



Access our House View and other key view summaries here:

[The House View](#) | [Global Strategy](#) | [US](#) | [Europe](#) | [China](#) | [Emerging Markets](#)

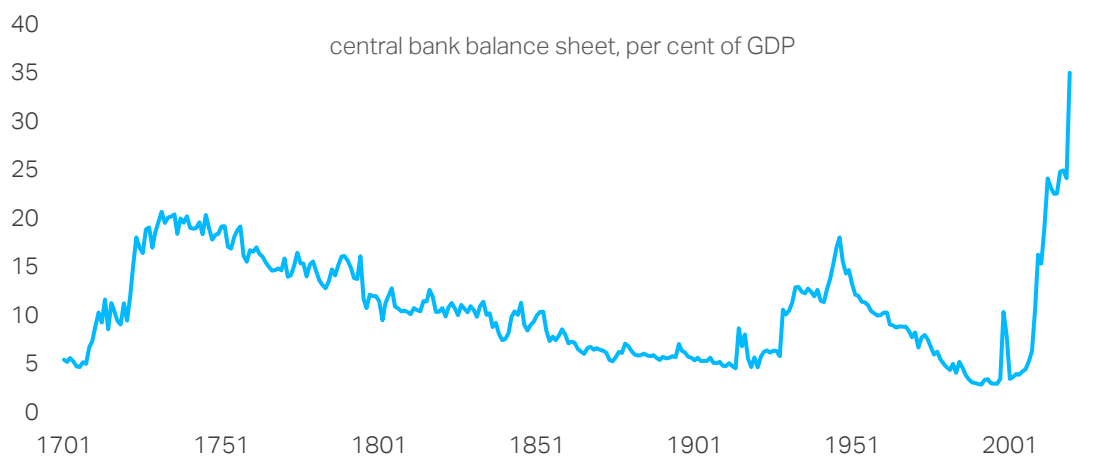
Macro Picture

THE WAR ON DEFLATION

Dario Perkins

After a decade where the authorities pushed the era of 'monetary dominance' to dangerous extremes, fiscal and monetary policy are now working together. The inflation consequences of this new regime will depend on future policy interactions, after the current recession has ended. Conducted well, cooperation could be a game-changer.

Chart 1: You don't see this often



Source: Bank of England data for UK, TS Lombard update based on recent policies

HISTORY LESSONS

Central bank independence, which required the strict separation of fiscal and monetary policy, is a relatively modern idea. It was the response to a unique period in history – the rampant inflation of the 1970s. With deflationary forces now dominant and central banks diluting their boundaries with fiscal policy, the era of 'monetary dominance' seems to be coming to an end (at last...).

COORDINATION FAILURE

The 2010s pushed the separation of fiscal and monetary policy to dangerous extremes, with central banks failing to counter the impact of government austerity. The forces that had rendered monetary policy less effective than in the past simultaneously made fiscal policy more potent, creating a deflation bias. Bond yields at 700-year lows called for a different response.

FISCAL ACCORD

Governments and central banks are now working together to minimize the fallout from COVID-19. This could even be the start of an era of "cooperation", reminiscent of the post WW2 regime. If the authorities want to protect central-bank independence, they should make fiscal-monetary cooperation explicit, rather than trying to disguising it on central banks' balance sheets (ECB!).

THE WAR ON DEFLATION

The COVID-19 pandemic has forced governments and central banks to work together to support the economy. While most investors welcome these efforts – it is the reason global asset prices have recovered from their March lows – there is definite uneasiness about the longer-term consequences of these actions. Are central banks compromising their independence in a way that will lead to serious inflation? Are they “monetizing” government debt? Looking beyond the recessionary consequences of the pandemic, it is easy to understand why the prospect of lasting fiscal-monetary “cooperation” has spooked some investors. This would represent a crucial departure from the doctrine that has dominated macro policymaking since the 1980s. Indeed, for more than three decades, most economists have championed the complete supremacy of monetary policy, which meant central banks had to be totally independent of government influence (rejecting their original role, which was to support the public finances in times of war). Yet the boundary they created between fiscal and monetary policy is looking increasingly artificial, while the era of monetary dominance seems to be drawing to a close.

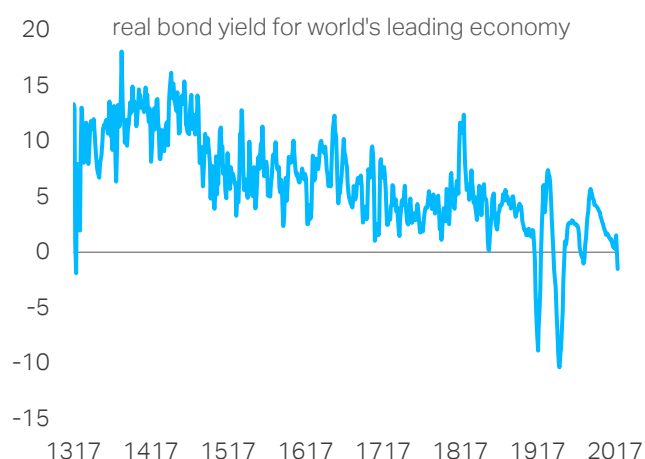
There is nothing inherently dangerous about cooperation between fiscal and monetary policy. We should even end up with a policy mix that is an improvement on the past decade, where the fanaticism of monetary policy reached dangerous extremes. After working together to combat the subprime crisis – much like what is happening today in response to COVID-19 – fiscal and monetary policies diverged throughout the 2010s. In some countries, this was an act of political opportunism, not to forget an irrational fear of bond markets. But it was also based on the mistaken belief that central banks could comfortably offset the impact of government austerity. Ignoring clear evidence that monetary stimulus was becoming less effective than in the past, while fiscal actions were becoming more potent, it is not surprising this policy mix failed to break the world economy out of its enduring slump. The 2010s expansion was the weakest in history, with most economies only capable of short, temporary bursts of ‘reflation’ (usually in response to massive fiscal stimulus in China). Inflation stayed stubbornly below central banks’ targets and bond yields dipped to 700-year lows, even turning negative in some jurisdictions. Bond markets offered a clear signal that the policy mix was wrong – but fiscal policy ignored this signal.

Fears of ‘debt monetization’ have distorted the debate about policy coordination, just as they did a decade ago when central banks first launched QE. The combination of fiscal stimulus and QE has nothing to do with “helicopter money”. In fact, in an obvious throwback to the post WW2 era, central banks might go further in the next couple of years, announcing ‘caps’ on government yields. And for now, there is certainly no conflict between policy co-operation and central-bank independence, while the inflationary consequences of these policies will depend on future interactions, not what is happening today. Will governments continue to use fiscal stimulus even after their economies have recovered from COVID-19 (or revert to hopeless austerity)? If consumer prices start to accelerate and this causes bond yields to rise, will central banks stick to their inflation mandates, or seek to suppress public borrowing costs? History shows plenty of episodes of successful policy coordination that did not result in rampant inflation (i.e. no ‘debt monetization’ took place). But if the authorities want to safeguard the independence of central banks, they should make any new cooperative regime explicit, rather than force the monetary authorities to hide what are effectively fiscal actions on their balance sheets (winks at the ECB).

1. HISTORY LESSONS

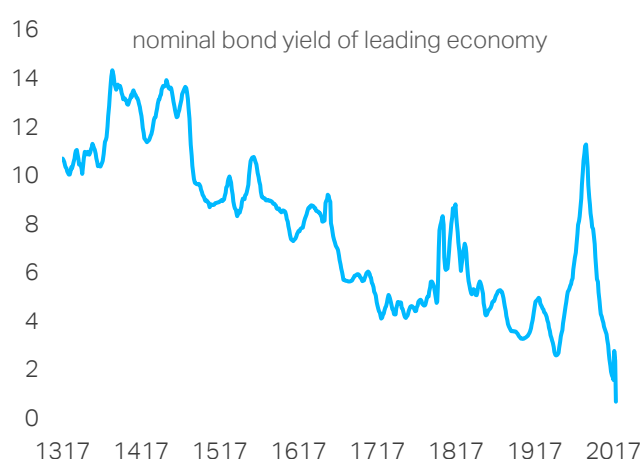
What is the difference between monetary policy and fiscal policy? The answer seems obvious if we restrict our focus to the specific tools employed, or the institutions responsible for their implementation. In this case, fiscal policy is all about the level and composition of government debt (i.e. taxes and spending) whereas (these days) monetary policy adjusts interest rates in an effort to influence the amount of money/ 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 policy". Yet this separation based on tools/institutions is rather artificial and there have always been questions about whether monetary and fiscal policy can ever truly be independent. Large government debts can certainly complicate monetary policy, even creating a situation where changes in interest rates have perverse effects on inflation (Sargent and Wallace's "unpleasant monetary arithmetic"). And, as we have seen recently, central banks sometimes have to buy huge quantities of government securities to pin down short rates¹.

Chart 2: Real rate depression



Source: [Bank of England study](#), TS Lombard

Chart 3: Nominal rates even more extreme

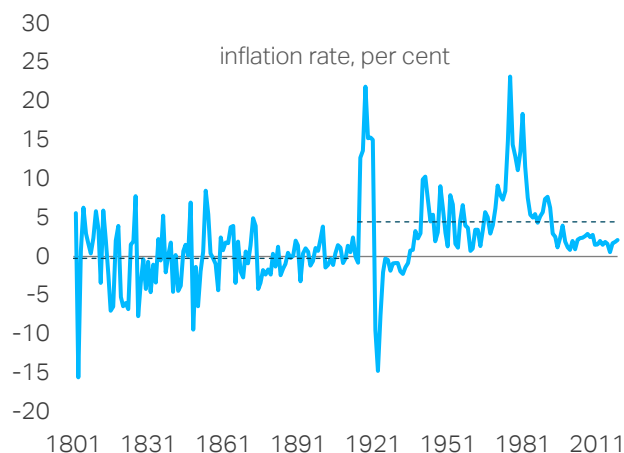


Source: [Bank of England study](#), TS Lombard

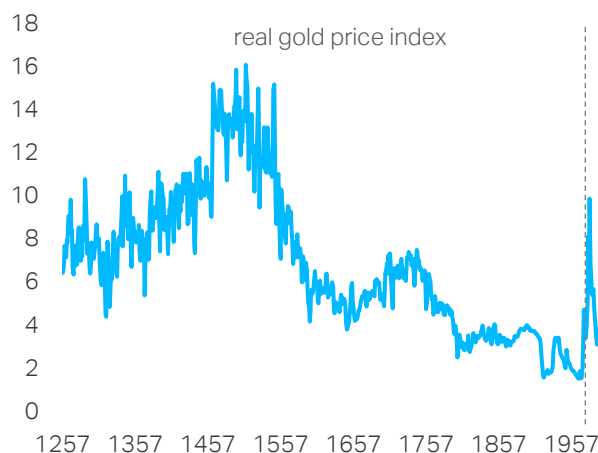
Central bank independence

The separation of fiscal and monetary policy, necessary to make the monetary authorities "operationally independent", was a rejection of central banks' original purpose – which was to fund governments, especially in times of war. The Bank of England appeared 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. This was proper 'debt monetization'. During times of war, central banks would suspend the convertibility of their currencies into precious metals and literally print money in an effort to inflate away their governments' debts. While this was an extreme form of 'cooperation' between the fiscal and monetary authorities, central banks remained subservient to governments for much of the 20th century. For example, most central banks kept interest rates artificially low during and after the two World Wars in an effort to suppress debt servicing costs. In the United States, this would eventually lead to open conflict between the Federal Reserve and the Treasury, resulting in the 1951 '[Accord](#)' (see Section 3).

¹ These problems become especially acute at the zero bound, when central banks try to manipulate the yield curve using their balance sheet. [Robin Greenwood et al noted this problem in 2014](#), pointing to the conflict with Treasury debt management. And more recently, we have seen the Treasury's Account at the Fed influence short-term dollar liquidity.

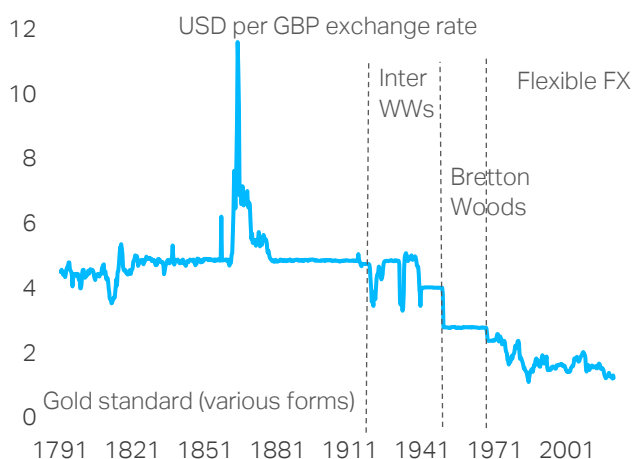
Chart 4: Inflation regimes


Source: Bank of England, TS Lombard

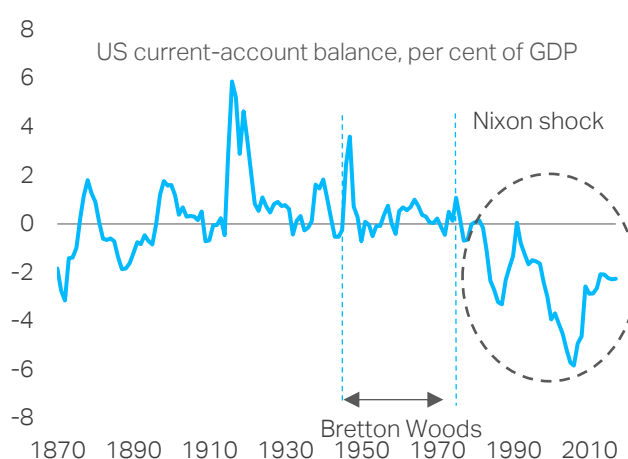
Chart 5: Gold was once the 'nominal anchor'


Source: Measuringworth.com, TS Lombard

For long periods after World War II, central banks were not as independent as they are today. Many governments pursued fixed exchange rates, first under Bretton Woods and then various incarnations of the European Exchange Rate Mechanism (ERM), which meant elected politicians could set the broad parameters of monetary policy. Even the German Bundesbank, in principle the most fiercely independent central bank in the world, sometimes had to concede to political pressure (such as devaluing the Deutsche Mark to help the French). And in other countries, such as the UK and Italy, there was no pretence about monetary independence – up until the 1990s, politicians continued to control interest rates. Arguably, the situation in the US was a little more complicated. Though in principle the Federal Reserve enjoyed similar legal protection to the Bundesbank (especially after the 1951 Accord), in practical terms, 'independence' often came down to a battle of individual 'forcefulness' between the President and the Fed chair².

Chart 6: History of fixed exchange rates


Source: Bank of England, TS Lombard

Chart 7: USD becomes global standard


Source: MacroHistory, TS Lombard

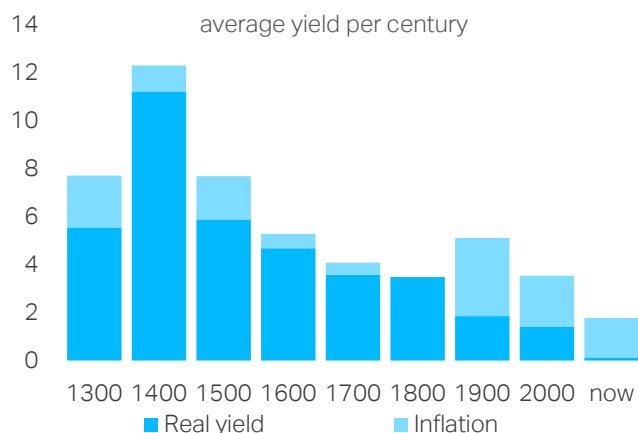
The era of monetary dominance

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

² This issue was acute in the 1960-1970s, when first William McChesney Martin "gave in" to President Johnson in 1965 (during the Vietnam War) and then President Nixon bullied Arthur Burns into supporting his re-election in 1972. ([see here](#))

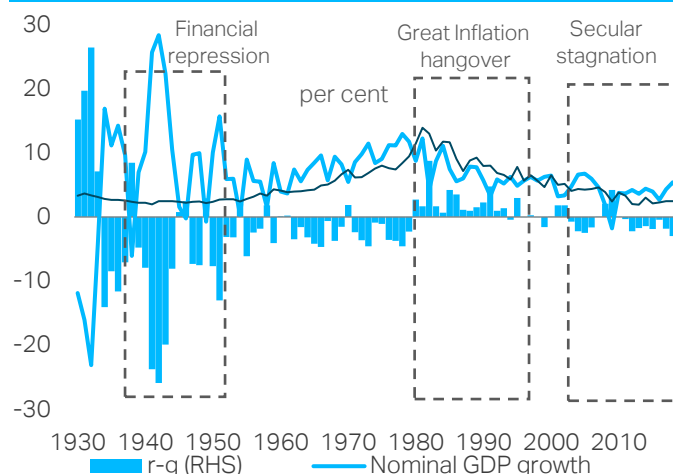
could do³. But after President Nixon broke the link between the US dollar and the price of gold in 1971, the world lost its 'nominal policy anchor'. The implications of this shift were felt surprisingly quickly. With policymakers free to use both policy levers with total discretion, inflation and budget 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. While orthodox Keynesian analysis had no solution for 'stagflation', new monetary ideas offered a solution – independent central banks that were free from short-term political demands.

Chart 8: Decomposition of nominal rates



Source: Bank of England

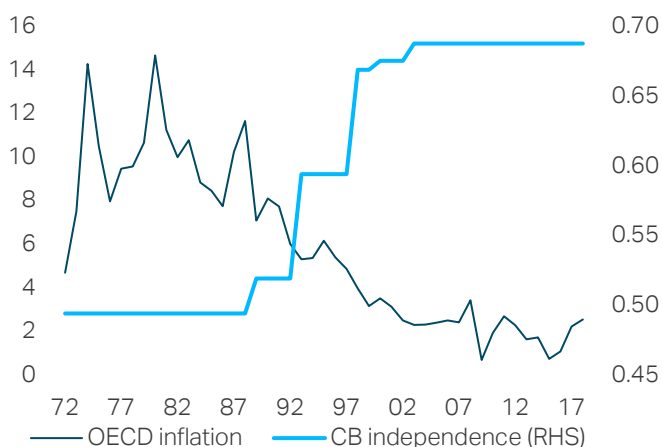
Chart 9: History of debt sustainability ($r-g^*$)



Source: MacroHistory, TS Lombard, *risk-free rate vs nominal GDP

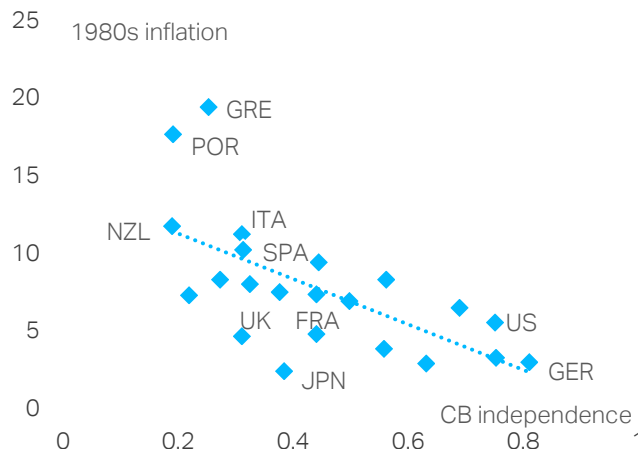
Since politicians always had an incentive to inflate their economies ahead of elections and couldn't be trusted to tighten policy when needed, the New Macroeconomic Consensus argued monetary policy must be in the hands of independent, 'conservative' central bankers that would solve the 'time inconsistency' problem and anchor inflation expectations at low levels. While the Phillips curve would disappear in the long term – structural forces ultimately determined 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

Chart 10: The era of CB independence



Source: Davide Romelli estimates for CBI, OECD

Chart 11: The rationale for independence



Source: Ed Balls, James Howat, and Anna Stansbury (2020)

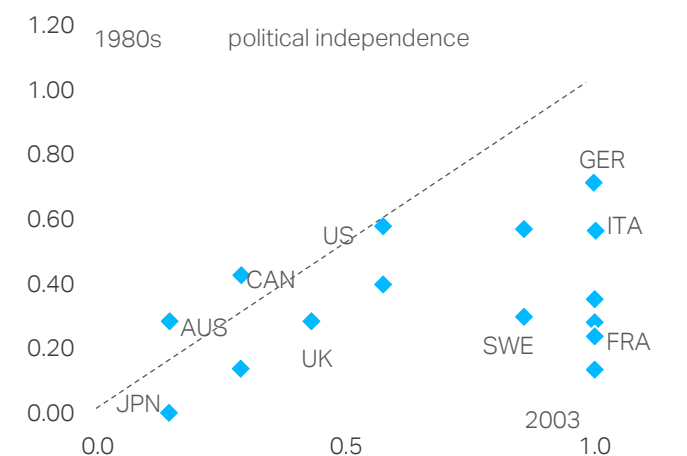
³ David Ricardo was one of the first economists to recognize this nominal policy constraint, blaming the Bank of England for creating runaway inflation during the 1800s when the convertibility of bank notes into specie was suspended in an effort to support the government's financing of the Napoleonic Wars (aka the 'Bullionist Controversy').

low inflation, they could minimise deviations in output from its underlying trend ('the divine coincidence' of monetary policy). This new consensus had empirical evidence to back it up – a huge numbers of studies showed a compelling correlation between independence and inflation. (A correlation that has actually broken down during the 2000s, with [no obvious link today](#).)

Monetary dominance

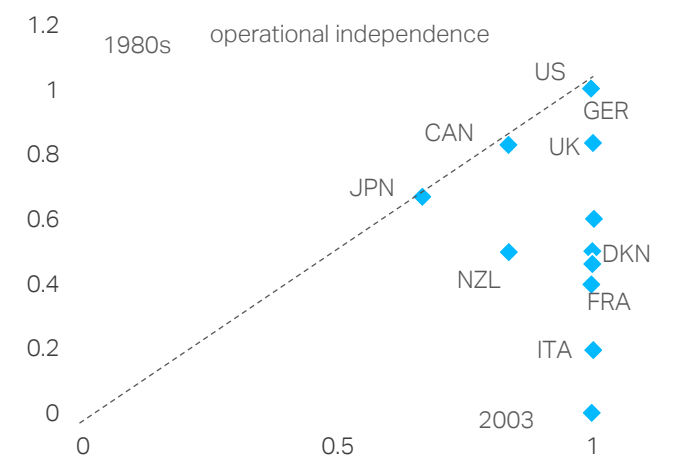
The Great Inflation of the 1970s ushered in a period of total monetary dominance, a shift that simultaneously downgraded the role of fiscal policy. Since nobody was prepared to let technocrats make decisions about how to tax and spend, there was no way round the 'time inconsistency' problem. Academics 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.

Chart 12: Political independence of CBs



Source: [Ed Balls, James Howat, and Anna Stansbury \(2020\)](#)

Chart 13: Operational independence



Source: [Ed Balls, James Howat, and Anna Stansbury \(2020\)](#)

Coordination outlawed

In the era of monetary dominance, there was no need for cooperation between central banks and the fiscal authorities. In fact, it was actively discouraged, if not outlawed (in the case of direct 'monetary financing'). If central banks spent their time supporting the public finances, they wouldn't be able to focus on price stability. Sure, the monetary authorities would continue to take account of fiscal policy when they set interest rates, but they believed they could use monetary policy to fully offset anything governments might try to do. In theory, the fiscal multiplier was now zero, leaving central banks in complete control of macro stabilization.

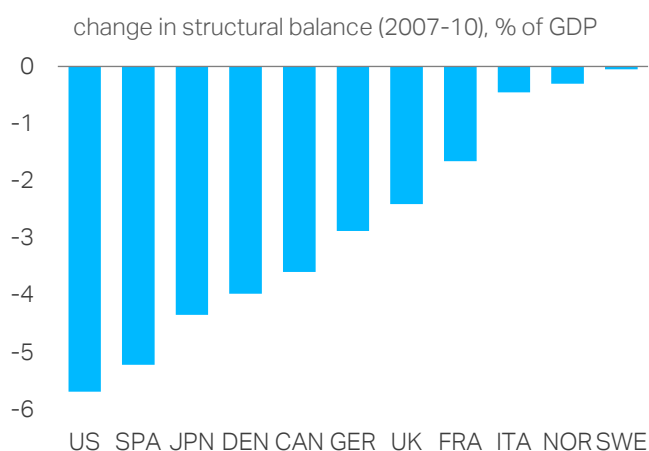
For decades, an extremely favourable global environment provided ample support for the new macro policy consensus. Long-term interest rates trended down, inflation stabilized at low levels – remarkably close to central bank's new targets – and most economies operated near full employment, delivering solid and sustained GDP growth. While there were minor disagreements about whether this Great Moderation was the result of 'good policy' or also had 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 premiere Gordon Brown to

believe macro policy reforms had contributed to a 'platform of stability'. Of course, we now know the Great Moderation wasn't as perfect as it seemed. Serious macro risks and imbalances were building up under the surface, which would have disastrous consequences in 2008.

2. COORDINATION FAILURE

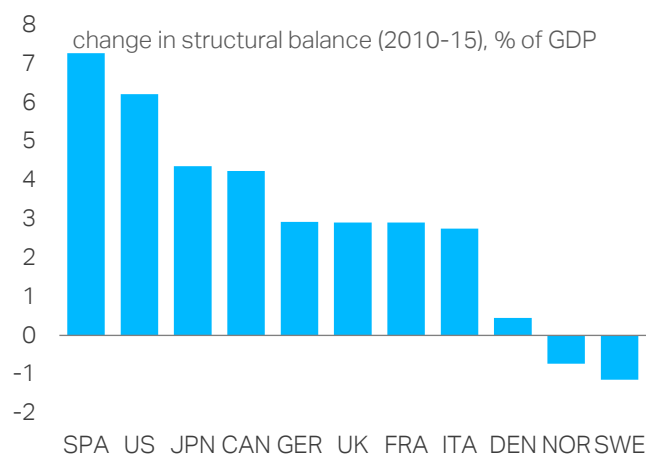
After the Subprime crash, it was reasonable to think the authorities might reconsider a macroeconomic policy framework that has totally missed – even contributed to – the biggest financial disaster since the Great Depression. And to some extent they did. Policymakers spent a lot of time thinking about 'macro-prudential' reforms, which would increase the resilience of their economies – especially their banking systems – to the global financial cycle. Yet nobody questioned the continued dominance of monetary policy. In fact, after a brief period at the depths of the 2008-09 recession when fiscal and monetary policy actually worked together to boost demand, the authorities pushed the era of monetary dominance to even wilder extremes. Just as central banks were trying to guide their economies out of the deepest slump in 70 years, most governments embarked on a massive programme of austerity. The result was an era of macro policy conflict unlike anything we have seen before (Chart 20 shows the US experience).

Chart 14: Fiscal easing in 2008



Source: OECD, TS Lombard

Chart 15: Followed by 'austerity'



Source: OECD, TS Lombard

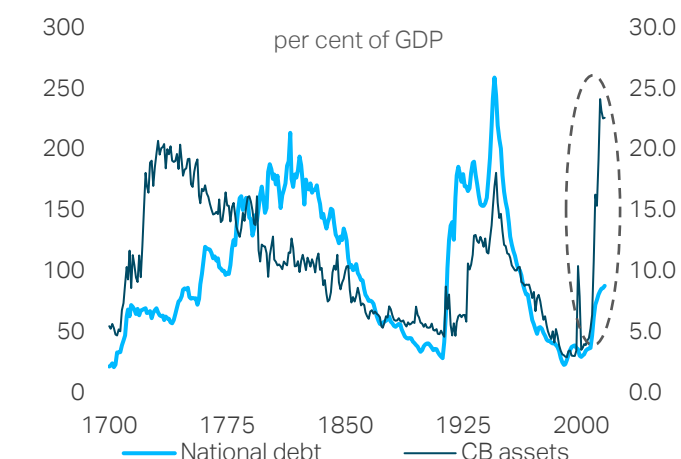
Monetary fanaticism in the 2010s

The government response to the financial crisis contradicted everything we thought we knew about fiscal policy. Elected officials were supposed to have an inherent 'inflation bias', which meant they would always overspend when given the opportunity. Yet central banks gave them this opportunity, doing things – such as buying huge quantities of government debt – which had some economists freaking out about 'debt monetization'. In 2010, a group of 23 economists wrote an 'Open letter to Ben Bernanke' (published in the Wall Street Journal) claiming these policies would eventually lead to 'currency debasement' and inflation spirals. So it seems odd government policy moved so firmly towards austerity, with large tax hikes and sweeping spending cuts, especially as this would cause real hardship to the people that elected them.

Some economists have argued fiscal policy is structurally prone to undermine monetary policy at the zero lower bound. Remember, many governments also responded with austerity in the

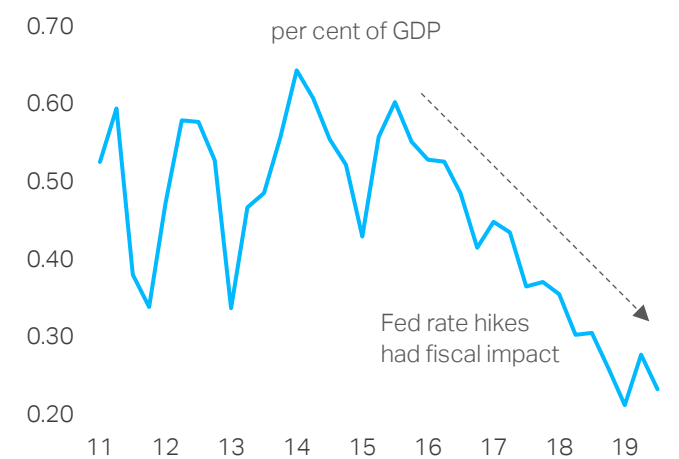
Great Depression, the last time that western economies fell into a liquidity trap. Perhaps these recessions are just an opportunity for those who believe in a smaller state to trim public expenditure. They can blame the recession on lax fiscal policy during the boom years. Households, particularly those with the median voters, are sympathetic to the argument that the government must “tighten its belt” at the same time as they do. There was certainly an element of this in the US and the UK, while German politicians took the opportunity to impose their traditional ‘ordoliberal’ ideas on the rest of Europe. But fear also played a role – nobody wanted to ‘turn into the next Greece’. Remember Bill Gross’ warning about the bed of nitroglycerine?

Chart 16: Not your usual ‘debt monetization’



Source: Bank of England, TS Lombard

Chart 17: QE wasn’t monetary financing

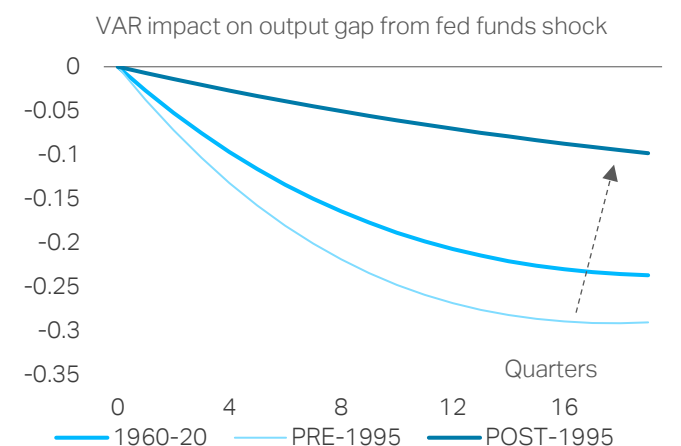


Source: Federal Reserve

Strategic failure

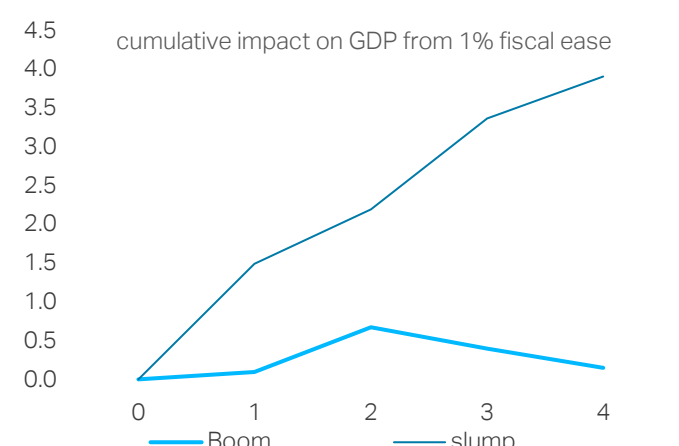
As ‘the Godfather’ of BoE independence points out, a government eager to implement austerity has first-mover advantage in a strategic game with the central bank. There is an optimal mix of monetary and fiscal loosening but the government can impose austerity, or put off controversial structural reforms, for its own political gain, because it knows that the central bank will then be forced to aggressively loosen monetary policy. The resulting mix of austerity and aggressive monetary loosening might suit the government politically, but is sub-optimal from society’s point

Chart 18: Monetary stimulus less effective



Source: TS Lombard estimates

Chart 19: Fiscal multipliers increased

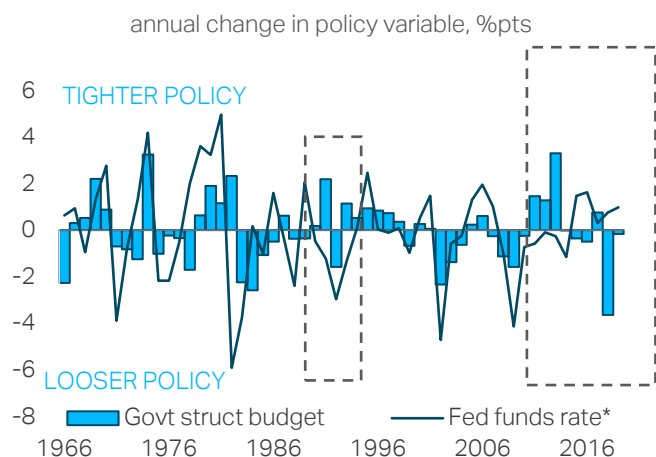


Source: Peterson Institute

of view. The central bank is left as “the only game in town” (Tucker, 2015). This was particularly dangerous in the 2010s because officials showed far too much faith in the potency of monetary policy. Past episodes of fiscal tightening, such as Bill Clinton’s in 1993, or even Margaret Thatcher in the 1980s, offered a distorted view about the likely benefits of ‘stimulative austerity’.

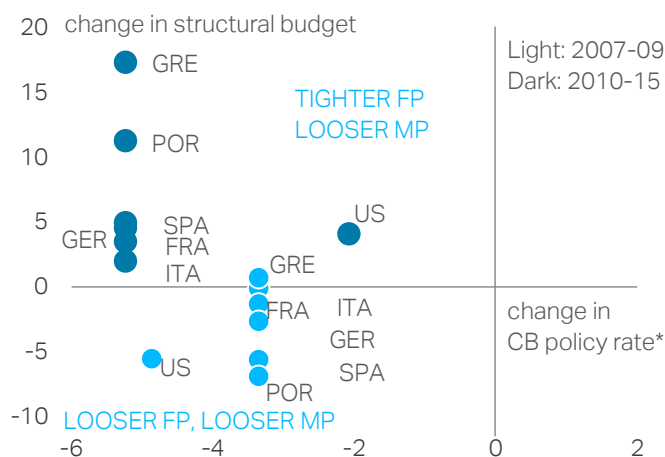
The main problem in the 2010s was that monetary policy had become much less effective than it was in the past, which meant there was no way central banks could offset the impact of government austerity. Private-sector spending had become less responsive to interest rates, while even large increases in asset prices (especially stock markets) failed to generate the ‘wealth effects’ policymakers had anticipated. And with monetary policy less potent, this meant the fiscal multiplier was much larger than the authorities had assumed. Forget the near-zero multiplier that had justified the separation of fiscal and monetary policy, it turned out the budget multiplier was definitely greater than one, probably in the 2-3 region. With this in mind, the dismal expansion of the 2010s – the slowest in modern times – becomes a lot less remarkable. Most countries could manage only short bursts of ‘reflation’, which rather ironically, always followed aggressive fiscal stimulus in China. You have to wonder what would have happened if other nations had used their public balance sheets in a similar way. We could soon find out.

Chart 20: The 2010s were uncoordinated



Source: OECD, TS Lombard, *includes ‘shadow’ Fed rate

Chart 21: Policy conflict worse in Europe



Source: OECD, TS Lombard, *includes shadow Fed and ECB rates

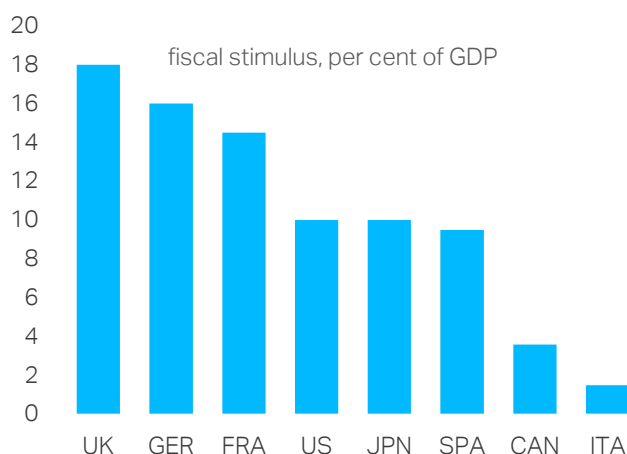
Bond signal ignored

With long-term interest rates reaching 700 year lows, the bond market was offering an unambiguous signal that the global policy mix was wrong. Yet apart from President Trump’s programme of tax cuts in 2017 – which was extremely poorly designed in terms of its stimulus properties – most governments ignored this signal. Up until a few months ago, the IMF was forecasting only a minor easing in the G20 public finances over the next decade. With COVID-19 plunging the world into recession, those forecasts will have to change. But even before this pandemic, it was clear the consensus on fiscal policy – at least among economists – was starting to shift. Most people realized that fiscal tools would have to do more to support the global economy over the next decade. The only question was about whether governments would do this themselves, or if central banks would have to move more forcefully into fiscal space. The era of monetary dominance looked doomed, with fiscal dominance set to take over.

3. FISCAL ACCORD

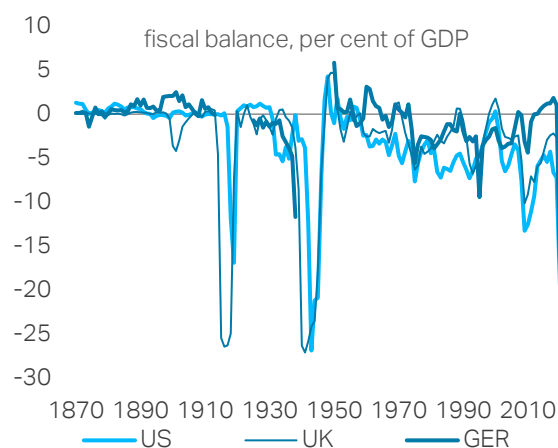
After a decade of pulling in different directions, COVID-19 has forced governments and central banks to work together to try to prevent a new economic depression. We are seeing fiscal stimulus of 'wartime' proportions, while central banks simultaneously expand their balance sheets at an unprecedented pace, buying huge quantities of public and private securities. Far from trying to enforce the strict separation of fiscal and monetary actions, the authorities have given the impression they are actually coordinating their response. In the US, the Fed and the Treasury have announced joint initiatives to support credit markets, while the Bank of England has even offered an unlimited credit line to the UK government⁴. While the prospect of policy cooperation has stoked accusations of 'monetary financing' and already has some investors fretting about inflation, we suspect these actions are a lot less dangerous than people realize. After all, it won't be hard to come up with a better policy mix than what happened in the 2010s.

Chart 22: The 2020 stimulus



Source: TS Lombard estimates

Chart 23: Wartime-style spending



Source: MacroHistory, TS Lombard

This is not 'debt monetization'

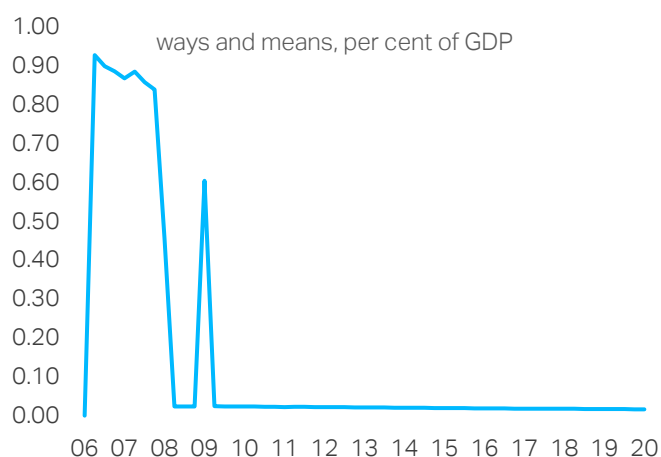
Whenever central banks engage in large-scale asset purchases, you will always find some economist ready to accuse them of 'debt monetization' – especially if governments are simultaneously running big budget deficits. This was certainly the case a decade ago, when officials first presented the idea of QE. But there is a clear misunderstanding about what monetary financing actually means. True monetary financing means the central bank must generate enough inflation such that the treasury earns sufficient seigniorage to offset the cost of any additional public spending. There must be no increase in public debt, which includes the central bank's balance sheet, since this is also part of government (something the authorities were keen to ignore as they entered the era of monetary dominance). To engage in monetary financing, the central bank must issue permanently zero-interest liabilities. 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 sheet. Since QE creates interest-bearing reserves, it is not monetary financing. To understand why, look at what happened when the Federal Reserve

⁴ The BoE caused a stir when it said it would provide unlimited funds to the government's 'ways and means' account, with accusations of monetary financing. The same thing happened in 2008, where it hit 1% of GDP (Chart 24). This account is temporary (so not monetary financing!) and just a way to give the Treasury access to large sums quickly.

eventually raised interest rates in 2015 – its remittances to the Treasury immediately went down; which means there was an implicit fiscal tightening (the government had less resources).

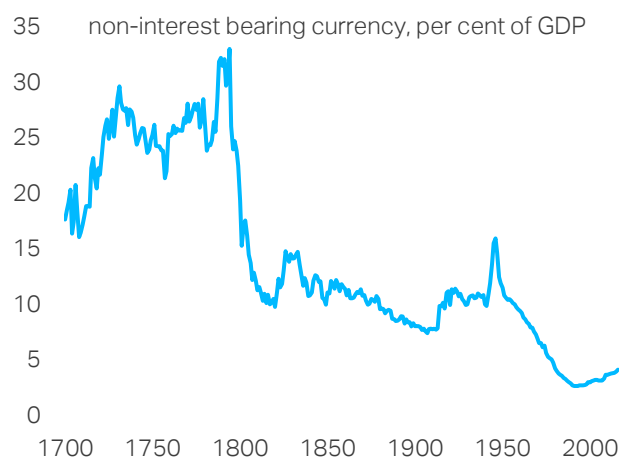
Gerard MacDonnell at FrontHarbor uses a simple numerical example to illustrate the point. Suppose the government does a fiscal expansion worth \$500 billion for two years, supported by the central bank doing \$1 billion in QE (which creates \$1 billion in excess reserves on the liability side of the central bank's balance sheet). If economic conditions improve enough to prompt higher interest rates, the central bank would have to pay the market rate on those reserves. Piercing the Fed-Treasury veil, this scenario is identical, from a public finance perspective, with what would have happened if the Treasury had financed the fiscal expansion with overnight bills and no help from QE. The central bank didn't need to get involved. In reality, QE really does nothing but shorten the maturity of the government's liabilities. Hardly hyperinflationary...

Chart 24: UK 'ways and means'



Source: ONS

Chart 25: Monetary financing is impossible



Source: Bank of England, TS Lombard

Monetary financing is hyperinflationary (and impossible)

The people warning about monetary financing are right about one thing – it would be massively inflationary. This is not a side-effect – it is the whole point of doing it. The amount of inflation required to 'inflate away the debt' depends on the size of the non-interest-bearing currency stock relative to GDP. The issue today is that this ratio has trended lower for centuries (Chart 25), which means a huge increase in inflation would be necessary even for a relatively small money-financed programme of fiscal spending. Helpfully, [staff at the Federal Reserve have already calibrated the scale of this problem](#), showing that a 1% increase in money-financed government spending would require a 25% increase in the Consumer Price Index. This is obviously something no major central bank would ever contemplate, especially if they wanted to retain their inflation targets. Even if they adjusted their objectives, by e.g. adopting a price-level target – which in principle could incorporate a period of 'overshooting' to allow some monetary financing – the scale of the overshoot would be so large, central banks would inevitably lose control⁵.

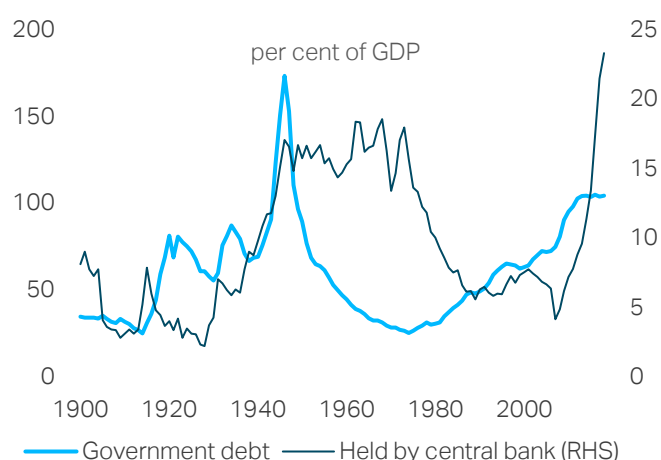
Fiscal policy in disguise

Many of the 'helicopter money' schemes economists are pushing today are not monetary financing, but rather ways to conceal fiscal policy on central banks' balance sheets. At best, the

⁵ Fed staff remind us about what happened during the gold standard. Central banks would freeze gold convertibility and print money during times of war. Once they had inflated away the debt, they could re-establish their pegs to gold, which would credibly commit them to a new nominal anchor. Central banks do not have this option today.

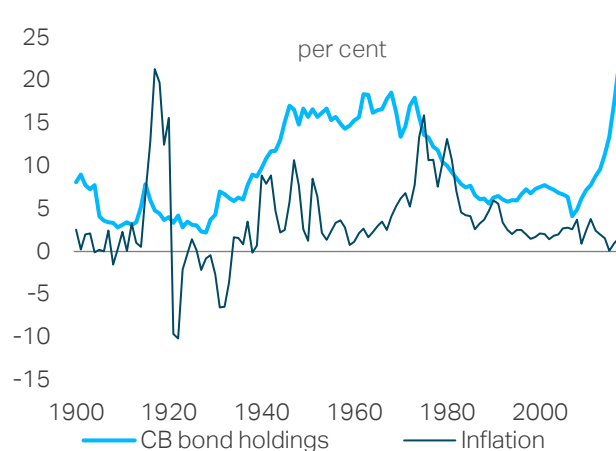
monetary authorities are temporarily transferring spending power to national governments. This is true not only for QE, but as also for 'yield caps' and even some of the more sophisticated ideas such as the ECB's TLTRO programmes (something the BoJ now seems to be copying). With bond yields at 700-year lows, you have to wonder why central banks even need to get involved in fiscal policy. The ECB is really the only central bank that has a good excuse for tinkering around in this way because many EMU governments are not allowed to do what is necessary in terms of fiscal policy. But, if you take a step back, even the ECB's much celebrated dual-interest rate system is actually a poorly designed fiscal stimulus⁶. No self-respecting politician would come up with a scheme that involved giving tax rebates to banks in the hope that they increase their lending to the private sector. Surely it wouldn't take a true pan-European fiscal authority long to find better way to stimulate the euro-area economy using taxpayer money.

Chart 26: History of policy cooperation (OECD)



Source: IMF (2013), [UCL \(2018\)](#)

Chart 27: Rarely associated with inflation



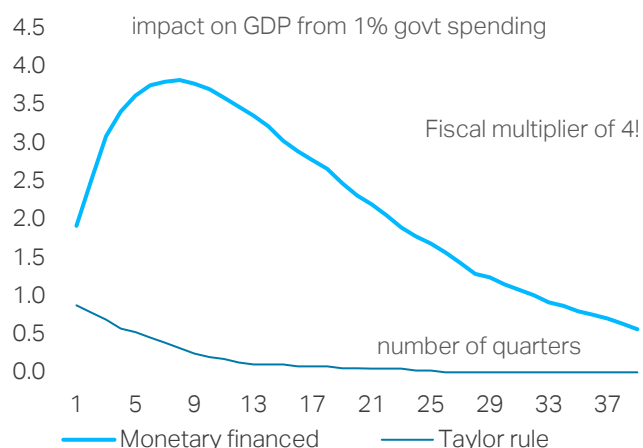
Source: IMF (2013), [UCL \(2018\)](#)

Could we repeat the 1940s?

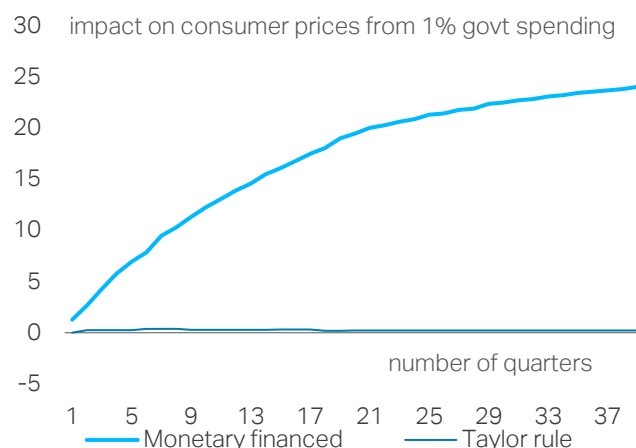
For now, governments are spending like they are fighting a war and central banks are engaged in massive QE. But what happens next? We think COVID-19 is morphing into a serious recession, which will persist into 2021. On the fiscal side, this will require a further budgetary easing. For central banks, the most immediate question is whether they want to continue to target the size of their balance sheets (e.g. purchase \$ x billion debt securities a month), or whether it makes more sense to try to cap bonds yields – as the Bank of Japan is doing. The main advantage of yield targets is that central banks might actually be able to reduce their QE purchases, especially if those caps are credible or – more likely – there is no tendency for yields to rise anyway. This is an idea officials at the Federal Reserve have been discussing for some time⁷, drawing on the experience of the 1940s, when the central bank used a similar system to support the war effort.

⁶ Note, the ECB imposes a negative interest rate on reserves, which is like a 'tax' on banks. It then encourages banks to take log-term loans from the central bank, on which it charges another negative interest rate (a subsidy). By widening the spread between the two, the ECB is effectively paying banks a fee if they lend to the private sector (a condition for the loans). This also involves fiscal transfers across the euro area, because banks in the North tend to pay the charge on their deposits, while banks in the South tend to use the TLTROs. Recent estimates suggest the ECB is currently paying banks a net subsidy of around 3 billion euros – which will only increase with future TLTROs.

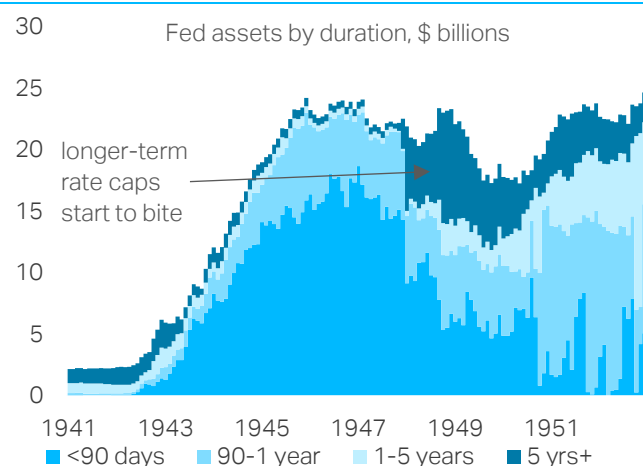
⁷ Fed staff first considered this idea in the early 2000s ([see here](#), and [here](#)), then again during the 2008 recession ([see here](#)). More recently, the NY Fed updated this analysis ([see here](#)). This Brookings paper is also useful ([see here](#)).

Chart 28: Monetary financing v stimulative


Source: [Federal Reserve \(2017\)](#)

Chart 29: But highly inflationary


Source: [Federal Reserve \(2017\)](#)

Chart 30: Impact of Fed yield 'caps'


Source: Banking and Monetary Statistics, 1941-1970,

Chart 31: Long history of Fed balance sheet


Source: Federal Reserve, TS Lombard

Ben Bernanke, always found at the forefront of monetary innovation, used [his blog a few years ago](#) to explain how a yield-targeting regime would work. He said the Fed could announce a cap on the two-year Treasury rate 'at one percent or less' and enforce this ceiling by standing ready to buy any Treasury security maturing up to two years at a price that corresponds to a return of one percent (current FOMC member [Lael Brainard suggested something similar](#), pegging 1-2 year yields). Bernanke also showed how the scheme would have an 'automatic exit'. Suppose, for example, the Fed announced on June 1 that it stood ready to buy any Treasury security that matures on June 1 2022 or earlier at fixed prices corresponding to a yield of one percent. As time passes, the May 1, 2022, terminal date would not change (unless extended); so the maturities of the securities the Fed is committed to buy would decline, and the program would automatically end on the specified terminal date. Even more appealing, central banks could use the scheme to reinforce their forward guidance on policy rates (rather than rely on QE).

One again, this is not monetary financing – up until the point where the yield cap compromises the central bank's inflation objective (at which stage it would presumably abandon the cap). At best, the central bank would be temporarily transferring some spending power to the Treasury.

The main action would take place on the fiscal side, where the government's budget stimulus would provide direct support to the economy. But there are dangers with such a strategy, which is where the Fed's experience during the 1940s comes in. In April 1942, in an effort to reduce the cost of financing the war, the Fed began pegging the interest rate on Treasury bills at 3/8 percent and enforcing a ceiling of 2-1/2 percent for the rate on long-term Treasury debt. The rate on bills was allowed to rise modestly in 1947, but the 2-1/2 percent ceiling on bond yields was maintained for almost a decade, until 1951. For much of the period – especially 1942 to 1946 – the cap on longer term yields didn't bite and the system worked well. But after 1946, the central bank became concerned about inflation, especially after wage and price controls were abandoned. The Fed was able to maintain the peg, but only by buying huge quantities of long-dated securities. While the recession of 1948 temporarily eased the conflict, it re-emerged as the US entered the Korean War in 1950, leading to a bitter confrontation with the Treasury.

Inflation isn't inevitable

In the current context – where there is really no sustained tendency for bond yields to rise – the imposition of yield caps by the Federal Reserve or other central banks really wouldn't make much difference to the global inflation outlook. Ultimately, the inflation question – which is a longer term issue – comes down to two crucial questions: (i) Will governments continue to use large-scale fiscal stimulus even after their economies have recovered from COVID-19 (or revert to the austerity of the 2010s)? And: (ii) if output gaps eventually close and inflation starts to rise, will central banks tighten policy or attempt to suppress government borrowing costs. For inflation to become a serious problem, we will need to see a sustained multi-year fiscal expansion, plus an era of 'fiscal dominance' in macro policy, where central banks surrender their inflation targets in the interest of exiting what has already been a decade-long liquidity trap. This is certainly possible – [for the first time in 30 years we have a clear inflation bias in our policy frameworks](#) – but it will not happen quickly. In fact, [a recent UCL paper](#) details lots of episodes of fiscal-monetary cooperation, where central banks used their balance sheets to engage in fiscal actions (rather than true monetary financing) without causing runaway inflation. And with a now notoriously flat Phillips curve, this seems like the perfect time to experiment.

A new 'cooperative' mechanism

Right now, there is no conflict between fiscal and monetary policy. But, as the 1940s showed, problems could emerge at a later date. If central banks want to protect their long-run independence, they should take the initiative and set the 'rules' for policy coordination. In doing so, we might even end up with a mechanism that eliminates the lower bound on monetary policy by allowing more powerful fiscal-monetary operations than anything the authorities are currently considering. The [paper from Harvard Kennedy School](#) makes some sensible suggestions, urging coordination based on three criteria: (i) The central bank should always be the institution to 'trigger' coordination (both initiating it and ending it, including an 'inflation knockout'); (ii) It should protect the democratic control of fiscal policy (i.e. politicians must decide how to spend taxpayer money); and (iii) Cooperation should be strictly limited to the zero bound.

As usual, Ben Bernanke got to this idea first, [with a blog explaining how a similar mechanism might work in the United States](#). He said the Federal Reserve could credit the Treasury's bank account with the amount of money it thinks the government needs to spend for the Fed to meet its inflation target. This scheme sounded radical at the time, but it is actually a brilliant way to ensure the continued independence of monetary policy (with the associated 'nominal anchor' this provides) with a mechanism that allows forceful policy coordination when it is needed. And it should be possible to come up with similar mechanisms in other parts of the world, including the UK, Japan and [even the euro area](#). As we enter an era where fiscal policy will have to play a much

greater role in supporting the economy, this is surely a much better policy regime than one that repeats past mistakes or tries to conceal fiscal actions with central banks.

Bottom line

Monetary and fiscal policy are working together again. There is nothing particularly dangerous or inflationary about this sort of cooperation. In fact, it should be a vast improvement on the policy mix of the last decade, which only added to the deflationary pressures in the global economy. Ultimately the inflation consequences of cooperation will depend on decisions that will be taken in the future, not what is happening today. Will governments continue to use fiscal stimulus even when the current recession is over? How will central banks respond if bond yields and inflation start to rise? Still, for the first time in more than 30 years, there is now a clear inflation bias in our policy regimes, which could ultimately threaten the independence of central banks. The monetary authorities should act ahead of these tensions, making their cooperation explicit and transparent, rather than trying to hide fiscal actions on their bloated balance sheets.