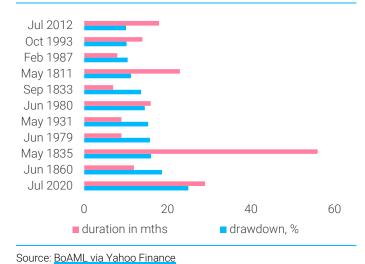
# **1. BOND ROUT**

Suddenly, everyone wants to talk about the sustainability of the public finances. In fact, it seems these days that every client meeting starts with a question about the fiscal outlook. After one of the longest and sharpest bond market routs in history, people are looking for something to blame; and spendthrift governments are an obvious candidate, especially with most administrations continuing to run large deficits while their central banks are actively engaged in QT. The "supply" of government securities has overwhelmed demand, apparently. And there will certainly be no shortage of demands on the public finances over the next decade, with climate change, ageing demographics, shifting geopolitics and the return of strategic industrial policies all likely to lead to larger and more persistent budget deficits. So, how much are doubts about fiscal sustainability contributing to the selloff in bonds? Will fiscal largesse continue to push yields and inflation higher? And what about the risk of a public debt crisis? While there are plenty of gloomy takes in the markets right now, we maintain a constructive view about how these dynamics will play out.

# **Chart 2: A historic selloff in bonds**



# Chart 3: One of the worst bond routs ever

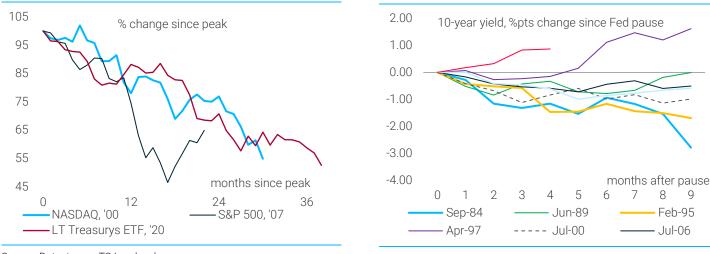


Source: Bank of England, TS Lombard

# The 'worst selloff in history'

The last three years have been disastrous for global bond markets. According to BoAML, this period has produced one of the longest and deepest bond drawdowns in history. (We didn't bother to check their numbers, but the destruction in bond markets is certainly severe enough to show up as one of our big <u>"real rate reversals" since the 1300s</u>, major turning points that always correspond to historically important events such as major wars, famines and pandemics.) When it comes to the most recent phase of this rout, which has seen US bond yields hit fresh highs in 2023, a great deal of energy has been spent over the past three months trying to backfit various explanations. Financial pundits have suggested a range of contributing factors, including the recent downgrade to US debt, unexpectedly large fiscal deficits, central bank QT, rising energy prices, the end of Japan's YCC, and geopolitics (perhaps less friendly EM governments were dumping their holdings of DM government securities). We find it helpful to split this latest rise in yields into two phases: an initial move, coinciding with improving growth expectations and a more recent (smaller) selloff, which has been associated with a widening in the term premium.

# **Chart 4: Another bubble bursts?**



#### Source: Datastream, TS Lombard

Source: Datastream, TS Lombard

Chart 5: This wasn't supposed to happen!

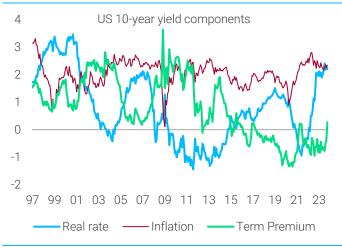
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# The two phases of the rout

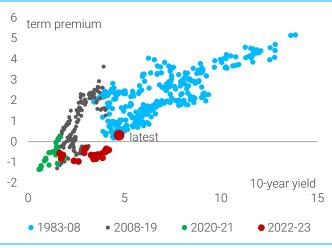
Chart 6 decomposes US yields into three parts: real interest rates, inflation expectations and the term premium. It is clear that higher real interest rates have driven much of the selloff in US Treasurys since 2021 and have again been the main force pushing yields higher in 2023. This reflects the expectation, not only that the Fed is going to keep interest rates higher, but also that the economy can tolerate tight monetary policy (a sign that r\* has increased). In fact, the latest rise in yields started in the summer, which is when most of the consensus suddenly abandoned their expectation of an imminent US recession. From a policymaker's point of view, this is a "good" rise in yields – because it is essentially a vote of confidence in the resilience of the economy. Unfortunately, however, real interest rates are no longer the only force is that is driving the selloff in fixed income markets. Term premia are also on the rise, which means investors are starting to demand extra compensation for holding long-dated paper rather than rolling over a series of short-dated securities. Whereas higher real rates are a vote of confidence in the economy, a rising term premium might reflect doubts about long-term fiscal sustainability. (But for the US at least, this is hard to square with continued currency appreciation.)

# Chart 6: First real yields, now the term premium



Source: TS Lombard estimates, ACM term premium from NY Fed

#### **Chart 7: Normalization in the term premium**



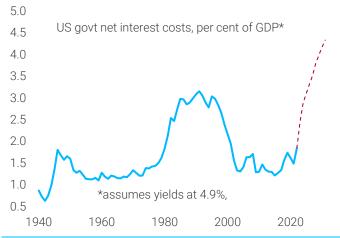


	Change in yield				
Date	2s	10s	Туре	What happened next?	Time to recession (from start of steepening)
Aug-Sep 69	0	0.5	Bear	Brief bear steepening, followed by bull steepening & recession	4 mths
Oct 79-Jan 80	0	0.5	Bear	Followed by bull steepening and recession	3 mths
Dec 80-Mar 81	-0.5	0.3	Mixed	Followed by bull steepening and recession	7 mths
Mar-89	0.5	0.4	Bear	One mth bear steepener in bull steepener trend	16 mths
Oct-00	-0.1	0.1	Mixed	One mth bear steepener in bull steepener trend	5 mths
Mar 06 - May 06	0.2	0.5	Bear	Eventually followed by bull steepening and recession	21 mths
Sep 19-Jan 20	0.1	0.4	Bear	Signs of recovery, interrupted by pandemic	N/A
Jul - now	0.1	0.9	Bear	??	??

# Table 1: Bear-steepening episodes amid yield inversion

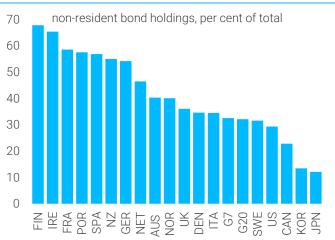
Source: GlobalData TS Lombard, Federal Reserve

# Chart 8: Higher rates kick off explosive dynamics?



Source: CBO, TS Lombard

# Chart 9: Still room for bond vigilantes?

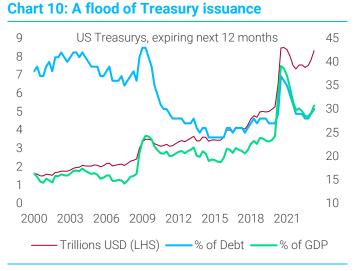


Source: IMF, TS Lombard

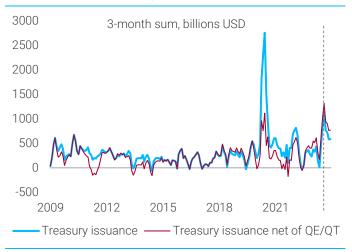
# **Bear steepening**

As long-term interest rates have increased, we have seen a rare "bear steepening" from a position of extreme yield inversion. A bear steepening is when the curve steepened owing to a sell-off in long-term bonds rather than a rally in short-term yields ("bull steepening"). Naturally, this dynamic has caused a fair degree of confusion in financial markets. Bull steepenings out of inversion are a classic sign that a recession has started. Usually, it is Fed rate cuts that are driving short rates lower; and typically the Fed is responding to a notable deterioration in the economic data. We know from past cycles that the Fed often waits until employment has started to crack before it eases monetary policy, which means a classic recessionary dynamic has already started. But bear steepenings out of inversion are not a clear recession marker. While we did see a bear steepening before the global financial crisis – which was obviously a bad sign for the economy –

we have also had bear steepenings that were not associated with an economic collapse. Table 1 gives a breakdown of previous episodes, showing that a selective use of the data can confirm whatever priors investors hold. Soft landing (late 1960s), hard landing (2007) and no-landing (a rebound in inflation, as in the 1970s) can all be consistent with bear steepening.



#### Chart 11: Issuance + QT = trouble?

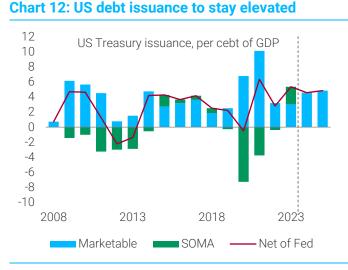


Source: Treasury, TS Lombard

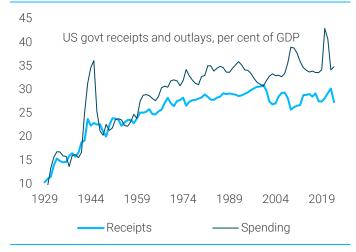
Source: Treasury, Fed, TS Lombard

Unfortunately, the nuance of the bear steepening has been lost in some of the coverage of bond markets. Instead, pundits' attention has been focused on the "puzzle" of why yields have continued to rise even after central banks have signalled a monetary pause. This move is highly unusual, and most of the commentary is blaming large budget deficits. Not only have governments been issuing large amounts of debt, even with their economies back to full employment; but central banks have been engaged in QT, shrinking their balance sheets by selling off some of the government securities they acquired during the pandemic. For weeks, all the talk in bond markets has been about "supply issues". In theory, this could also be the reason term premia are rising. If QE "works" by removing duration from bond markets and suppressing term premia – as Ben Bernanke et al. originally claimed – then it stands to reason that adding huge amounts of duration to the market should have the opposite effect. And we know the situation is only going to get worse. Around 30% of outstanding US debt is set to mature over the next 12 months – an eyewatering US\$7.6 trillion. The *Wall Street Journal* has summed up the mood by arguing that large fiscal deficits were the "prime suspect" for the pain in bond markets:

"Now, the Treasury itself is a source of risk. No, the U.S. isn't about to default or fail to sell enough bonds at its next auction. But the scale and upward trajectory of U.S. borrowing and absence of any political corrective threaten markets and the economy in ways they haven't for a generation."



#### Chart 13: US deficit remains high



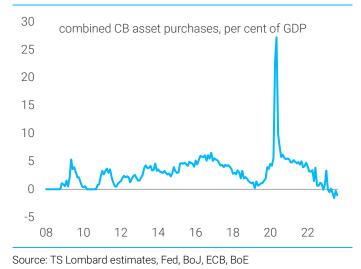
Source: IMF forecast October 2023

Source: BEA, TS Lombard

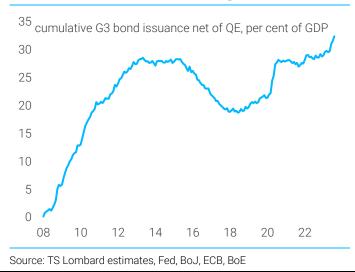
#### **Fiscal in focus**

There is no doubt that fiscal policy is back in focus. For the first time in at least a decade, TS Lombard clients have started to ask questions about the sustainability of the public finances – both in the US and elsewhere. And there are plenty of scary-looking charts in circulation. The CBO, for example, has just published an update of its US debt projections showing another sizeable fiscal deterioration, against a benchmark where debt was already on a seemingly explosive path. "Higher for longer" interest rates can only make the situation worse. As the influential investor Paul Tudor Jones recently explained to CNBC, there is even the possibility of a vicious cycle, "where higher interest rates cause higher funding costs, [which] cause higher debt issuance, which cause further bond liquidation, which cause higher rates, which put us in an untenable fiscal position". Outside the US, we have already seen some governments supposedly incur the wrath of the bond vigilantes. Exactly 12 months ago, "unfunded" UK budget proposals from the Liz Truss government triggered a surge in British bond yields; promptly forcing the prime minister to scrap her plans and resign. And worries are beginning to build in other parts of Europe, particularly Italy, where the government has just delayed its deficit reduction plan. So how worried should investors be about the fiscal situation? Are we on the brink of a DM public debt crisis?

#### Chart 14: QT is starting to bite?



#### Chart 15: Duration has been rising since 2017!



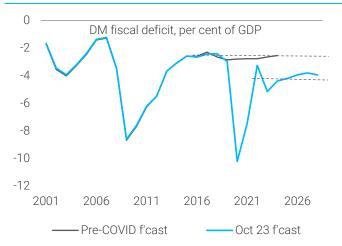
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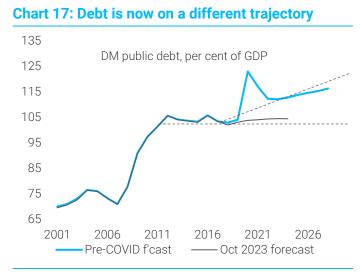
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# **2. NEW REGIME**

There is no doubt we are entering a new regime of larger fiscal deficits and (even) higher public debt. The shift seemed inevitable even before the pandemic and the war in Ukraine, but these developments have only served to accelerate a trend that was already in place. These days, whenever something goes wrong in the global economy, the first response is always to throw public money at it. And the demands on state finances are only going increase over the next 5-10 years, thanks to climate change, ageing demographics and big geopolitical shifts. After decades of neoliberalism, governments are now looking to play a more activist role in the economy, with the sudden popularity of strategic industrial policies a key barometer of how far attitudes have moved. Inevitably, this means financial markets will have to absorb a larger supply of government securities. The good news is that the relationship between bond issuance and term premia is not nearly as powerful as financial pundits tend to assume. There will be periods where heavy bond issuance is a problem for financial markets, but that will not be the new normal.

# Chart 16: A new fiscal regime





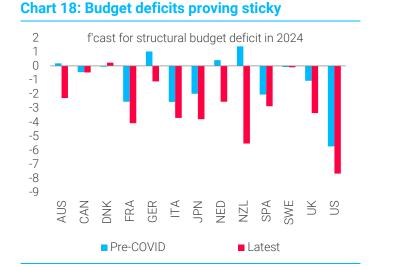
Source: IMF WEO forecasts, TS Lombard

Source: IMF WEO forecasts, TS Lombard

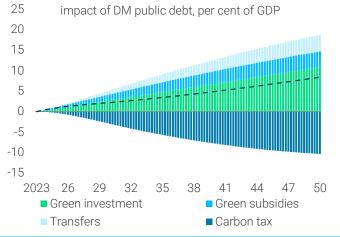
# **Historic deficits**

The pandemic obviously caused a huge deterioration in fiscal positions, with governments everywhere using their balance sheets to plug an enormous hole in private-sector incomes. With many people unable to work and companies unable to open for regular business, massive fiscal support was the only way to avoid a wave of bankruptcies and a serious economic depression. But three years on, even with the pandemic over and most economies back to full employment, governments have continued to run large budget deficits (often larger than we would normally expect even in a recession). New fiscal pressures have emerged, such as the energy crisis in Europe and Bidenomics in the US, and these have prevented a return to pre-COVID budgetary norms. The latest forecasts from the IME – updated for their October 2023 annual meetings – show that the world is now on a totally different fiscal trajectory. Compared with forecasts the IMF made before the pandemic, deficits will remain structurally higher, and debt will continue to rise (whereas, four years ago, the IMF expected a steady debt trajectory). While the deterioration

is most pronounced in the US, IMF analysis flatters the situation elsewhere, because it assumes regions such as Europe will meet their (increasingly untenable) "fiscal rules".



#### Chart 19: Huge costs from 'net zero' objectives



Source: IMF WEO forecasts, TS Lombard

Source: IMF Fiscal Monitor, October 2023

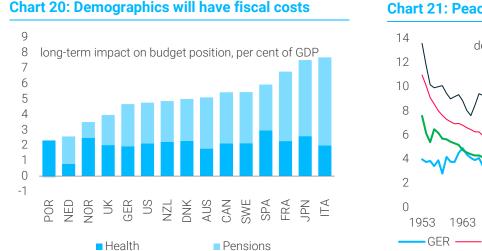
# **Fiscal pressures will build**

While nobody could have predicted the precise catalyst (the pandemic, as it turned out) for this shift towards expansionary fiscal policy, there has long been a certain inevitability to these dynamics. That became clear in the late 2010s, as political attitudes started to change and it was obvious that monetary policy – then the dominant macro policy tool – could not address the world's emerging structural macro problems (namely, inequality, climate change and a general lack of investment). We showed in March 2019 that there was a historical pendulum that swang between fiscal and monetary policy and that the era of "monetary dominance" was coming to an end, with fiscal policy taking over. The popularly of MMT-type thinking was an obvious marker. Naturally, the events of the past three years have only strengthened our conviction in this view. In fact, the monetary-fiscal pendulum has swung much faster and further than even we could have imagined. Updating our previous analysis, there are a number of reasons to think the demands on the public finances are only going to intensify over the next decade, namely:

(i) Bailout culture: By the end of the 2010s, it was widely accepted that there was no hard limit on the public finances - beyond the possible impact of persistently large deficits on inflation. And even when inflation did come along, after the pandemic, most people assumed it had nothing to do with fiscal policy, instead blaming supply chains and the war in Ukraine. So now, whenever there is a problem, the politician's first impulse is to throw public money at it. We saw this clearly in 2022, when governments across Europe spent huge sums trying to protect households and businesses from higher energy prices. And we are seeing it again currently, with some countries considering ways to insulate homeowners from higher mortgage rates. On one level, it seems perverse that governments would, in effect, try to offset the impact of tight monetary policy by easing fiscal policy. But the real problem is one of poor targeting. While it makes sense to use the government's balance sheet to support the most vulnerable, the polarization in our current political situation means this cannot happen because there is no consensus about who should get the support. In our fractious political system, every bailout is an "everybody bailout".

- (ii) The next recession: Governments everywhere are running large deficits even at full employment. At some point, another recession will come along, pushing the public finances even further into the red. Central banks say they are prepared to cause pain to get inflation under control, but this is evidently not true for politicians, who, at some point, will be seeking re-election. Monetary officials who have been singing the virtues of Paul Volcker et al. would do well to remember that the political situation today is very different from that in the 1980s. Back then, 15 years of stagflation had produced a broad political consensus for breaking the old economic system and rebuilding from scratch. There is no such consensus today. In fact, if central banks do eventually cause a recession in order to force inflation lower, they are likely to discover that fiscal policy will be working even more forcefully against them.
- (iii) Infrastructure needs: Most developed nations adopted austerity measures after the global financial crisis. Perversely, the easiest areas to cut were those that, in fact, did very little to improve the long-term sustainability of the public finances – such as investment in infrastructure. In a world of zero interest rates, even the most incompetent civil servants should have been able to identify public investment projects with a positive net present value (which means spending in these areas would have enhanced future fiscal sustainability). But there is only so long governments can postpone this sort of investment, particularly when - outside of Japan - most developed economies are already significantly "under-invested". According to McKinsey, writing in the late 2010s, the US and most of Europe had a significant "infrastructure gap", with investment rates falling well short of future population needs. And that was before taking into account new "net zero" commitments. The euro area was a particularly egregious example of this trend, with no net public investment in the 15 years after the GFC. As new academic work has shown, the region's fiscal rules were a definite barrier to public capex.
- (iv) Climate change: Climate change will affect the public finances in two main ways. First, there will be an impact from extreme weather events, which – with increasing frequency – will periodically reduce tax revenues and boost government spending. The second, potentially larger, effect will come from decarbonomics and governments' commitments to make their economies carbon neutral by 2050. The latest IMF Fiscal Monitor gives a projection for the costs involved. According to their estimates, the median developed economy is facing a fiscal hit of around 20% of GDP, although this could decline to around 10% of GDP if the authorities were willing to adopt carbon taxes more aggressively. (So far, as the IMF points out, governments have been unwilling to impose large costs on their citizens, opting instead for fiscally-costlier tax subsidies and other environmental incentives – Bidenomics is the prime example of this.) Chart 17, which is from the same IMF report, gives a breakdown of the potential fiscal impact, with green investments making up the bulk of the cost.
- (v) Ageing demographics: Most of the developed world has recently passed an important demographic inflection point, with old-age dependency ratios now trending higher. The impact on the public finances will be two-fold. First, participation rates in labour markets will decline, which will reduce average tax revenues, particularly as older workers tend to earn higher wages. Second, governments will need to spend more on healthcare and pensions, particularly in countries that have traditionally had high levels of public-sector involvement. Chart 20 shows the OECD's estimates of the demographic hit to DM government spending. While there is considerable

heterogeneity across countries, the average long-term cost is around 5% of GDP. And that does not include the impact of lower tax receipts, which could be significant, too.



#### Chart 21: Peace dividend is set to reverse



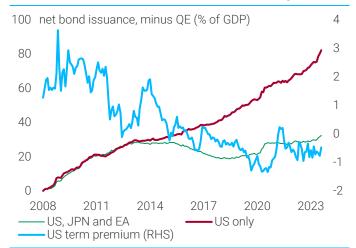
Source: OECD

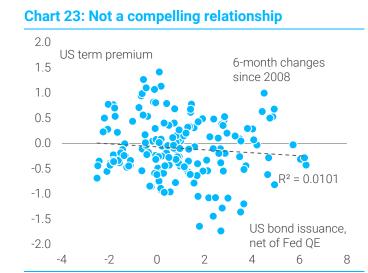
Source: SIPRI Military Expense database

- (vi) Defence and industrial policy: Before COVID-19 it was easy to foresee the fiscal consequences of decarbonomics and climate change. Since then, new pressures for the public finances have emerged, directly linked to the developments of the past three years. Structural geopolitical tensions have clearly increased, with a "hot" war in Europe and a simultaneous intensification of the "cold war" between the US and China. As we explained in a previous Macro Picture, deglobalization is real and likely to gain traction over the next decade, with a reconfiguration of international trade around regional blocs, and increased emphasis on friendshoring and reshoring. There is no doubt these structural shifts will have an impact on fiscal positions. For a start, we are likely to see higher levels of defence spending, particularly in Europe. But there is a bigger story here about the role of governments in the economy. After 40 years of neoliberalism, which emphasized minimal government interference, we are entering an era where the public sector is looking to play a more active role in how economic resources are allocated. The sudden popularity of strategic industrial policy is an obvious marker for this shift. We may not be headed all the way back to the mixed economy of the 1940s/1950s, but it is clear governments now want to secure strategically important resources and support specific industries (such as manufacturing). Not only is this important from a geopolitical point of view, but the politicians think it can help resolve some of the central macroeconomic weaknesses of the neoliberal era - such as stagnant real wages and high levels of inequality.
- (vii) Debt servicing: If we are truly in a new regime of higher interest rates which has been our thesis for some time this will also have an impact on the public finances. Net interest payments will rise, which will lead to even larger deficits and potentially the "doom loop", on which Paul Tudor Jones' recent debt warning was based. Of course, the timing and magnitude of these effects will depend on the size and average maturity of existing debts, which vary considerably across countries. For the US, the CBO has recently published new forecasts for debt-servicing costs: rising to more than 4% of GDP in 2030 (from less than 2% of GDP currently), which would be the biggest debt burden since at least WW2. (Goldman Sachs has a similar estimate.) As the CBO notes, this would make interest payments the US government's second-

largest budgetary expense, comfortably surpassing Medicare and defence. We should not forget that central banks have also influenced the timing of the interestrate hit to the public finances. QE not only reduced the maturity of public debt – by swapping long dated bonds for overnight bank reserves; it has also concealed some of the fiscal impact of higher interest rates within central-bank balance sheets. With the monetary authorities now losing money on their bond holdings, fiscal remittances will decline, resulting in a more gradual and subtle fiscal deterioration. (Some central banks have tried to plug this revenue hole by introducing a "tiering system" on bank reserves, i.e., excluding some reserves from interest payments; this amounts, in effect, to a tax on the banking sector.) Finally, higher interest rates can also squeeze government budgets via their effect on financial markets, assuming they reduce asset prices and squeeze pinch tax receipts.

# Chart 22: Net issuance doesn't drive term premia





Source: US Treasury, Fed, TS Lombard

# Supply problems?

With deficits and public debt likely to remain high, there is no doubt the supply of bonds will continue to increase. But this raises obvious questions about whether financial markets will be able to absorb the additional debt issuance, particularly if central banks are committed to QT. With term premia already on the rise and pundits linking this development to worries about "fiscal sustainability", it is understandable that there is a degree of concern among investors. We would make two points, however. First, the link between debt issuance and the term premium is much weaker than most economists assume. The term premium reflects deeper macroeconomic fundamentals – particularly the cyclical behaviour of inflation – not the condition of the public finances. While there are specific times when financial markets will find it difficult to absorb large amounts of issuance, there is no reason to think this will become the new status quo. Second, debt sustainability is not just about the size of the fiscal deficit or the level of public debt relative to some arbitrary historical metric. As we explain in Section 3, much of the current anxiety about fiscal policy rests on an overly static (and pessimistic) view about how the new policy regime will influence "r-g", i.e., the difference between interest rates and nominal growth.

Source: Federal Reserve, ECB, Fed, BoJ, US Treasury

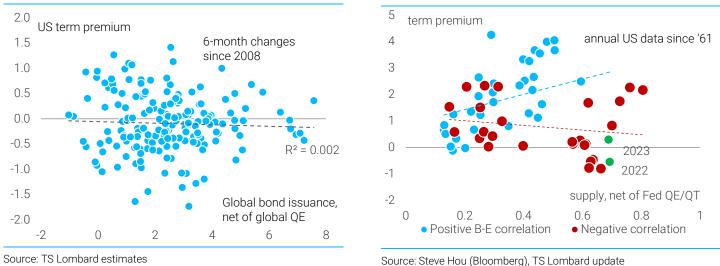


Chart 25: Issuance matters – sometimes

# Chart 24: Global QE is not the driver either

# Impact on the term premia

Before we explore the impact of the new policy regime on debt sustainability, it is worth looking at the relationship between budget deficits and bond yields in more detail. While there is no doubt fiscal policy can affect long-term interest rates – particularly if it has an impact on economic growth and inflation – recent anxiety is based on a more specific concern: that the "supply" of bonds will drive up governments' borrowing costs by widening the term premium. This would be particularly worrying because it would lift debt-servicing costs in a way that is unrelated to the strength of the economy (or inflation). Fortunately, Chart 23 shows there is not much evidence to support this claim. On average, the rolling six-month correlation between the US term premium and net issuance (after adjusting for QE/QT) has been extremely weak, with the latter able to explain only around 1% of the variation in the former (based on a regression since 2009). Investors who are worried about the "flood" of issuance in 2023 would do well to remember that net of Fed QE/QT, the pace of US Treasury issuance is similar to what it was throughout the pandemic (Chart 11). Back then, the term premium was deeply negative (and declining) while bond yields were testing 800-year lows. Clearly, there is much more to the term premium than the supply of bonds or the amount of new issuance governments are pumping into the system.

We have written a lot about bond-market term premia in recent years, arguing that the amount of compensation investors will demand for holding long-dated government securities depends on two main factors: the volatility (and uncertainty) of inflation and the correlation between bonds and equities. The uncertainty point is intuitive. In a world of greater macro uncertainty – particularly inflation volatility – investors will need an extra layer of compensation. So, it is not surprising that the term premium is closely tied to the dispersion in consensus inflation forecasts. The link with the bond-equity correlation is more complicated. But when bonds and equities are negatively correlated – i.e., bond and equity returns move in opposite directions – government securities are a good hedge for stock-market losses, which is what gives bonds their insurance-like properties. And if investors want to use bonds to hedge their equity exposures, they should be willing to pay an "insurance" fee to do so. That insurance fee takes the form of a negative term premium. Since the early 2000s, the bond-equity correlation has been consistently (and powerfully) negative, which is why term premia continuously narrowed.



1.0

0.8

0.6 0.4

0.2 0.0

-0.2

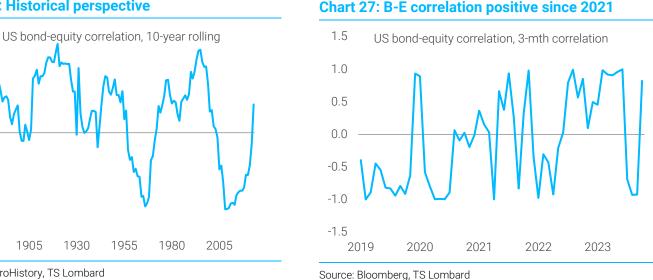
-0.4 -0.6

-0.8 -1.0

1880

1905

Source: MacroHistory, TS Lombard

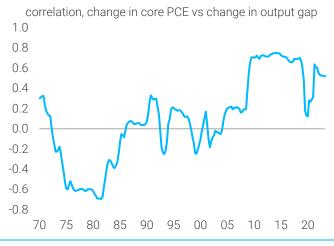


# **Bond-equity correlations**

1930

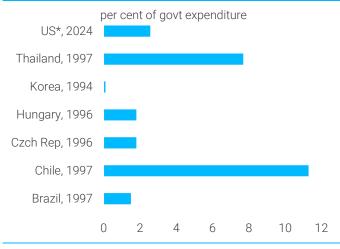
Ben Bernanke managed to convince investors that QE worked by removing duration from the bond market, which is what forced term premia down. But the real reason why term premia trended lower has nothing to do with QE. Rather, that trend was caused by a collapse in inflation volatility and a world where the bond-equity correlation was consistently negative. And the bondequity correlation turned negative after the 2000s largely owing to the types of shock that were hitting the economy – specifically, the dominance of demand shocks over supply shocks. Demand shocks make inflation pro-cyclical, which is what drives bonds and equity returns in opposite directions. The important point here is that while it seems correct to expect a rising term premium in the 2020s, this has nothing to do with investor concern about fiscal sustainability. Instead, it is about the nature of shocks the world economy faces, namely the increasing frequency of supply shocks. In a regime of frequent supply shocks - due to climate change, deglobalization and deteriorating geopolitics - we should expect periods of countercyclical inflation and wider term premia.

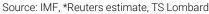
#### Chart 28: Inflation cyclicality drives B-E correlation



#### Source: BEA, TS Lombard







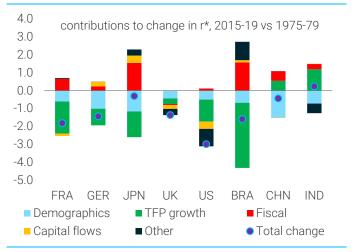
Although the supply of bonds is not the dominant driver of the term premium, there may be times when the broader macro environment makes it harder for financial markets to digest heavy government issuance. Recent analysis by Steve Hou at Bloomberg, for example, shows that the link between "supply" and yields tends to strengthen in periods where the bond-equity correlation is already positive. This makes sense. If bonds are a poor hedge for equities, investors may be unwilling to "fund" large deficits without some additional compensation. It might even have been an issue in recent months, particularly as the rally in global energy prices (another negative supply shock) has hurt both bond and equity returns simultaneously. But we do not think the recent positive correlation between bonds and equities will become the new status quo. The 2020s is not likely to produce persistent 1970s-style stagflation. While we expect more frequent supply shocks – which will reduce the *average* correlation between bonds and equities – we are not forecasting a scenario where governments will face ongoing funding problems. Most of the time, financial markets will be able to absorb the supply of bonds without suffering indigestion.

# **3. PAYING FOR IT**

It seems ironic that investors have gone from worrying about a "shortage of safe assets" to anxiety about whether financial markets will be able to absorb the "flood of government issuance" that is coming in a new era of fiscal activism. Yet, the real question about public debt sustainability – or at least the path of government debt over the medium term – ultimately depends on "r-g". Right now, mainstream economics has an extremely pessimistic view about the trajectory of the public finances (and therefore the risk of a debt crisis) based on the idea that persistent budget deficits will raise borrowing costs but do very little to boost GDP. We do not share this pessimism. On balance, macro policy is turning more reflationary, especially compared with the extremely deflationary policy mix of the 2010s. The net result is likely to be higher inflation (tolerated, within reason, by central banks) and faster real GDP growth. In contrast to all the secular gloom about macroeconomic prospects in the 2020s, we are likely to see a sustained revival in productivity. A higher-pressure economy will force companies to look for efficiency gains rather than rely on cheap borrowing costs and low wages (the growth model of the 2010s). Even strategic industrial policy – once derided by mainstream economics – could bring benefits.

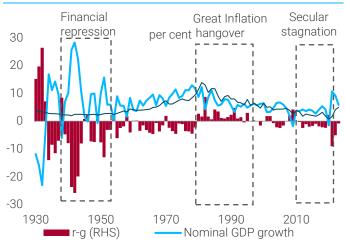
# Debt sustainability criteria

For two months, the website-formerly-known-as-Twitter has been full of threads explaining the "r-g" criteria for debt sustainability. One influential post, by Marc Goldwein, has made more than 360,000 impressions, having been reposted more than 200 times. Goldwein's worry, like many who joined the debate, was that higher interest rates have made debt sustainability significantly more difficult. R-g has narrowed; and in the worst-case scenario – where interest rates do not revert lower – we could face a "terrifying, mechanical debt spiral". But it is not just the ever-excitable crowd on #fintwit that is worried. Public debt was also a big theme at the Federal Reserve's recent Jackson Hole symposium, where journalists reported a grim mood among the academics and policy wonks in attendance. Barry Eichengreen kicked off the debate, presenting a lengthy paper that looked at the historical record of dealing with large public debt problems. Eichengreen argued that since austerity was now out of the question and there was no real prospect of faster economic growth or higher inflation (developments that have helped to tame explosive debt dynamics in the past), we would likely be stuck with much higher levels of borrowing, which will pose serious "economic, financial and political risks".



#### Chart 30: Fiscal policy can influence r\*





Source: IMF World Economic Outlook, April 2023

Source: TS Lombard estimates

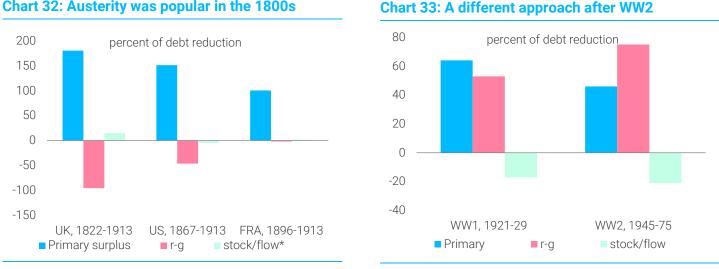
# **Dealing with debt problems**

We agree with Barry Eichengreen's analysis of past debt problems. In <u>our own historical guide to</u> <u>public debt</u>, we showed that there were two ways to reduce borrowing once it reached the sort of levels we are seeing today. Either government can go for the so-called "orthodox" approach, which involves running primary fiscal surpluses (i.e., austerity) and introducing structural reforms or they can try the so-called "unorthodox" approach, which typically involves some combination of default, inflation and financial repression. Governments used the orthodox approach for dealing with debt problems in the 19th and early 20th centuries but went down the unorthodox route after WW2 (with yield-curve control, financial repression and several bursts of rapid inflation). We also agree that a return to austerity now seems unlikely, particularly given the public disdain for these policies when they were applied after the global financial crisis. Politicians in the 2010s seemed to forget that while austerity was politically sustainable in the Napoleonic era, when "creditors" were over-represented in Parliament and Congress, this would not be the case in a modern-demographic society. Based on r-g arithmetic, as Barry Eichengreen correctly points out, either debt must continue to rise or governments must find a way to "inflate it away".

# The static consensus

While Eichengreen is more relaxed than most financial pundits about the markets' ability to absorb DM government debt – because there are still structural sources of demand for safe assets (which, at current yields, increasingly includes purchases by households and non-financial corporates) – we think he is too pessimistic about future r-g dynamics. That is because, like many mainstream economists, he is underestimating the potential for expansionary fiscal policy to reflate the global economy in the 2020s, via both moderately higher inflation and stronger economic growth. People forget that a highly deflationary policy mix actively contributed to persistent weakness of the global economy after the GFC. Governments pursued austerity, while the private sector was deleveraging and fiscal multipliers were big, with central banks engaged in a largely futile effort to offset the impact of tight budgets using NIRP and QE – policies that did very little to boost growth or inflation. Sure, this produced historically low interest rates, but it also gave us chronically weak nominal spending. If the new regime of expansionary fiscal policy can lift both interest rates and nominal income – which seems reasonable – it will not cause a deterioration in future debt dynamics. Both "r" and "g" would rise, with "r-g" little changed. This

may sound unrealistic, but we are already seeing these dynamics play out in the private sector, where rapid nominal income growth has offset the impact of rising borrowing costs on DSRs.



# Chart 32: Austerity was popular in the 1800s

Source: IMF working paper (2019)

Source: IMF working paper (2019)

# Why 'g' will rise

Faster nominal income can come from two sources - higher inflation and stronger real economic growth. On the inflation side, we think central banks will tolerate inflation above 2% as long as they can retain a degree of plausible deniability. Mainstream economists tend to exclude this possibility, either because they assume a total commitment to 2% targets or because they think any gains for debt sustainability would be offset by rising inflation expectations. But they are missing an important point: inflation is going to become a lot more volatile in the 2020s, rather than persistently very high. Fiscally induced inflation is not like "monetary inflation": whereas rapid monetary growth can cause a persistent inflation problem, budgetary expansions tend to come in fits and starts. (To see the difference, compare the 1940s/1950s, which had a big fiscal component, with the 1970s, which had a strong monetary component). It is unlikely that expansionary government policy can produce persistently very high inflation because that would require ever-increasing budget deficits. Instead, we see the new policy regime shifting the prevailing tendency of inflation – a world where 2% becomes an inflation "floor" rather than a "ceiling". Not only will central banks "look through" most of the extra volatility in inflation, but it is unlikely it will be fully priced into bond markets (even with moderately high term premia). In extreme situations, we may even see central banks suppress nominal yields, although true financial repression is hard in globalized financial markets, with large foreign bond holdings.

# Stronger economic growth

While higher/more volatile inflation can help "r-g", the bigger gains should come from stronger real economic growth. We think the consensus is too gloomy about medium-term growth prospects. Combined with secular labour shortages, a more reflationary policy mix will contribute to a "higher pressure" economy, which will boost wage growth and force companies to invest in labour-saving technologies, rather than rely on cheap labour and low interest rates. We should also see a revival in productivity and an acceleration in the pace of technological innovation - the two most acute weaknesses of the perma-lukewarm economies we had in the decade after the global financial crisis. Chart 39 shows that total factor productivity always tends to accelerate in a higher-pressure environment, where companies are forced to innovate. This is our best route to

unlocking the potential gains from new digital technologies such as AI. These technologies were not needed in the 2010s, when demand was tepid, and supply was not a binding constraint.

#### Chart 34: No meaningful crowding-out effect Chart 35: No magic debt threshold 1000 40 Square root of sample size Precision massive range suggests 900 (inverse of (precision proxy) 35 no public debt threshold 800 standard error) that causes GDP slump 30 700 600 25 tiny effect and it 500 disappears when 20 400 adjust for selection bia 15 300 200 10 100 5 $\cap$ Debt "threshold" for economic slump, per cent of GDP -0.2 -0.1 01 0 Impact on GDP from 10%pts rise in public debt ratio 0 100 150 200 50

#### Source: Philipp Heimberger

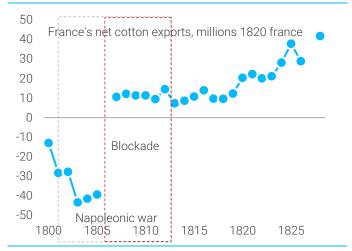
Source: Philipp Heimberger

Our optimism about the growth-enhancing aspects of budget deficits stands in sharp contrast to the widespread fiscal pessimism we heard after the global financial crisis. Back then, thanks to an influential study by Reinhart and Rogoff, most economists believed high levels of public debt would undermine medium-term growth rates by "crowding out" private investment. We now know, of course, that those Reinhart and Rogoff findings were totally flawed. Not only is there an extremely weak relationship between public debt and GDP growth, but a recent meta study has shown that it is largely the result of a mainstream selection bias. Economic journals are more likely to publish studies showing a negative relationship than studies showing no such relationship exists (Charts 34-35). Once we adjust for the selection bias, there is no statistically significant link between debt and GDP growth; and, in contrast to what Reinhart and Rogoff claimed, there is certainly no "tipping point" where large debts trigger an economic slump.

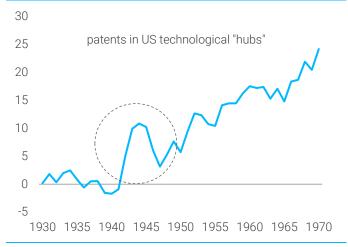
# **Gains from industrial policy**

The mainstream bias against fiscal interventions is particularly acute when it comes to industrial policy, which has long been despised by the academic community. For decades, <u>the consensus has argued that it is a bad idea for governments to "pick winners"</u> (although the theoretical case, based on market failures, was always quite compelling). This is because when academics looked at the results of industrial policies, they often struggled to find anything positive to say. The interventions rarely achieved their desired outcomes – worse, the research often revealed a negative correlation between state policies and economic performance. But the sudden popularity of industrial policy has led to a flurry of new studies seeking to re-examine the empirical evidence in this area. And the early consensus is that much of the old research was probably flawed. As a recent paper by Réka Juhász, Nathan Lane and Dani Rodrik points out, not only were academics often mismeasuring public intervention was often a response to a market failure (it was "endogenous"), and the negative correlation with economic performance was not a good guide to what the policies were doing. Industrial policies could have been successful at the margin – by reducing a market failure – but this would not show up in the empirical work.





# Chart 37: R&D gains from WW2 govt investments



Source: Réka Juhász, Nathan Lane and Dani Rodrik

Source: Daniel Gross and Bhaven Sampat (2020)

As Juhász et al. point out, in order to better assess industrial policy, we need to look at examples where the intervention was truly "exogenous". This is best done through case studies - ideally where the shift in government policy happened by accident. A fascinating "natural experiment" is what happened during the period 1803-15, when Napoleon Bonaparte interrupted trade with Britain through his military blockade of English ships. Although the policy was about geopolitics, not economics, it had a pronounced (unintended) impact on the local French economy. French regions that became better protected from trade increased their capacity in mechanized cotton spinning – the cutting-edge technology of the time – during the blockade, and the economic geography of the industry persisted, even after the blockade ended, with France becoming a net exporter of those products. Today, this provides a compelling "infant industry" rationale for the idea that government trade barriers can generate positive results. And, as other economists point out, it is not the only case study to shed a more favourable light on strategic industrial policies. We see similar benefits when we look at government R&D during WW2, the US "space race" with the Soviet Union in the 1960s and even 19th century American shipbuilding. In many of these case studies, there is compelling evidence that government intervention boosted productivity, had large "multiplier" effects on output and even generated a persistent technological edge. So, perhaps a regime of greater fiscal activism will not be the disaster everyone is assuming.

# **Muddling through**

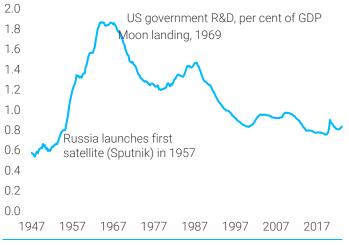
Right now, views about fiscal policy are highly polarized. While many investors are worried about debt sustainability and/or "fiscal dominance" – a world where persistently large deficits make it impossible for central banks to hit their inflation targets – there are others who think we are headed back to austerity. If we had to choose a side, we would join those who think fiscal policy is going to be "excessively loose". Not only is the current political situation unable to tolerate a return to austerity, but the next decade will place enormous pressure on governments to increase their spending. But perhaps the most likely scenario is one of "muddling through". The public sector is definitely going to play a bigger role in the economy – with large increases in investment – but (semi-)independent central banks and fear of the "bond vigilantes" will also force a degree of restraint on governments. We are not going to see, for example, the widespread adoption of Trussonomics (particularly given the way that experiment worked out for the UK). Our optimistic take is that perhaps the developed economies are stumbling onto a more favourable fiscal-monetary policy mix. Growth and inflation would be higher –especially compared with the 2010s

- but only to the degree central banks can retain a degree of plausible deniability about sticking to their 2% targets. This would be a moderately reflationary new macro regime, where 2% becomes a floor on inflation rather than a ceiling – and no government faces a "debt crisis".

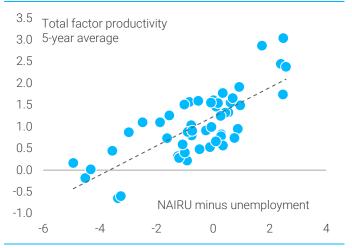
# **Market implications**

Most investors are looking at the prospect of a new fiscal regime with a degree of trepidation. And it will certainly have a bearing on the performance of asset markets over the next decade. Whereas the era of lowflation and permazero rates naturally favoured fixed-income markets and long-duration equities (which enjoyed a continuous "rerating"), investors are going to have to work harder to secure decent returns in the 2020s. Rather than looking for exposure to intangible assets such as US tech, the FAANGs, cryptocurrencies and all the speculative investments that outperformed in the era of zero interest rates, investors should now seek exposure to the real economy, especially sectors that are likely to become secular growth catalysts in the next supercycle. Commodities, energy, value stocks and real assets (including housing) should all perform well – at least once immediate recession risks have eased. And the relationship between bonds and equities is going to change fundamentally, albeit in subtle ways, which will undermine the classic 60-40 approach to portfolio allocation. We have written a lot in recent years about the long-term market implications of the new macro supercycle – see here and here for examples.

#### **Chart 38: Spillovers from the Space Race**



#### Chart 39: Push the economy – productivity gains



#### **Bottom line**

The recent historic rout in bond markets has raised concerns about the prospects for fiscal policy, including – in the extreme – some risks to the sustainability of public debt. These ideas have gained traction of late as term premia have widened, a move that seems – superficially at least – linked to unexpected large government debt issuance (particularly in the US). There are worries that financial markets will not be able to absorb this extra supply, especially with central banks engaged in QT (a source of additional duration). We think these worries are overdone – for two reasons. First, there is no clear link between net issuance and bond yields. While there is certainly a risk that term premia continue to rise, the main reason is shifting macro fundamentals – not the supply of public debt. Periods in which there is a positive correlation between bonds and equities can make investors more reluctant to hold government securities, but this is unlikely to become the new normal in financial markets. The second reason not to panic about government debt is that while there is no doubt we are entering a new era of activist fiscal policy, the

Source: Kantor and Whalley (2023)

Source: OECD, TS Lombard estimates

consensus is too pessimistic about what this means for nominal GDP growth. When it comes to "r-g", economists tend to ignore the "g" and put too much emphasis on the "r". We think the world is adopting a more reflationary policy mix – particularly compared with the 2010s – and that this will boost both inflation (moderately) and raise economic growth. Also, productivity is likely to improve, as a higher-pressure economy drives up IT investment. Even strategic industrial policy – once the source of much neoliberal scorn – could deliver sizable benefits. The likeliest path for the public finances is one of "muddle through", where governments play a more active role in the economy but not to the degree that they threaten the plausible deniability of independent central banks, or risk the wrath of the (still largely mythological) bond vigilantes.

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