

Coppola, Frances

**Article**

## The political economy of inflation

European Journal of Economics and Economic Policies: Intervention (EJEEP)

**Provided in Cooperation with:**

Edward Elgar Publishing

*Suggested Citation:* Coppola, Frances (2021) : The political economy of inflation, European Journal of Economics and Economic Policies: Intervention (EJEEP), ISSN 2052-7772, Edward Elgar Publishing, Cheltenham, Vol. 18, Iss. 3, pp. 331-343, <https://doi.org/10.4337/ejeep.2021.03.07>

This Version is available at:

<https://hdl.handle.net/10419/277523>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



<https://creativecommons.org/licenses/by/4.0/>

# The political economy of inflation

Frances Coppola

BMus, London University (Royal College of Music) and Executive MBA, City University Business School, London, UK

*For the last 40 years, macroeconomics has been dominated by Milton Friedman's view that inflation occurs when the supply of money rises more quickly than economic output – 'too much money chasing too few goods', as the saying goes. If inflation is always due to an imbalance of money supply and output, central banks alone determine the path of inflation, and fiscal policy merely has a redistributive function. This paper draws on historical and empirical evidence as well as recent theoretical literature to show that this view is mistaken. Monetary policy has redistributive effects, and fiscal policy affects the money supply. It is therefore impossible to separate them in practice. Both fiscal and monetary policy have inflationary consequences, and because their distributional effects are different, monetary policy cannot fully offset fiscal decisions. Fiscal and monetary policy are influenced by political decisions and are themselves political in nature. Since inflation reflects spending and saving patterns which are affected by political choices, it is fundamentally a political phenomenon.*

**Keywords:** *inflation, money supply, monetary policy, fiscal policy, politics*

**JEL codes:** *E31, E4, E5, E6, P16, P44*

## 1 A CONVENTIONAL MACROECONOMIC VIEW OF INFLATION

*'Inflation is always and everywhere a monetary phenomenon in the sense that it is and can be produced only by a more rapid increase in the quantity of money than in output.'*

Milton Friedman (1970: 11)

The above statement is a microcosm of what has become the conventional macroeconomic view of inflation. When too much money is chasing too few goods and services, prices rise. Friedman expresses it formally in the familiar quantity of money equation:

$$MV = PQ.$$

The simplistic view of the quantity of money theory (QTM) says that increasing the quantity of money in circulation always and everywhere raises prices. We could call this the 'lump of output' fallacy, since it presupposes that production cannot respond to increases in the money supply. If the supply side is unable to respond to money-supply increases by increasing production of goods and services, it either rations goods and services (we saw supermarkets rationing goods during the COVID-19 pandemic) or raises prices to drive out marginal purchasers. Since the majority of consumers are also workers, rising consumer prices in turn lead to rising wage demands. The result is a wage–price spiral.

The circumstances under which this scenario might play out are quite specific. It requires a closed economy which is either at full employment or has resource constraints limiting production, such as energy shortages.

Received 27 April 2021, accepted 25 May 2021

If the economy is not at full employment and has no resource constraints, then the QTM says that increasing the amount of money in circulation should, by increasing demand for goods and services, encourage firms to increase production to meet demand. This will mean rising investment, falling unemployment and increasing output. There might be a short-term rise in inflation, because firms can take a while to increase production, but over the medium term inflation should stabilize. If it does not, then the economy is 'overheating': the money supply needs to be reduced to depress demand so that firms reduce production, cut wages and lay off staff.

Both this and the previous scenario imply that there is a trade-off between inflation and unemployment. Inflation will rise if the money supply is increased when the economy is at full employment, because firms will compete for scarce labour, driving up wages and feeding higher labour costs through to prices. So keeping inflation under control necessarily means keeping the money supply below the level at which inflation will start to rise. This implies tolerating some unemployment, and by extension, somewhat lower output than would be the case if employment were high enough to risk inflation taking off.

This inflation vs unemployment trade-off is the Phillips curve, and the rate of unemployment at which inflation is stable is the 'non-accelerating inflation rate of unemployment', or NAIRU. These are at the heart of current conventional macroeconomic thinking about inflation.

The stagflation of the 1970s called into question the simple Phillips-curve relationship between inflation and unemployment: clearly, it was possible to have rising unemployment and rising inflation simultaneously. So the model was extended to incorporate inflation expectations. The expectations-augmented version of the Phillips curve is still used by central banks today.

If the economy is open, and production is constrained by full employment and/or resource constraints, then raising domestic demand will draw in imports. Indeed, as production can take a while to respond to demand stimulus, imports are likely to increase in the short term even if the economy is not at full employment and has no resource constraints. If increasing the money supply causes the exchange rate to fall, then inflation could increase because of rises in the price of imported goods. Importantly, inflation can rise because of a falling exchange rate even if the economy is far from full employment, if there is substantial import penetration – for example if the country is dependent on imported oil or foodstuffs.

When the country is dependent on imports either for essential consumption (such as foodstuffs) or for essential production inputs (such as oil or raw materials), reducing domestic demand for imports necessarily means that domestic production falls and unemployment rises. This can appear to be the same trade-off as the Phillips-curve relationship. But there are important differences, the first being that there is no NAIRU when inflation is caused by a falling exchange rate in a country dependent on imports. Unemployment can rise to the skies without making much of a dent in inflation. Only stabilizing the exchange rate can bring inflation under control.

This is true whether the money supply increase arises from government spending or central-bank monetary policy. However, the means used to increase the money supply may affect the rate of inflation. Monetizing a government deficit, for example, could destroy confidence in the value of money, resulting in exchange-rate collapse and runaway inflation.

## 2 FRIEDMAN'S EQUIVALENCE: A CHILD OF ITS TIME

The political economy of the past dominates the inflation literature in conventional macroeconomics. Yet the language that is used about inflation, and the theories that

attempt to explain it, largely ignore the political circumstances under which inflation, or disinflation, or deflation, take hold. It is as if they were created in a sterile vacuum, rather than being forged in the political turmoil of the 1930s or the 1970s.

In the 1950s and 1960s, developed economies were largely closed: capital and credit controls were ubiquitous, there was a fixed exchange-rate system, and many had import controls. They also had what was then regarded as full employment (though women were much less likely to be in the workforce than they are now): indeed, they had suffered a negative shock to the working-age population, which would naturally tighten the labour market. Despite this, full employment was their principal policy goal, and they directed fiscal and monetary policy to achieving and maintaining it: inflation, it was thought, could be controlled through prices and incomes policies. But prices rose inexorably, and wage restraint agreements with unions were inevitably discarded when union members found their wages eroded by price rises. The collapse of the Bretton Woods gold-backed exchange-rate system in 1971, and the oil-price shock of 1973, simply added fuel to the inflationary fire.

For the UK, the final straw was the Conservative government's ill-judged attempt to stimulate the economy with a combined fiscal and monetary boost between 1971 and 1974. By 1975, inflation was touching 25 per cent and the pound's exchange rate was falling rapidly (McIvor 2020).

Friedman's monetarist revolution grew from the failure of the 'Keynesian' policies of the 1960s and the stagflation of the 1970s. It is thus deeply rooted in the political economy of its time.

But the economic beliefs that Friedman rejected themselves grew from an earlier political economy. The 'Keynesian' emphasis on full employment was a response to the Depression, when many developed countries – and especially the US – experienced very high unemployment. So too was the belief that monetary and fiscal policy must spur high growth rates to prevent the economy stagnating. Those who had lived through the 1930s, or (in the UK) the 1920s, had experienced debt deflation, not inflation. And they defined the economic policies of the 1960s and 1970s.

Similarly, those who grew up in the inflationary 1960s and 1970s have defined the economic policies of our time. Inflation has now been under control for a quarter of a century: indeed, for the past ten years (and far longer in Japan) the principal battle of our time has been against disinflation. But the literature on inflation in conventional macroeconomics is still dominated by the political economy of the 1970s. We need to update our thinking about inflation to take account of the political economy of today.

Today's economies are much more open than the economies of Friedman's time. Capital and credit controls have been lifted around the world, though many developing countries still retain exchange controls. Barriers to trade are far lower than they were 50 years ago, though they have risen somewhat in the last few years. Relatively free movement between many countries, coupled with much easier travel, have made it possible for many people to live and work far from their countries of origin.

Today's labour markets are very different too. We do not even know what 'full employment' means any more. The mid-twentieth-century notion that a man worked full time from 16 to 65 and then retired, while a woman worked until she got married and then became a homemaker, is long dead. Part-time, flexible, temporary and casual working has risen, while full-time working has somewhat declined; and as firms have found creative ways of avoiding employment obligations, the boundary between 'employed' and 'unemployed' has become very blurred. Open borders, extended supply chains and free movement of capital have enabled companies to offshore production to places with lower labour costs. Since the 2008 global financial crisis, underemployment and low wage growth have arguably been better indicators of labour market slack than unemployment.

There are still resource constraints, of course. And for import-dependent countries (except for the US, which has the luxury of being able to pay for all its imports in its own currency), the danger of foreign-exchange (FX) crisis never quite goes away, though for developed countries it is considerably mitigated by central-bank swap lines. Venezuela's hyperinflation is primarily an FX crisis caused by a severe terms-of-trade shock, the bankruptcy of the state-owned oil company and the failure of an exchange-rate peg (Coppola 2015). Some things never change.

Now, unprecedented increases in the money supply in response to the COVID-19 pandemic have resurrected old fears about inflation. Friedman's equivalence is back in the news again: indeed, in the nascent cryptocurrency ecosystem, an even more extreme version is gaining traction, one that simply defines all expansion of the money supply as inflation, regardless of the response of output. The supply side is damaged by measures to contain the pandemic, and governments are giving out enormous sums of money to people and businesses. Because the demand side has also been suppressed, saving rates have shot up. And governments are running enormous deficits because of unprecedented levels of fiscal support for economies in lockdown.

All of this creates huge uncertainty about the future path of inflation. Some fear that pent-up demand and supply-side damage will cause high inflation rather than vibrant recovery (*Financial Times* 2021a). But others argue that inflation will be dampened by high unemployment, including disguised unemployment among those supported by measures such as the UK's Job Retention Scheme. They believe that as economies reopen, growth, not inflation, will return (*Financial Times* 2021b).

The path of recovery after the 2008 global financial crisis suggests that neither view is entirely correct. Consumer price inflation rose in 2010–2011, touching 5 per cent in the UK and leading the European Central Bank (ECB) to raise interest rates. But this spike was short-lived: as the eurozone sovereign-debt crisis gathered pace in 2011–2012, inflation fell again. Over the next few years, unemployment in the US and UK fell to its lowest since the early 1970s. But the feared 1970s-style wage–price spiral, or worse, Zimbabwean-style hyperinflation, never happened. And nor did much in the way of growth. Exceptional monetary stimulus neither triggered inflation nor kickstarted growth, and exceptionally low unemployment did not force employers to give in to large wage demands and raise prices to compensate. The relationships between money supply and output, and unemployment and inflation, appeared to have broken down.

However, monetary stimulus was accompanied by fiscal consolidation in developed countries, often targeted at those with the greatest marginal propensity to spend. There were also measures to increase the participation rate among marginal groups such as single mothers, sick and disabled people, and people over the age of 60. Fiscal tightness offset easy money, and rising participation rates kept the labour market slack even as measured unemployment rates fell.

Had there been combined fiscal and monetary stimulus, as in the early 1970s, and no labour market reforms to increase participation rates and cut welfare-benefit bills, would inflation have taken off, or would growth have improved? We do not know. But it seems clear that models based on the political economy of the 1970s now fail to adequately explain or predict the behaviour of inflation, unemployment or growth.

### 3 DEPOLITICIZATION OF MONETARY AND FISCAL POLICY

At the heart of the monetarist revolution is the notion that monetary and fiscal policy are different. Monetary policy is concerned with the creation and destruction of money, fiscal

policy with the distribution of money. Since inflation is always and everywhere caused by changes in the supply of money, only monetary policy influences inflation. Fiscal policy can only be inflationary if it is combined with monetary policy:

Government spending may or may not be inflationary. It clearly will be inflationary if it is financed by creating money, that is, by printing currency or creating bank deposits. If it is financed by taxes or by borrowing from the public, the main effect is that the government spends the funds instead of the taxpayer or instead of the lender or instead of the person who would otherwise have borrowed the funds. Fiscal policy is extremely important in determining what fraction of total national income is spent by government and who bears the burden of that expenditure. By itself, it is not important for inflation. (Friedman 1970: 11)

While monetary policy remained under government control, there was always a risk that money would be created indiscriminately to fund profligate public spending, and that this would cause runaway inflation. The risk was still present even if the central bank was responsible for monetary policy, because the government could force a captive central bank to finance its spending. Sargent/Wallace (1981) showed that when the central bank is forced to monetize government spending *ex post* to prevent sovereign default, it is unable to keep inflation under control.

The solution was clear. Create independent central banks over whose activities governments would have no control, and give them total control of monetary policy. Central banks alone would decide when and how to inject new money into the economy, or remove existing money from the economy, and their decisions would be governed by an inflation target. Governments would be able to spend only what they could raise in taxes or borrow on capital markets.

Thus were born today's independent central banks. Central banks are prohibited by law from directly financing government spending, and governments are prevented by law from interfering in their monetary policy decisions. Most central banks are at least accountable to their governments for their ability to meet their inflation target, which in many cases is set by the government. But the ECB, the most independent of them all, sets its own mandate and is accountable to no government. It marks its own homework.

However, the idea that monetary and fiscal policy could be rigidly separated by means of independent central banks quickly ran into trouble. Fiscal theorists pointed out that government spending could cause inflation even when it wasn't being monetized by the central bank. Persistently large deficits financed by selling bonds amounted to a commitment to create money in the future, which the central bank would be obliged to fulfil even at the expense of inflation. They were therefore intrinsically inflationary. So governments not only must relinquish the power to create money in the present, they must also be prevented from making spending decisions that commit central banks to creating money in the future.

In response to the perceived need to prevent inflationary money creation both now and in the future, governments set fiscal rules to restrict not only their own spending but that of all future governments. Many wrote into national law, and even into their constitutions, 'balanced budget' requirements and 'debt brakes'.

But this didn't satisfy economists who preferred the whole apparatus of money creation, both now and in the future, to be beyond political control. They called for independent fiscal councils to set the limits of government spending. All government would be able to do is decide how to distribute the amount of money set by the fiscal council, which in turn would be determined by the central bank's monetary objectives.

This 'depoliticization' of money creation was itself a political decision. The generation that lived through the 1960s and 1970s hates and fears inflation, and many of them blame government for it. To them, ending government's ability to generate inflation seemed

self-evidently the sensible thing to do. So they voted in governments that would voluntarily relinquish control first of monetary policy, and later – particularly in Europe – large parts of fiscal policy too. The euro is perhaps the ultimate expression of that generation's fundamental distrust of government.

Independent central banks, fiscal councils, and laws constraining government spending and central-bank money creation have their roots in the political economy of the inflationary 1970s. They replaced the previous paradigm that was rooted in the political economy of the depressed 1930s. Now, 40 years on, the political economy has moved on, and the models and institutions of the 1970s may no longer be fit for purpose.

#### 4 THE GREAT MONETARIST EXPERIMENT

The disorderly collapse of Lehman Brothers in 2008 ushered in a decade of monetary experimentation. The prospect of a second Great Depression created a golden opportunity for monetarists to prove that deflation was always and everywhere a monetary phenomenon. So central banks cut interest rates to nearly zero and bought billions of assets held by the private sector, paying for them with newly created money. If Friedman was right, all this new money would kickstart growth and increase inflation.

Initially, central banks were supported by coordinated fiscal expansion. But by 2010, rising government debt and deficits were spooking investors. Governments, fearful of adverse credit ratings and rising borrowing costs, turned to fiscal austerity to reduce their deficits. From then on, central banks struggled to maintain economic growth against considerable fiscal headwinds. The result was a decade of stagnation, occasionally relieved by flashes of growth whenever one government or another briefly loosened its tight grip on the fiscal finances.

This stagnation did not resemble the stagflation of the 1970s. There was little inflation, and by the end of the decade, not much unemployment, except in the countries worst affected by the eurozone crisis. But wage growth was flat, while cuts to benefits and services disproportionately affected the poorest. And bank lending, which central banks had expected would take off in response to the vast increase in bank reserves caused by quantitative easing (QE), remained subdued.

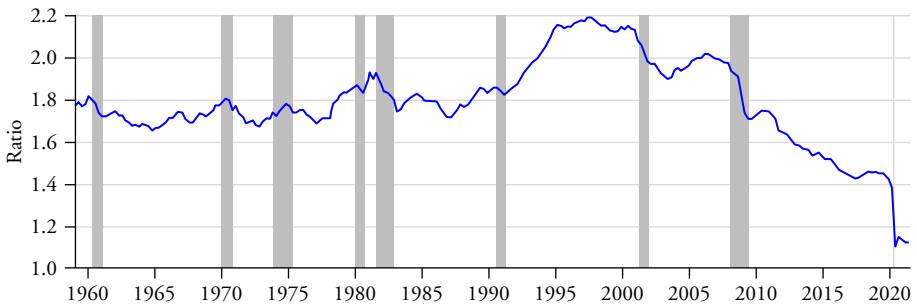
Whether this was because banks didn't want to lend or people didn't want to borrow was unclear. The Japanese economist Richard Koo (2011) diagnosed post-crash economies as suffering from a 'balance sheet recession' like that which had caused Japan's 'lost decade', and warned that a highly indebted private sector would not want to borrow while it was repairing its balance sheets. But others observed that damaged bank balance sheets and the regulatory imperative to reduce risky assets were restricting bank lending, particularly to smaller businesses and less creditworthy households (cf. for example McAndrews 2015).

As the decade progressed, it became clear that monetary policy did not by itself revive stagnant economies. Increasing the supply of  $M$  did not result in a significant increase in either  $P$  or  $Q$ . Instead, the velocity of money slumped (see Figure 1).

Clearly, something had gone wrong with Friedman's equivalence.

At this point it is worth recalling John Maynard Keynes's trenchant warning to Franklin D. Roosevelt in 1933 (Keynes 1933): 'Some people seem to infer from this that output and income can be raised by increasing the quantity of money. But this is like trying to get fat by buying a larger belt'.

Not only were central banks trying to make their economies fatter by providing them with bigger belts, they were doing so while their governments were putting their economies on starvation diets to make them fit into smaller belts.



Note: Shaded areas indicate US recessions.

Source: Federal Reserve Bank of St. Louis database (<https://fred.stlouisfed.org/series/M2V>).

Figure 1 Velocity of M2 money stock

The fact that central banks were unable to raise inflation while governments were actively reducing spending suggests that Friedman was wrong. Fiscal policy is not purely redistributive, and it does affect the rate of inflation. There are two possible reasons for this:

- When a government cuts back spending hard and/or raises taxes sharply to reduce public deficits, it drains money from the private sector. Unless the central bank offsets this by creating new money,  $M$  shrinks.
- The poor are more likely than the rich to spend additional money; the rich are more likely to save it. Redistribution from rich to poor therefore tends to increase consumer price inflation, while redistribution from poor to rich tends to reduce it. So fiscal austerity targeted at the benefits and public services on which the poor depend is disinflationary. The harder these are hacked back, the harder the central bank will find it to raise inflation to target. Cutting back 'automatic stabilizers', the benefits that partially maintain labour incomes in a recession, is particularly disinflationary: people who suffer a sudden loss of earned income tend to cut back discretionary spending hard, causing further job losses among people whose incomes depend on the discretionary spending of others, and thus setting up a deflationary spiral.

Regardless of whether fiscal policy is actively causing  $M$  to shrink or simply redistributing it from poor to rich, an inflation-targeting central bank has no choice but to respond to fiscal austerity by flooding the place with new money. If it does not, it will lose control of inflation on the downside, and allowing a disinflationary or deflationary spiral to develop would be a major failure for a central bank. Thus, 'fiscal dominance', in the sense that the behaviour of the fiscal authority determines the path of monetary policy, applies as much when governments are spending too little as when they are spending too much. Ultimately, central banks always dance to a fiscal tune.

The monetarist economist Scott Sumner (2013) argued that fiscal policy was irrelevant because a determined central bank could always offset its effects. But this has proved to be incorrect. The distributional effects of fiscal and monetary policy are very different, and they therefore have different effects on inflation. Central-bank asset purchases are necessarily targeted at the rich; the effect of the purchases is to increase the value of all assets, thus making the rich richer. This is the primary distributional effect of asset purchases (Coppola 2019). Research by the Resolution Foundation shows that asset purchases also raise employment



and wages, which tends to benefit the poor (Gagnon et al. 2019). But the only conclusion that can be drawn from this is that monetary policy's redistributive effects are either small or biased towards the rich. The redistributive effects of fiscal policy are much larger.

When fiscal policy redistributes money from rich to poor, monetary policy can offset its inflationary effects. But when fiscal policy redistributes money from poor to rich, as was the case in many countries during the post-crisis fiscal consolidation, monetary policy is unable to offset its disinflationary effect. When combined with redistributive fiscal policy, therefore, monetary policy tends to have a disinflationary bias.

## 5 THE POLITICAL ECONOMY OF THE POST-CRASH YEARS

Fiscal authorities' decision to impose austerity on their populations in order to eliminate deficits run-up in the 2008–2009 recession was entirely political. By definition, therefore, central banks' decision to offset fiscal austerity with extremely low interest rates, QE and cheap loans for banks was also political. Central banks are necessarily political actors. The more 'independent' they are, the more political they become.

Nowhere was this more apparent than in the eurozone crisis of 2011–2014, when the ECB acted as a quasi-fiscal authority. It dictated the course of fiscal policy to elected governments and threatened to withhold monetary stimulus if they failed to comply. It could be argued that this was simply an independent central bank exercising its independence: but to exercise that independence, it had to become a political actor.

The post-crash political economy has also seen progressive erosion of central-bank independence. As interest rates remained stuck at the lower bound, central banks increasingly resorted to quasi-fiscal operations, such as QE, various forms of asset exchange (Operation Twist, Funding for Lending), and explicit backing for sovereign debt, sometimes in exchange for sovereign guarantees (the ECB's various sovereign-debt purchase programmes).

QE's quasi-fiscal nature rests on two characteristics: first, that it amounts to monetization of government debt, and second, that because it can potentially cause losses for central banks, it is explicitly or implicitly backed by fiscal authorities. During the COVID-19 crisis, the Bank of Japan and the Federal Reserve (Fed) have effectively been monetizing their governments' deficits by buying sufficient government debt in the secondary markets to offset all new issuance. Monetization of deficits has long been associated with high inflation, and for that reason is prohibited in many countries including Japan and the US. However, neither country prohibits the central bank from buying unlimited quantities of government debt on secondary markets in pursuit of monetary policy objectives, even though the effect can be to monetize the government deficit.

In Germany, where inflation remains a constant fear nearly a century after the Weimar hyperinflation, the possibility that the central bank might monetize deficits even indirectly is anathema. The ECB's QE was successfully challenged in the German courts on the grounds that it could violate Article 123 of the Lisbon Treaty prohibiting monetary financing of government (Bundesverfassungsgericht 2020), though the case is expected to fail at the European Court of Justice.

The quasi-fiscal nature of QE – and indeed, the general dependence of central banks on fiscal authorities – becomes apparent when considering its risks. QE involves purchasing assets, mostly government debt but in some cases also corporate debt (Bank of England, 2016) and equities (Bank of Japan, ongoing). These purchases expose the central bank to credit and market risk, and hence to the possibility of losses. If the losses are large enough to wipe out expected seigniorage, the central bank could technically become insolvent.

However, as long as the fiscal authority is able and willing to recapitalize it, it can continue to operate indefinitely in a state of technical insolvency. Only if the fiscal authority lost the power to tax, or politicians refused to recapitalize the central bank, would central-bank insolvency become a problem, since the currency would no longer be anchored by future taxes. This would be a recipe for hyperinflation (Reis 2015). Currency-issuing central banks, even if 'owned' partially by private-sector shareholders, can never be fully independent of tax-raising governments.

Central-bank independence has thus been eroded by central banks' own monetary actions in a persistently disinflationary decade hit by multiple political shocks. And there have also been political attacks on central-bank independence. The Bank of England's independence was compromised in 2013, when the Chancellor of the Exchequer, George Osborne, publicly instructed the incoming Governor, Mark Carney, to pursue 'activist monetary policy' to offset fiscal consolidation (cf. Osborne 2013).

Carney was later accused of outright political bias in the run-up to the European Union (EU) referendum when the Bank of England forecast dire consequences for the British economy if Brexit went ahead. There was further criticism of the Bank of England's political stance in August 2016, when the Monetary Policy Committee (MPC) cut interest rates and commenced QE to offset the economic turbulence from the UK's decision to leave the EU. Pro-Brexit politicians claimed that Brexit would be positive for the UK and the Bank's behaviour revealed a pro-Remain stance among its officials. The last few years of Carney's tenure as Governor were dogged by repeated political demands for his replacement with someone who would be more positive about Brexit.

Not only do central banks' decisions have political effects, central-bank independence is itself a political decision. The Federal Reserve system was established by Congress as an 'independent agency' of the US government. The Bank of England was granted 'operational independence' by Parliament in 1997 at the behest of the government of the day. The ECB's independence arises from a treaty voluntarily signed by 27 elected governments in 1992. Admittedly, its independence is possibly more secure than that of a central bank of only one country, since 27 elected governments would have to agree to end its independence. But it is still fundamentally a political institution, established by politicians and maintained by the agreement of politicians.

The lesson of the post-crisis decade is that central-bank independence is largely smoke and mirrors. Separation between fiscal and monetary policy has proved impossible in practice, because fiscal policy has monetary effects and monetary policy has fiscal effects. Both fiscal and monetary policy are influenced by politics, even if the bodies tasked with managing them are supposedly independent, and both have political consequences. And when the political environment is polarized, as it was in both the US and the UK from 2016 to 2020, the monetary policy response to a political shock can be seen as politically driven even if it is intended to be purely economic.

Central banks and fiscal councils can only ever be as independent as politicians allow them to be. In a democracy, this is a necessary safeguard. Unless these bodies are directly elected, completely removing them from political influence seriously dilutes democracy.

## 6 THE PROBLEM OF BANK LENDING

As a supposedly powerful monetary stimulus, QE has been a massive failure. The high inflation it was widely expected to generate never materialized, and nor did the robust growth. Mainstream economists were puzzled that the unusually large quantity of bank reserves created by QE didn't result in a lending boom. Models of bank lending in

mainstream economic textbooks relied upon the ‘money multiplier’ model, in which banks ‘lent out’ a multiple of their reserves, typically ten times. So, increasing a bank’s reserves should mean a tenfold increase in its lending. But it didn’t. Banks simply sat on the reserves. Some economists argued that the reason banks weren’t increasing lending was that central banks were paying positive interest on reserves, so banks unwilling to lend at risk could park money risk-free at the central bank without incurring a carry cost (Applebaum 2015).

But the real problem was the economists’ models. In 2014, the Bank of England published a ground-breaking research paper on bank lending (McLeay et al. 2014). It concluded that rather than lending out existing money, banks create new money when they lend. The new reserves created by QE made no difference to banks’ ability to lend.

The Bank of England estimated that prior to the 2008 global financial crisis, 97 per cent of the money in circulation was created through bank lending. The proportion is somewhat lower now, because the Bank’s asset purchases have created new deposits in banks as well as new reserves. But even now, the majority of money in circulation is created by commercial banks, not the central bank.

The central bank influences the quantity of money created by commercial banks by varying the interest rate paid on reserves (or charged, if the bank is borrowing reserves), and by tightening or loosening capital requirements and other regulations. In normal times (that is, not when the central bank is actively doing QE), this is the main route by which monetary policy controls inflation. It relies on there being a robust causal relationship between private-sector borrowing and consumer price inflation.

However, the enormous credit bubble of the mid 2000s failed to cause any significant increase in consumer price inflation. As a result, central banks did not see the oncoming financial crisis. For them, the absence of inflation meant borrowing could not be at dangerously high levels.

It now seems that private-sector borrowing and consumer price inflation are not strongly correlated. Rather, private-sector borrowing is strongly correlated with asset prices, particularly property. This reflects a fundamental change in the business models of banks over the last half-century. Banks no longer lend mainly to businesses, as they did in the 1960s. These days, in most developed countries, banks lend primarily to households for the purchase of real estate.

Bank lending against real estate is strongly pro-cyclical. When real-estate prices are rising, banks will lend more; when they are falling, banks cut back lending. Property price falls, especially when coupled with rising real interest rates, also trigger widespread mortgage defaults and foreclosures. The property price crash of 2007–2008 is thus the proximate cause of the money-supply collapse at that time. Bailing out property owners directly might have been a sensible course of action.

The fact that bank lending is now heavily oriented towards households means monetary policy has intergenerational consequences. Young people are far more likely to borrow than old, especially against property, while old people are much more likely to have wealth, including liquid savings held in banks. Central banks’ principal means of controlling inflation is thus to influence the ability of younger and poorer people to borrow and spend. There is a secondary effect through savings rates, since at the margin the interest rate on savings influences household spending and saving decisions. But as savers tend to be older and richer than borrowers, the influence on inflation is likely to be less strong.

Central banks’ monetary policy decisions are therefore redistributive in much the same way as fiscal policy. Raising the policy rate redistributes money from younger and poorer to older and richer; lowering the policy rate redistributes money from older and richer to younger and poorer. The effect is to influence spending and saving incentives at the

aggregate rather than the individual level, increasing saving by redirecting money to those more likely to save it, or increasing spending by redirecting money to those more likely to spend it. The lower bound on interest rates restricts the ability of central banks to redistribute money effectively and explains why fiscal policy must take over at the lower bound.

Fiscal policy that drains money from the young and poor reduces their ability to borrow and spend; fiscal policy that redistributes money to the old and rich does not make them any more likely to borrow and spend. At the lower bound, therefore, fiscal austerity targeted at the young and poor reduces bank lending and associated money creation. QE can replace the lost money, but since the money doesn't go to the young and poor, it does not increase their spending power. Indeed, the propensity of QE to raise asset prices tends to price younger and poorer people out of property markets. Since banks predominantly lend to younger and poorer people, at the margin QE itself therefore reduces bank lending. At the lower bound, the combination of fiscal austerity targeted at the young and poor with QE that raises asset prices is severely disinflationary in the absence of other measures to boost bank lending to younger and poorer people. It should come as no surprise, therefore, that many governments enacting fiscal austerity have adopted measures to encourage younger and poorer people to borrow – for example, the UK's Help to Buy scheme.

Redistribution of money from one group to another is always political in nature. The decision to keep inflation low by redirecting money from those more likely to spend it to those more likely to save it is fundamentally political, whether it is made by a fiscal authority or a central bank. And even when governments are obliged to enact fiscal austerity to prevent sovereign default and/or currency collapse, they are still free to decide where the spending cuts and tax rises should fall. At the lower bound, disinflation – or even deflation – is a political choice. At higher interest rates, so too is inflation.

## 7 CONCLUSION

Inflation is much more than just a monetary phenomenon. It is not simply a matter of the money supply outrunning output, as Friedman thought. It reflects the balance of spending and saving in the economy, which is itself determined by the distribution of money between old and young, rich and poor, households and businesses.

Inflation is the product of many factors, not just the money supply and output. For example, demographics, labour market structure, openness, regulatory environment, tax policy and house prices all influence inflation.

Inflation, disinflation or deflation may be caused by exogenous or endogenous shocks, but the decision to tolerate them – or not – is political. For example, older people might vote for low-inflation policies to protect their wealth, but for younger people, secure jobs and better wages might be higher on the priority list. Policies that satisfy the preferences of one generation at the expense of another are fundamentally political, whether they are set by governments or central banks. Inflation is thus always and everywhere a political phenomenon.

Since inflation is a political rather than a monetary phenomenon, it is not possible to separate monetary and fiscal policy, nor to make either independent of politics. Monetary policy has fiscal consequences, fiscal policy has monetary consequences, and both are influenced by – and in turn, influence – political decisions.

Central banks that issue currencies are never independent of fiscal authorities. Their solvency and, by extension, the value of the currency they issue depend on the tax-raising powers of the fiscal authority. It is fundamentally irrational to believe that a central bank

can maintain the value of its currency when the fiscal authority is so corrupt or dysfunctional that it has no effective power to tax. If the fiscal authority is not credible, neither is the central bank. On occasion, central banks have maintained their currencies while their governments are temporarily in disarray – the UK after the Brexit vote in 2016, for example – but this is always in the expectation that the disruption will be short-lived and normal service will be resumed shortly.

Fundamental distrust of government cannot be cured by making the central bank independent. If the government can't be trusted not to cause runaway inflation, neither can the central bank.

Central banks are tools of government. If a central bank becomes genuinely independent of government, it either reverts to being just another commercial bank, or it becomes the government. Efforts to make central banks independent of politics dilute their democratic accountability.

The relationship of banking and monetary policy is much better understood than it was even a decade ago. However, changes in bank business models fundamentally affect the transmission of monetary policy. Monetary policy models need to be updated to reflect the fact that most bank lending is for real-estate purchase by households rather than business lending. The 2008 crisis showed that there is little if any relationship between consumer price index (CPI) inflation and bank lending for real-estate purchase, yet central banks continue to rely on adjusting bank lending appetite as their principal means of controlling CPI inflation.

The last decade has tested the limits of monetary policy and exposed the fundamentally political nature of central banks.

## REFERENCES

- Applebaum, B. (2015): The Fed's policy mechanics retool for a rise in interest rates, URL: <https://www.nytimes.com/2015/09/13/business/economy/the-feds-policy-mechanics-retool-for-a-rise-in-interest-rates.html>.
- Bundesverfassungsgericht (2020): Headnotes to the judgment of the Second Senate of 5 May 2020, URL: [https://www.bundesverfassungsgericht.de/SharedDocs/Entscheidungen/EN/2020/05/rs20200505\\_2bvr085915en.html](https://www.bundesverfassungsgericht.de/SharedDocs/Entscheidungen/EN/2020/05/rs20200505_2bvr085915en.html).
- Coppola, F. (2015): The impending collapse of Venezuela, in: *Forbes*, URL: <https://www.forbes.com/sites/francescoppola/2015/01/13/the-impending-collapse-of-venezuela/?sh=7c6d4e247e34>.
- Coppola, F. (2019): *The Case for People's QE*, Cambridge, UK: Polity Books.
- Friedman, M. (1970): The counter-revolution in monetary theory, IEA Occasional Paper 33, The Collected Works of Milton Friedman, URL: <https://miltonfriedman.hoover.org/internal/media/dispatcher/214480/full>.
- Financial Times* (2021a): Letter: BoE must end its asset purchases to avoid stoking inflation, URL: <https://www.ft.com/content/c2d1ffe6-e1b9-48cb-ab49-1633e41ce857>.
- Financial Times* (2021b): OBR paints brighter picture for UK economy, URL: <https://www.ft.com/content/ec9b58a5-fa69-422d-91bf-7cbc0799926d>.
- Gagnon, J.E., Leslie, J., Rahman, F., Smith, J. (2019): Quantitative (dis)pleasing?, Resolution Foundation Briefing September 2019, URL: <https://www.resolutionfoundation.org/app/uploads/2019/09/Quantitative-displeasing-FINAL-VERSION.pdf>.
- Keynes, J.M. (1933): An open letter to President Roosevelt, URL: <http://la.utexas.edu/users/hcleaver/368/368KeynesOpenLetFDRtable.pdf>.
- Koo, R.C. (2011): The world in balance sheet recession, in: *Real-World Economics Review*, (58), 19–37.
- McAndrews, J. (2015): Credit growth and economic activity after the Great Recession, URL: <https://www.bis.org/review/r150417b.pdf>.

- McIvor, R. (2020): The barber boom, Ruffer, URL: <https://www.ruffer.co.uk/Thinking/Articles/Market-views/2020-07-Barber-boom>.
- McLeay, M., Radia, A., Thomas, R. (2014): Money creation in the modern economy, in: *Bank of England Quarterly Bulletin*, 54(1), 14–27.
- Osborne, G. (2013): Speech by the Chancellor of the Exchequer, Rt. Hon. George Osborne MP at the Mansion House, URL: <https://www.gov.uk/government/speeches/speech-by-chancellor-of-the-exchequer-rt-hon-george-osborne-mp-mansion-house-2013>.
- Reis, R. (2015): Different types of central bank insolvency and the central role of seigniorage, Type-script, URL: <https://personal.lse.ac.uk/reist/papers/15-dns.pdf>.
- Sargent, T.J., Wallace, N. (1981): Some unpleasant monetarist arithmetic, in: *Federal Reserve Bank of Minneapolis Quarterly Review*, 5(3), 1–17.
- Sumner, S. (2013): Why the fiscal multiplier is roughly zero, Mercatus Center Policy Briefs, URL: <https://www.mercatus.org/publications/monetary-policy/why-fiscal-multiplier-roughly-zero>.