

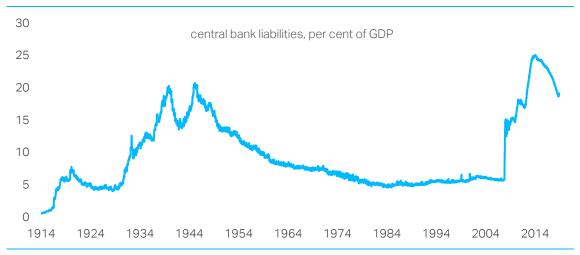
Macro Picture

QE4 AND BEYOND

Dario Perkins

Central banks are again expanding their balance sheets but the era of monetary dominance is coming to an end. Fiscal stimulus will soon take over – the only question is whether governments will do this themselves, or try to disguise their actions via central banks. Despite Japan's failures in the 1990s, fiscal action could still be effective.

Chart 1: Fed balance sheet



Source: Federal Reserve TS Lombard

INDEPENDENCE DAY

Central banks took charge of macro stabilization after the policy disasters of the 1970s, while fears about long-term fiscal sustainability constrained elected officials. But this institutional setup looks outmoded for a deflationary environment in which real interest rates are historically low. Central banks are also doing things that blur the lines between fiscal and monetary policy.

FISCAL DOMINANCE

There is speculation the next round of stimulus will involve closer interaction between fiscal and monetary policy, perhaps via 'caps' on government bond yields and various forms of monetary financing. Pure helicopter money is implausible but we might see central banks doing things that create large fiscal transfers. It would be better if governments took such action themselves.

BUDGET BOOSTER

Some economists use Japan's experience to argue fiscal stimulus would not provide an adequate solution to secular stagnation. This prognosis is probably too gloomy, especially as there is plenty of evidence fiscal multipliers are larger in depressed economies. But a fiscal revolution is surely coming, a revolution that threatens to erode central-bank independence.



QE4 AND BEYOND

There was a time when central banks were presumed to be all-knowing and all-powerful, deftly manipulating the tools of monetary policy to deliver their desired levels of inflation while seamlessly 'fine-tuning' demand to create the perfect Goldilocks environment. Yet, after a decade of consistently missing their targets and failing to break the world out of its post-2008 rut, the monetary maestros seem to be running out of ideas. Central bankers now admit, even in public, that they might not be able to meet their mandates without help from fiscal policy (even if the world avoids technical recession). This is a major break with the doctrine that has dominated macroeconomic policymaking since at least the 1980s. For decades, economists not only championed the complete supremacy of monetary policy, but they also believed central banks should be totally independent of government influence. Yet the separation between fiscal and monetary policy was always a little artificial and the distinction between the two has become blurred in recent years, as central banks created an increasingly sophisticated toolkit. There are some economists who now want the monetary authorities to go further, pushing more forcefully into the traditional realm of fiscal policy. Doing so would surely undermine their independence.

Though the global economy is not yet in recession, the current slowdown has already forced central banks to test the limits of their policy ammo. Even with the adoption of NIRP in some countries, there is limited room to cut interest rates. By the end of the year, the BoJ, ECB and Federal Reserve will all be expanding their balance sheets even if, in the case of the Fed, this is intended to ease tensions in money markets rather than a true QE programme. Longer-term investors are asking what happens next, especially if these latest actions are not sufficient to prevent a global recession. Further rounds of QE seem inevitable, probably tied to explicit yield targets (caps). Central banks are likely to commit to buying whatever quantity of government paper is needed to keep long-term yields below certain thresholds. While this provides an incentive for governments to increase their spending (some economists will call it 'helicopter money'), the fiscal authorities shouldn't actually need this incentive – not with bond yields at 700-year lows. It is also possible the monetary authorities will be prepared to go beyond these simple inducements and try to inject funds directly into their economies. There are various ways they could do this, including dual interest rates, quasi- tax rebates and 'Peoples QE'. While true money financing is impossible, central banks might use their balance sheets more 'creatively'.

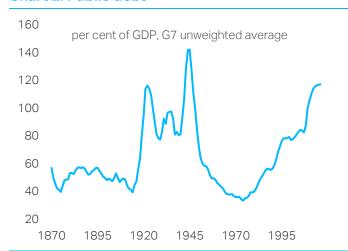
After decades of monetary dominance, it seems we are now entering an era where fiscal policy takes over – an era of fiscal dominance. Either governments will increase their spending to try to revive their economies, or central banks will use their balance sheets to achieve the same effect. The obvious question is whether this shift to fiscal stimulus will be successful in breaking the world out of secular stagnation. Understandably, many commentators are sceptical, pointing to Japan's experience in the 1990s. The Japanese government doubled its public debt between 1991 and 2000 but deflationary pressures continued to build. While Japan's experience shows government spending is no substitute for structural reform, the country's poor track record doesn't mean fiscal stimulus won't be successful elsewhere – especially as many of the conditions that ailed Japan in the 1990s do not apply to other nations. In fact there is evidence fiscal multipliers are currently quite powerful, especially where there is a firm commitment to reflation, demand is cyclically weak and monetary policy plays a supportive role. While we think fiscal stimulus will be useful, this doesn't necessarily mean the world has reached an inflexion point for inflation and real interest rates – this inflexion point could still be some way off.



1. INDEPENDENCE DAY

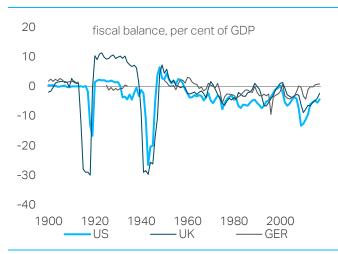
What is the difference between monetary policy and fiscal policy? The answer seems obvious if we restrict our focus to the specific tools employed, or the institutions currently responsible for their implementation. Fiscal policy changes the level and composition of government debt (i.e. taxes and spending) whereas (these days) monetary policy manipulates interest rates in an effort to influence the amount of money and credit in the economy. The Federal Reserve's website makes an even cruder distinction: monetary policy is whatever the central bank does, whereas Congress decides fiscal policy¹. Yet this separation, which is also common in many other parts of the world, is somewhat artificial and there have always been questions about whether monetary and fiscal policy can ever truly be independent. Economists have long recognized, for example, that large government debts might complicate the task of monetary policy, perhaps even creating a situation where changes in interest rates have perverse effects on inflation (Sargent and Wallace (1981) called this 'some unpleasant monetary arithmetic').

Chart 2: Public debt



Source: IMF, TS Lombard, Macrohistory

Chart 3: Government deficits



Source: Macrohistory, OECD, TS Lombard

Central bank independence

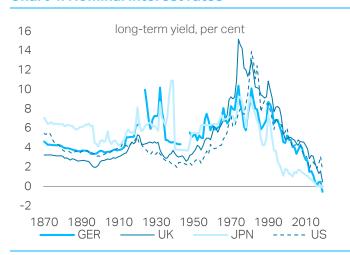
While today the separation of monetary and fiscal decisions seems natural, this is a modern arrangement. Central banks were originally created to fund governments, especially in times of war. The Bank of England was founded in 1694 and had a monopoly on note issuance to provide financing to King William III. Napoleon Bonaparte created the Bank of France in 1800 for similar reasons. Though the role of central banks changed in the 20^{th} century with the creation of the Federal Reserve, which was established to provide an elastic currency response to the country's frequent banking panics, even these modern institutions surrendered their monetary powers to support the greater public good. Most central banks kept interest rates artificially low during and after the two World Wars in an effort to support government finances. And through at least the 1970s, elected politicians continually meddled in monetary policy, with fiscal and monetary operations often conducted in a coordinated manner. This was clear for most European central banks, which were usually just a branch of the finance ministry, but it was also true in the United States (see Allan Meltzer's history of the Federal Reserve, or 'the secret diaries of Arthur Burns').

Macro Picture | 10 October 2019

¹ Note: the US Treasury is in charge of exchange rate policy, which bizarrely makes the US currency a fiscal tool.

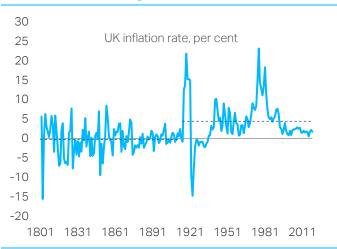


Chart 4: Nominal interest rates



Source: Macrohistory database, Bloomberg, TS Lombard

Chart 5: Inflation regimes

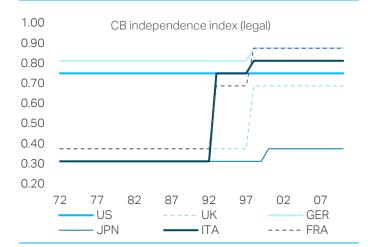


Source: Bank of England historical database

A response to the Great Inflation

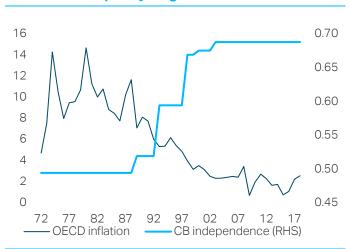
In many ways, political constraints on fiscal and monetary policy didn't matter until the 1970s because the Gold Standard (and later the Bretton Woods system) restricted what governments could do². But after President Nixon broke the link between the US dollar and the price of gold in 1971, the world lost its 'nominal policy anchor'. The implications of this shift were felt surprisingly quickly. With policymakers free to use both policy levers with total discretion, inflation and budget deficits spiralled out of control. By the 1980s, most nations were suffering from mass unemployment, record inflation, large budget deficits and exceptionally high real interest rates. Orthodox Keynesian thinking had no solution for 'stagflation' but new monetary thinking offered a solution – independent central banks that were free from short-term political demands.

Chart 6: Central-bank independence



Source: Davide Romelli

Chart 7: Good policy or good luck?



Source: Davide Romelli, TS Lombard, OECD

Since politicians always had an incentive to inflate their economies ahead of elections and couldn't be trusted to tighten policy when needed, the new monetary consensus argued monetary policy must be in the hands of independent, 'conservative' central bankers that would

² David Ricardo was one of the first economists to recognize this nominal policy constraint, blaming the Bank of England for creating runaway inflation during the 1800s when the convertibility of bank notes into specie was suspended in an effort to support the government's financing of the Napoleonic Wars (<u>aka the 'Bullionist Controversy'</u>).



solve the 'time inconsistency' problem and anchor inflation expectations at low levels. While the Phillips curve would disappear in the long term – structural forces must ultimately determine the level of unemployment – anchoring inflation expectations would allow policymakers to manage their economy more effectively in the short term. Officials even believed, by credibly committing to low inflation, they could also minimise deviations in output from its underlying trend ('the divine coincidence' of monetary policy). This new consensus had plenty of empirical evidence to back it up. Various economists had documented a strong inverse relationship between central-bank independence and inflation patterns. The Bundesbank's success also supported this narrative. With the most independent central bank in the world, Germany had not endured the wage-price spirals of the 1970s, in contrast to the US and many other parts of Europe.

Monetary dominance

So the Great Inflation of the 1970s ushered in a period of monetary dominance, a shift that simultaneously downgraded the role of fiscal policy. Since nobody was prepared to let technocrats makes decisions about how to tax and spend, there was no way round the 'time inconsistency' problem. Academics also warned that cutting taxes wouldn't work because most people – being super rational and forward looking (of course) – would only increase their savings in anticipation of the tax hikes that must eventually follow. There were also worries about the time lags involved with fiscal decisions. If any stimulus only came into effect long after it was needed, such measures could prove counterproductive. So, rather than use fiscal policy to manage demand, governments were under pressure to focus on long-term debt sustainability. This, proponents argued, was particularly important in the modern era of free capital markets and flexible exchange rates, where the bond vigilantes stood ready to punish fiscal negligence.

For decades, an extremely favourable global environment provided ample support for the new macroeconomic consensus. Long-term interest rates trended down, inflation stabilized at low levels – remarkably close to central bank's new targets – and most economies operated near full employment, delivering solid and sustained GDP growth. While there were minor disagreements about whether this Great Moderation was entirely the result of 'good policy' or also involved a degree of 'good luck' (particularly the emergence of China and other EMs, which provided a powerful supply shock for the global economy), you didn't have to be UK premier Gordon Brown to believe monetary and fiscal reforms had contributed to a 'platform of stability'. Of course, we now know the Great Moderation wasn't quite as perfect as it seemed. Serious macroeconomic risks and imbalances had been building under the surface, particularly in global banking and credit provision – areas which standard macro orthodoxy had shockingly ignored.

Monetary-fiscal lines become blurred

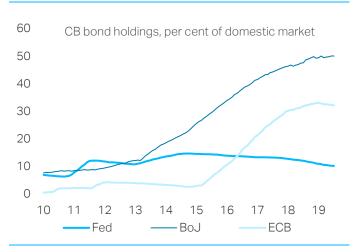
The 2008 global financial crisis shook the economics profession, yet the consensus approach to macro policy somehow survived – in fact, central banks became even more powerful. While the initial recession saw monetary and fiscal policy working together to support demand, with large cuts in interest rates and a material increase in government spending, it wasn't long before finance ministries were back to worrying about budget sustainability. By 2010, governments in most major economies were looking at ways to reduce their deficits ('austerity'), leaving central banks alone in their efforts to revive global demand and lift inflation. A decade on, though austerity has lost its grip on fiscal policy, central banks have had to go to extreme lengths to try to reflate their economies and prevent inflation dipping further below their targets. But in taking these actions, especially new policy tools with much clearer 'distributional effects', the monetary authorities have also blurred the boundary between fiscal and monetary policy.



Chart 8: Rising inequality



Chart 9: Central banks' balance-sheets



Source: National sources, TS Lombard

Source: World Inequality database

Monetary policy has always involved a redistribution of income. When central banks cut interest rates, the decision helps borrowers (typically the young) but harm savers (typically the old). Yet, not only have these effects become more obvious since 2008 – especially with interest rates at new lows – central banks have also used tools where redistribution seems to be the actual objective, rather than a side-effect (see this speech by Otmar Issing). This is particularly clear where central banks have targeted asset values, apparently hoping for some sort of 'trickledown effect' to the average citizen. Since it is mainly the wealthy that own stocks, boosting asset prices has widened inequality. But there are also a variety of more specific ways in which central banks seem to have gone beyond the traditional boundaries of monetary policy (see here):

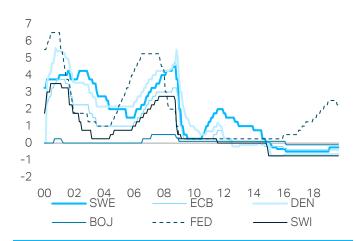
- (i) Financial bailouts: Central banks not only played a critical role in the 2008 bank bailouts, they also exercised considerable judgement about which institutions to save and at what cost. The basis for making these decisions wasn't always clear. Why did the Fed save Goldman Sachs but not AIG? Why did it treat Bear Stearns differently to Lehman? Sometimes the magistrates even got involved;
- (ii) Asset purchases: Through their asset purchases, central banks provided direct support to specific groups in society. The Fed purchased MBS, for example, which favoured the housing sector. The BoJ bought corporate paper and even equities. The ECB not only took actions that favoured some euro countries over others, it even adopted the <u>role of enforcer</u> in an effort to discourage 'moral hazard'.
- (iii) **Fiscal transfers:** By taking on credit risk, central banks exposed themselves to potential losses, which would have had an impact on the public finances. If central banks had made losses on the securities they bought (which in most cases they avoided), either fiscal remittances (a source of government revenue) would have declined, or they might have asked for recapitalization, a direct cost to taxpayers;
- (iv) Negative interest rates: The negative interest rates recently employed in Japan and parts of Europe also involved quasi-fiscal transfers. By imposing a negative rate on bank deposits, which banks have not been able to pass on to their customers, the authorities have effectively imposed a 'tax' on them. In the case of the ECB, the authorities have even tried to offset the tax using negative-yielding TLTRO funds, effectively a 'subsidy' to banks that lend the cash to the real economy. But the tax tends to fall on the northern euro countries and the subsidy goes to the periphery.



- (v) Financial stability roles: Most central banks have taken on more responsibility for financial stability since the crash. Since financial crises inevitability involve a cost for taxpayers, any mistakes in this area could have profound fiscal implications:
- (vi) Debt management at zero bound: Money and government debt are close substitutes at low interest rates, which means decisions by the finance ministry about how to fund the fiscal position can influence money markets. Recent US Treasury issuance, for example, seems to have had a powerful impact on the availability of short-term dollar funding, both in the US and in the Eurodollar market.

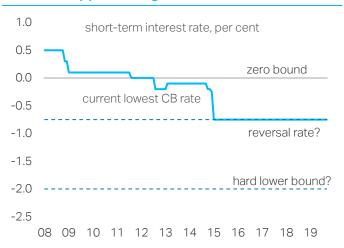
We do not want to be overly critical of central banks. They have taken on more responsibility since 2008 because they had no choice – their actions helped to prevent a nastier macro environment, perhaps even a second Great Depression. Governments should not have relied so heavily on monetary easing, especially when pursuing misguided austerity. But it is clear central banks now have a problem because their efforts have not been enough to put the global economy back on its pre-2008 trajectory. Growth is deteriorating and inflation remains below official targets. The question now is whether central banks have gone as far as they can go, or if they will adopt even more radical policies. Additional action will be hard without further crossing the boundary into fiscal policy, a move that could ultimately threaten their independence.

Chart 10: Policy rates



Source: Datastream

Chart 11: Approaching the 'reversal rate'



Source: Datastream, TS Lombard

2. FISCAL DOMINANCE

For the first time since the 1980s, monetary policy seems to be losing its dominance as the main tool for stabilizing the economy. Even central bankers are calling for help from fiscal policy, admitting they might not be able to deliver their inflation mandates without it. This is a remarkable shift compared to the consensus of the last 30 years, when it seemed unthinkable monetary policymakers would ever admit defeat in meeting their long-term objectives, let alone call on governments to ease fiscal policy. What happened to inflation being 'always and everywhere a monetary phenomenon'? And where did the bond vigilantes go? Today the main problems are the exact opposite of those suffered during the 1980s: deflation risks have replaced worries about inflation. Real interest rates are too low, not too high. Budget deficits no longer seem to matter. Yet, this is not the first time in history the consensus has shifted against monetary policy, with fiscal dominance taking over – the same thing happened in the 1930s.

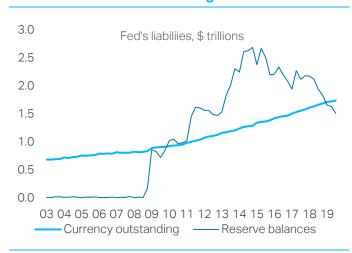


Chart 12: Japan's yield targets



Source: Datastream, BoJ

Chart 13: Reserves becoming scarce?



Source: Federal Reserve

What happens next?

While most economists agree fiscal policy must now play a greater role in boosting demand, the central banks are not going to sit back and do nothing while they wait for finance ministries to get their act together. Indeed, the monetary authorities are already cutting interest rates and with the adoption of negative rates in some countries, there is still scope to cut interest rates a little further. Yet it is hard to see any central bank cutting its policy rates below -1% given the risks and uncertainties associated with NIRP. Financial markets haven't reacted particularly favourably to negative rates (especially the banking sector), so there are good reasons to think this policy has reached its 'reversal rate'. The Fed has more room to cut rates than other central banks, though it has ruled out the possibility of NIRP. Most central banks will also increase the size of the balance sheets through new rounds of QE. The ECB and the BoJ are already buying securities in large quantities and the Federal Reserve could soon be doing the same.

QE4

In principle, the next round of US asset purchases will have a quite different objective from previous QE programmes. In the past, the Fed said it was buying government securities in an effort to reduce long-term interest rates and provide additional monetary stimulus. It was focused on the asset side of its balance sheet. Today, the central bank is paying more attention to its liabilities, specifically the amount of reserves in the system. Remember, the Fed buys private securities by creating reserves. In recent months it has been increasingly clear that <u>US bank reserves are becoming scarce</u>, as QT and various other forces have drained liquidity. New regulations have made it difficult to judge how many reserves the system needs but with these tensions appearing – including upward pressure on the Fed funds rate and a surge in repo rates – the authorities now recognize the need to add new reserves to the system, which will involve a new rounds of asset purchases. While the Fed categorically denies this is "QE4", the monetary operation is effectively the same – so the distinction is lost on many financial pundits.

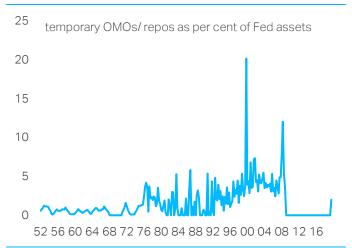
Yield targets next?

Even if the upcoming round of Fed asset purchases is not designed to lower bond yields, it is clear that a more serious economic downturn would require more explicit monetary easing. We suspect all central banks, including the ECB and the BoJ, would step up their asset purchases substantially. How much can they expand their balance sheets? One possibility is that rather than specify a limit on the amount of securities they purchase, central banks will instead



announce explicit yield targets. Like the BoJ is already doing, this would involve a commitment to buy whatever amount of bonds is needed to keep yields below certain thresholds (say, 0%). This is complicated in the euro-area context because there is no single budgetary authority, but the ECB could get round this by targeting a weighted-average of national yields. The advantage of this scheme is that it could not only reduce the amount of bonds central banks eventually have to purchase (the BoJ has actually reduced its asset purchases since it announced a yield target in 2016), it also provides an implicit invitation for governments to ease fiscal policy.

Chart 14: Fed injecting liquidity again



Source: Federal Reserve, TS Lombard

Chart 15: USD scarcity affects the dollar?



Source: Federal Reserve, TS Lombard

Some commentators are excited about the prospect of yield targets because they imply 'coordination' between fiscal and monetary policy. They are reminiscent of what happened during the two World Wars. To the extent this kept public borrowing costs below market rates, it is sometimes described as 'helicopter money'. The central bank transfers purchasing power from its balance sheet to the Treasury and, if this also causes prices to rise, it can help to raise seigniorage. Yet, as we will explain below, the scheme the authorities are considering is not 'true' monetary financing. This is because central banks would retain their inflation targets and issue interest-bearing liabilities via QE, which means there will be no permanent fiscal transfers from the central bank to the Treasury. In a sense, the monetary authorities would only be capping yields on the basis that these yield-caps are not actually necessary. You have to wonder why such a scheme is needed when long-term bond yields are already sitting at 700-year lows.

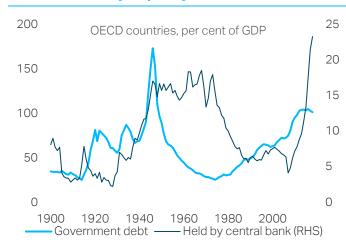
Monetary-fiscal coordination

Many of the proponents of monetary-fiscal coordination are not really pushing for 'true' helicopter money (despite what they say), but rather for central banks to disguise government debt on their balance sheets. There might be good reasons to do this, especially if politicians are excessively worried about deficits, but most of these schemes would still raise the public sector's total liabilities (government plus central bank). Proper helicopter money should have no impact on government debt. Many economists do not understand this – even with QE, people accused central banks of trying to 'monetize' fiscal deficits. Sure, central banks were buying public securities while governments were simultaneously running large deficits (Charts 18 and 19), but that debt hasn't disappeared or been inflated away – it is still there, as interest-paying bank reserves. Even if central banks now cancelled this debt, as some economists have suggested, *this would still be conventional fiscal financing*. The central bank would be operating



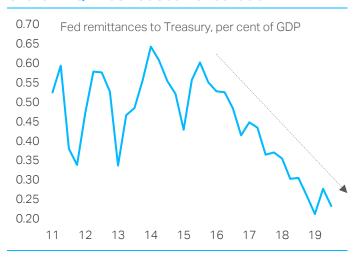
with negative net worth and even if this had no economic consequences, it would involve hidden fiscal costs. The bank's future earnings would decline, which is a source of public revenue³.

Chart 16: History of policy coordination



Source: IMF, TS Lombard

Chart 17: QE wasn't debt monetization



Source: FRED, TS Lombard

True helicopter money is actually impossible with the current policy setup because, as Fed staff have shown, it requires an implausibly large increase in consumer prices⁴. Central banks would have to abandon their targets and allow a massive inflation overshoot. Short of a total conversion to MMT philosophy (which seeks to re-establish the pre-1980s policy framework by putting finance ministries back in charge of inflation targets and relegating central banks to the role of debt sustainability) it is hard to imagine any major economy attempting successful helicopter money. Yet this doesn't mean central banks won't engage in a variety of activities which, even if they are not true helicopter money, could create large fiscal transfers, such as:

- (i) Peoples' QE: Rather than central banks purchasing government bonds and trying to stimulate the economy by reducing interest rates, central banks could either place the money into specific public investment funds (which could issue bonds), or simply distribute the money directly to households and businesses electronically. The first idea is really just another version of QE, while the second would be similar to a tax rebate. But central banks retain their inflation targets so no 'monetization'.
- (ii) The Bernanke idea: The US treasury holds an account at the Fed. In a recent blog, Ben Bernanke suggested an idea where the Fed could decide how much it needs Congress to spend in order to hit its inflation target. It could then credit the government with that amount of cash, leaving elected politicians to decide how to spend the funds. Again, this is really just back-door fiscal policy but at least it would allow elected representative to choose how to spend the money;

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³ The critical point about 'true' helicopter money is that public debt must not increase. This will only happen if the central bank can generate enough inflation such that the Treasury earns sufficient future seigniorage to offset the cost of the scheme. To do this, the bank must issue permanently-zero-interest liabilities (or commit to a zero policy rate). This way, when inflation rises and interest rates increase, there will be no offsetting impact from the liability side of the central bank's balance sheets. This is also why QE, which created interest-bearing reserves, was strictly not 'debt monetization'. As the Fed raised interest rates, its remittances to the Treasury declined (Chart 17) – there has been a fiscal impact.

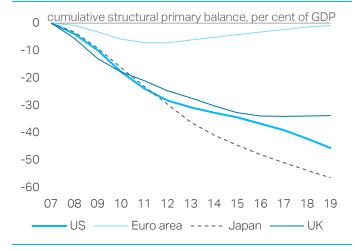
⁴ The underlying problem, as <u>Gerard MacDonell from Front Harbor</u> points out, is that the non-interest bearing currency stock is too small relative to GDP, which means the 'tax base' for the inflation tax isn't large enough. The smaller the non-interest bearing currency stock, the larger the increase in prices needed to fully monetize the additional government debt. Gerard has shown, for example, that with the US currency stock of \$1.75 trillion, a helicopter scheme worth \$500bn for two years would need a 40% rise in the price level – something no central bank would ever allow.



(iii) Dual interest rates: To quote Eric Lonergan from M&G, there are two interest rates that matter for households – the rate at which they borrow and the rate they are paid on their savings. In principle, central banks could decide to reduce the interest rate that borrowers have to pay on loans while simultaneously raising the rate they receive on their savings. The ECB's current framework already allows them to do this – they can cut the interest rate on which they lend to banks (via the TLTRO), subject to these loans being extended to the private sector, and raise the interest rate they pay on deposits. With a few refinements to the ECB scheme, central banks could create large fiscal transfers to banks, paying them a fee to pass on the funds.

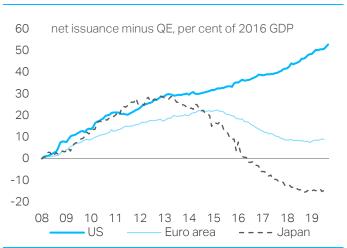
Helicopter money is, by definition, powerfully inflationary and a guaranteed solution to the lower bound on interest rates. But it is also operationally impossible. The quasi-fiscal schemes we have outlined above are sure to be less potent but, as we will explain in Section 3, they could still be more successful than QE. The problem is that they require central banks to get even more involved in policies that would involve clear and obvious transfers from taxpayers to the people who benefit from these schemes. There are good reasons why central banks are reluctant to do this, not least because it is the role of elected politicians to decide how to spend public money – not technocrats. If the political left wants governments to invest in green energy while the right would prefer to cut taxes, surely it is better to have an election and let the public decide. And in most countries these sorts of transactions are still illegal, which is another obvious policy hurdle.

Chart 18: Governments increased debt



Source: National sources, TS Lombard

Chart 19: While CBs took up the issuance



Source: TS Lombard estimates

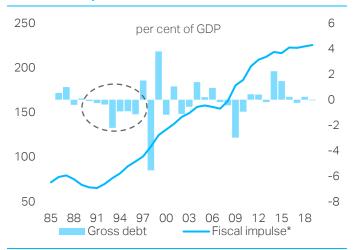
3. BUDGET BOOST

Whatever form fiscal dominance takes – traditional government tax and spend, or fiscal action concealed on central banks' balance sheets – the important question is whether this stimulus will be successful. By expanding their combined balance sheet, can governments and/or central banks genuinely reflate the global economy and pull the world out of its continuous slump? Long term Japan-watchers are sceptical. They point out that fiscal policy was unable to prevent Japan's liquidity trap, with public debt doubling during the 1990s, while nominal GDP stagnated, deflation became firmly entrenched in wages/prices and yields converged to perma-zero. Yet,



while it is true fiscal stimulus cannot resolve underlying structural deficiencies, Japan's experience might not be informative about what we can expect to happen elsewhere.

Chart 20: Japanese fiscal stimulus



Source: OECD, *annual change in structural balance

Chart 21: Japanese public investment



Source: OECD

Lessons from Japan

The role of fiscal policy in Japan's lost decade has always been controversial. While the government used budget stimulus to try to boost demand in the early stages of the country's slump, the authorities seemed to lack genuine conviction and didn't act decisively enough. Despite several rounds of tax cuts and a total easing that some estimates put at ¥130 trillion (25% of GDP), the government always made it clear these actions were temporary and that taxes must eventually rise. And, of course, on several notorious occasions the government did tighten policy. This undermined the effectiveness of fiscal stimulus. Some economists – including Adam Posen – also believe Japan's stimulus was much smaller than the authorities claimed. Official estimates included a large dose of double counting, while actions taken at the regional level undermined decisions taken at the national level. Posen argues Japan's public debt surged because the decade-long slump undermined tax revenues, not because of the stimulus.

Since 'structural' Japanese fiscal easing was concentrated in the early 1990s (Chart 20), there are also questions about whether relatively tight monetary policy and strains in the financial sector undermined the impact of these policies on the real economy. Back then, the Bank of Japan seemed obsessed with moral hazard and was reluctant to engage in large-scale asset purchases, while the banking sector was suffering from serious NPL problems – strains that would eventually trigger a severe banking crisis and a nastier recession in the late 1990s. The large appreciation in the Yen certainly didn't help, compounding deflationary forces and masking any benefits from budgetary easing. Again, these problems were pretty specific to Japan.

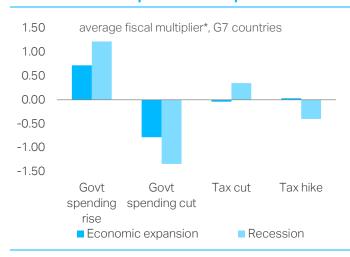
Fiscal multipliers

The unique features of Japan's economy in the 1990s suggest, even if the authorities did try fiscal stimulus (questionable), the 'fiscal multiplier' was probably low. The multiplier measures the impact on GDP of a one percentage point increase in the government's structural deficit, either from cutting taxes or an increases spending. While the size of the multiplier is hotly contested and often a source of disagreements between the political left and the right, there is now a clear consensus among academics that multipliers are larger during recessions or when interest rates are close to the zero bound. There are various reasons for this, but one obvious factor is that 'crowding out' is likely to be minimal and central banks will be less inclined to react by tightening



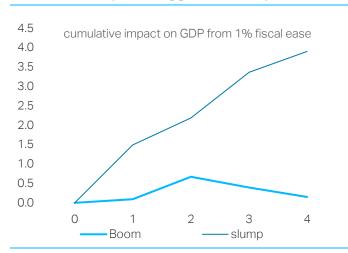
monetary policy. Charts 22 and 23 provide evidence for fiscal multipliers based on influential IMF estimates plus more recent analysis by the <u>Peterson Institute</u>. While multipliers of around one are typical during expansions, suggesting limited value for money, this rises to around 2-3 in recessions, which means every 1% budget easing boosts GDP by up to 3 percentage points.

Chart 22: State-dependent multipliers



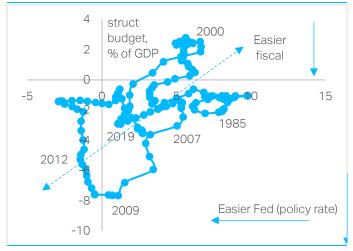
Source: IMF estimates, *change in GDP from 1% change in budget

Chart 23: Multipliers bigger in a slump



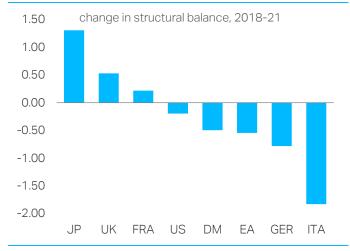
Source: Peterson Institute

Chart 24: Fiscal-monetary coordination?



Source: OECD, TS Lombard

Chart 25: Planned stimulus



Source: IMF, OECD

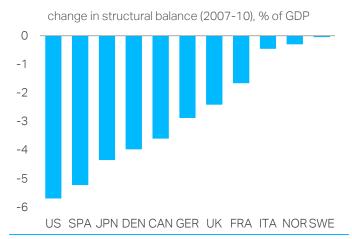
Other historical precedents

The 'narrative approach' is an increasingly popular way to analyse fiscal multipliers. Rather than rely on econometric models, economists study specific episodes in which the authorities eased policy and try to figure out its impact on the real economy. Over the past two economic cycles there have been plenty examples of fiscal stimulus programmes that have had a material impact on GDP. Some studies, for example, have shown that both the Bush and Obama tax cuts, which included large rebate cheques (similar to the proposed fake 'helicopter money' schemes) created a substantial boost to US consumption. One estimate suggests around 45% of the Obama rebates were spent within two months of households receiving them, which eventually



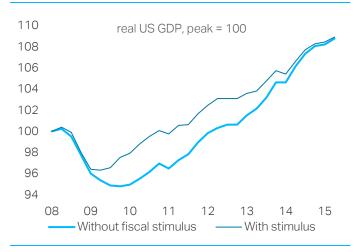
rose to 66% in total. In fact, there is a clear consensus (albeit with a <u>few notable critics</u>) that the 2009 fiscal stimulus – coordinated at the G20 level – made the subprime recession milder than it would otherwise have been. Estimates by <u>Alan Blinder and Mark Zandi</u>, for example, suggest US GDP would have been around 6% lower without fiscal stimulus. While the 2009 stimulus was much larger than anything the authorities are currently considering (compare Charts 25 and 26), a more serious economic downturn would prompt a more forceful response.

Chart 24: Fiscal response to subprime crisis



Source: OECD

Chart 25: The US stimulus worked?



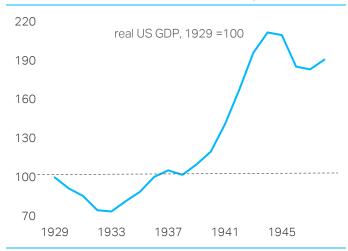
Source: Alan Blinder and Mark Zandi

Looking much further back, there is also a compelling argument that fiscal stimulus ended the Great Depression. After years in which the authorities unsuccessfully tried to stimulate their economy through monetary policy, it was massive military spending that eventually pulled the US economy out of its slump (Chart 28). By 1937, US GDP was still below its 1929 level – it then jumped by more than 20% in two years as the country prepared for WW2, finally breaking out of what economists were calling secular stagnation. Of course, the military conflict itself makes it difficult to draw firm conclusions about the longer term impact of fiscal spending. Proponents of helicopter money argue central banks were able to inflate away the wartime debt, but a more careful analysis shows it was strong, sustained real GDP growth that eroded the debt burden – this was a story of post-war rebuilding and massive demographic shifts (i.e. the baby boom).

While the experience of the Great Depression is unlikely to settle the debate about fiscal policy, proponents of the secular stagnation thesis are convinced fiscal policy will be much more potent than monetary stimulus. And we don't need to go all the way back to the 1930s to find evidence to support their theory – it is enough to consider China's recent dominance of the global industrial cycle. While western central banks have gone to great lengths to try to reflate the global economy, with limited success, swings in China's policy cycle have been having a much clearer impact on global demand. This is perhaps because China has been the one part of the world where the authorities cast aside worries about the sustainability of government debt and repeatedly used their balance sheet (albeit under the disguise or private borrowing) to boost demand and stimulate their economy. Unfortunately, since the Chinese are no longer willing to play this role, DM governments might now have to step in to fill the gap.

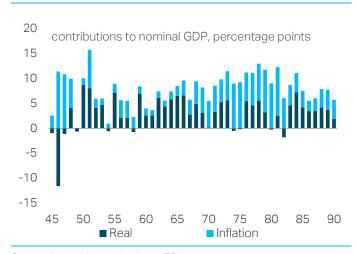


Chart 26: Fiscal ended the Great Depression



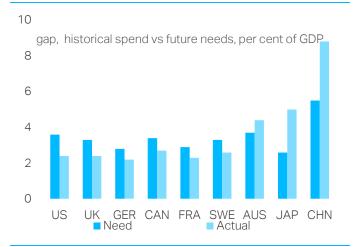
Source: Macrohistory database, TS Lombard

Chart 27: But also a 'real' post-WW2 boom



Source: Macrohistory database, TS Lombard

Chart 28: The case for public infrastructure



Source: McKinsey Infrastructure report

Chart 29: After a decade of public cuts



Source: BEA, TS Lombard

Bottom line

Monetary policy has totally dominated attempts at macroeconomic stabilization since the 1980s, mainly as a response to an extraordinary period of double-digit inflation, excessively high real interest rates and reoccurring worries about public debt sustainability. Today the world faces a total different environment – inflation that is too low and chronically depressed real interest rates. Despite a decade of aggressive central bank action, monetary policy seems to be running out of ideas about how to resolve this situation. As a result, the monetary authorities have increasing adopted quasi-fiscal measures, policies with clear distributional consequences. Some commentators now want them to go even further, by engaging in monetary-fiscal coordination or adopting policies that involve large-scale fiscal transfers. There is certainly a compelling case for fiscal stimulus, despite Japan's disappointing experience in the 1990s. But we suspect governments will need to adopt these measures themselves, rather than try to conceal them on central banks' balance sheets. True helicopter money is a non-starter.



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