Failing to plan = planning to fail

The risk of recessions and the importance of macroeconomic policy in limiting the damage they cause

James Smith
July 2019
Summary

Recessions are bad for living standards, in both the short term and the longer term. And because recessions are triggered in a number of ways, we can’t recession-proof the economy. Macroeconomic policy can, however, limit the economic pain they cause. But the legacy of the last recession has left policy underprepared for the next. This means that the adequacy of our macro policy framework should loom far larger in our economic debates than it does at the moment – particularly as there is a relatively high risk of another downturn in the next few years.

Technical recessions (where economic output contracts for two consecutive quarters) have come along roughly once a decade in the UK. With the current period of economic expansion now into its tenth year, there is therefore concern that we are nearer to the next recession than we are to the last. Of course there is no mechanical link between the passage of time and the onset of a downturn. That said, risks can build over time. And, in this context, the global outlook has clouded over the past two years with a number of obvious recession triggers. Indeed, a simple model based on financial-market data suggests that the risk of a recession is currently close to levels only seen around the time of past recessions and sharp slowdowns in GDP growth, and is at its highest level since 2007.

This matters. Looking across the past five recessions, GDP has fallen by around four per cent on average from peak to trough. That’s equivalent to a hit today of around £2,500 per household. Similarly, the average rise in unemployment over past recessions equates to around one million people. There is of course much variation around this average, and in thinking about what effect the next recession might have on living standards, the potential scale of the downturn is clearly central. But so too is the way in which the economy adjusts to a new lower output equilibrium.

Recessions can be triggered in a number of ways, with no two the same, and all of them bad. They often reflect developments abroad, though domestic circumstances can also be at play. What characterises recessions is a synchronised fall in spending across the economy. The economic pain caused by that fall in demand leads to higher unemployment (i.e. fewer hours of production), a drop in earnings (i.e. lower reward for each hour of work) or a combination of the two. When the bulk of that supply-side adjustment manifests as higher unemployment, the effects are concentrated on a small group (with clear distributional implications). When the pay takes most of the strain, it results in a more generalised sharing of the pain.

Recent UK history tells us that the exchange rate plays an important role in determining the balance between these two forms of adjustment. When sterling adjusts sharply downwards, wages tend to take the strain; when it does not, unemployment spikes more markedly instead. A comparison of the past two UK recessions illustrates this point. In the early-1990s, GDP fell by 2.0 per cent and the value of the pound saw a sustained fall of less than 10 per cent. Unemployment subsequently jumped by over 1 million people, but real-terms pay growth slowed only marginally relative to the pre-recession trend. In 2008-09, GDP plummeted by 6.3 per cent and the exchange rate fell nearly 30 per cent. Unemployment still jumped – by around a million (1.1 million) – but by much less than
had been expected given the severity of the downturn. The period was characterised instead by a severe wage squeeze in which median hourly pay (adjusted for inflation) fell by around 7 per cent between 2009 and 2014.

This case-by-case variation should caution us against assuming that the next recession will necessarily feel like the last: unemployment may be at historically low levels today, but there is every chance that the next downturn – even if it is smaller in scale than the last one – causes it to balloon once more. But whatever form the economy’s adjustment takes, it should also be clear that the effects of a recession can persist for many years. GDP, unemployment and real incomes rarely fully return to the path they were on prior to the recession, and recession scars can mean some areas and cohorts find themselves permanently left behind. Policy response is therefore vital.

Macroeconomic stabilisation policy – the use of macroeconomic tools, such as monetary and fiscal policy to offset fluctuations in economic activity – plays a crucial role in stopping a recession becoming much more severe. Without it, there is evidence that the severity of the recession may be magnified greatly.

Indeed, effective policy works both by addressing the underlying causes of a recession, and by providing substantial and timely support to overall demand. During the Global Financial Crisis (GFC) that meant direct action to resolve failings in the financial sector, along with large-scale policy stimulus. On the monetary side, that involved slashing the Bank of England’s base rate (from 5.75 per cent in December 2007, to just 0.5 per cent by March 2009) and engaging in the previously untried policy of Quantitative Easing (with £375 billion of assets being purchased by the Bank). On the fiscal side, the stimulus took the form of tax cuts (with VAT being lowered from 17.5 per cent to 15 per cent for instance) and spending rises – with subsequent unwinding during the long period of fiscal consolidation from 2010. Absent the policy support delivered in the immediate post-crisis period, GDP could have been 12 per cent lower after the recession – equivalent to over £8,000 for every household in the UK.

Worryingly, however, policymakers are unlikely to be able to respond in the same way should another recession hit. On the monetary side, there is the very real constraint provided by the proximity of policy interest rates to zero: a base rate of just 0.75 per cent equates to much reduced room for manoeuvre. On the fiscal side, there is at least the perceived constraint that comes with a debt-to-GDP ratio that is more than double the one prevailing ahead of the GFC (at over 80 per cent). There are still policy choices available, but a new approach will almost certainly be required. And preparations for this new approach should already be under way.

It’s against this backdrop that the Resolution Foundation’s new Macroeconomic Policy Unit (MPU), has been established. The MPU will seek to contribute to a better-informed and more inclusive macroeconomic policy debate. That debate will be particularly important for those on low to middle incomes who are often particularly exposed when the economy falls into a recession – with this forming the subject of the next MPU briefing note. Thereafter, we will publish a comprehensive assessment of the UK’s existing macroeconomic framework by way of understanding just how recession ready the UK is.
We are likely to be nearer the next recession than the last

Recessions are a regular feature of all economies. As Figure 1 shows, technical recessions (where output contracts for two consecutive quarters) have hit the UK roughly once a decade in the period since the 1950s. With the current period of economic expansion now into its tenth year, there is inevitably concern that the next downturn may be due. But that concern rests less on some misguided belief in the law of averages, and more on the presence of a number of vulnerabilities that could lead to a recession at home and abroad.

Figure 1: UK recessions happen about once a decade on average

Globally, the economic outlook has clouded somewhat over the past two years. Trade tensions are elevated and the Chinese economy – the engine of so much international growth over recent decades – appears to be undergoing a structural slowdown. Most recently, the US Federal Reserve has indicated that it may need to loosen monetary policy in future if the growth outlook deteriorates further.

That global picture has inevitable consequences for the UK, especially given the importance of trade to our economy. But the country faces domestic-specific pressures too. Most obviously, the uncertainty that exists around the UK’s approach to Brexit is having a clear impact on business confidence and investment in the near term. And longer term, the specifics of the UK’s future trading relationship with the EU and the rest of the world will have a direct read-through to the country’s economic prospects. In its most recent Article IV assessment of the UK economy, the International Monetary Fund (IMF) pointed to all of these pressures and more – including the possibility that UK households may seek to increase precautionary saving – as risk factors. [1]

Indeed, there is at least some evidence to suggest the UK economy may already be contracting. Figure 2 sets out trends in the Purchasing Managers Indices (PMIs) in the period since 2008, with clear signs of a marked slowdown in activity in each of the services, manufacturing and construction sectors in recent months. The latest (June 2019) scores are at levels usually recorded during periods where GDP is either stagnating or contracting slightly.

**Figure 2: Survey data are consistent with a small contraction in UK GDP**

UK PMI Business Activity Index: 50 = no change on previous month

![Graph showing trends in Purchasing Managers Indices (PMIs) since 2008](image)

Notes: PMIs are a survey measure of firms’ output. The responses are aggregated into an index where the value of 50 equates to no change in output with values above (and below) indicating increasing rates of expansion (contraction) in output.
Source: IHS Markit/ CIPS

One indicator that is often cited as a predictor of future recessions is the difference between longer-term and shorter-term yields on government bonds, often referred to as the ‘slope’ of the yield curve. One reason this indicator is thought to contain information about future recessions is because these measures reflect expectations of the near-term path of monetary policy compared to the longer-term path. If shorter-term rates are above longer-term ones (negative slope), it suggests markets are expecting looser monetary policy in future than today, implying expectations of a deterioration in the outlook for the economy.

Testing this relationship empirically, Figure 3 shows that a negative yield curve slope has tended to precede recessions in the period since 1980.

**Figure 3: A downward sloping path of government bond yields (negative slope) has preceded recessions**

‘Slope’ of the UK government yield curve (5 year yield minus 1 year yield)

Using a simple probability model we can map this indicator into what it implies for the risk of a recession in the coming years. The resulting indicator is shown in the dark blue line in Figure 4. It shows that this indicator has increased significantly in the run up to the previous three recessions. And it has risen from close to zero in 2014 to levels only seen around recessions and sharp slowdowns in GDP growth by 2019 Q2, reflecting the flattening of the yield curve shown in Figure 3. Our simple model suggests, therefore, that there is an elevated chance of the UK facing a recession at some point in the next three years.

[3] Specifically, we estimate a quarterly version of the following regression:

$$Pr(Recession = 1) = \Phi(\beta_0 + \beta_1\text{Slope}),$$

where ‘Recession’ is an indicator that equals one if there is a recession in the next three years, but is zero otherwise; and $\Phi$ is the standard normal cumulative distribution function. We estimate the model from 1978 to 2007 to avoid possible problems created by the low level of short-term yields after 2007. We then use the estimated parameters to generate a recession probability up to 2019 Q2.
While clearly elevated, it is worth noting that this indicator is below the peak levels recorded immediately prior to each of the three previous recessions. And in the early 2000s this indicator increased sharply without a technical recession following. But, while our modelling is of course far from definitive, it remains the case that there are plenty of reasons to think that a recession in the coming years is relatively likely. So a key question becomes what sort of damage can be expected from a recession?

Recessions are a time of economic hardship, with the scale and distribution of that pain varying from instance to instance

While the scale, duration, cause and precise implications of all recessions are different, they always have a clear, negative effect on the living standards of a country’s citizens.

Figure 5 illustrates this, setting out the range of trajectories for GDP and unemployment recorded during each recession (and subsequent upswing) since the Great Depression. In all instances, the key feature is a sharp, synchronised fall in demand with households and firms cutting back spending. That translates into falling GDP and a rise in the number of people out of work. The average peak-to-trough fall in GDP in each of these episodes is 3.7 per cent, or around £2,500 per household in the UK in today’s terms.
Figure 5: Recessions always result in falling GDP and rising unemployment

Cumulative growth in real-terms GDP over successive economic cycles (per cent), UK

Cumulative change in 16+ unemployment rate successive economic cycles (percentage points), UK

There is much variation around this average however. For example, the GFC recession stands out as one in which GDP per capita fell especially sharply – dropping by around 6 per cent from peak-to-trough. And the subsequent recovery was also weaker than that recorded in most other cases, meaning output is now around 15 per cent below where it would have been had the pre-crisis trend in growth persisted.[4]

[4] Pre-crisis trend is taken to be the average growth rate observed during the six years preceding the two years before a recession. In excluding the two years prior to the recession we reduce the risk that estimates of trend are affected by overly rapid growth in the run up to a recession.
Yet this downturn was also one in which unemployment spiked more modestly than might have been expected given the scale of the downturn. UK recessions have nearly always generated substantial jumps in unemployment, and the GFC episode was no different. The unemployment rate rose by 3.3 percentage points (from 5.2 per cent to 8.5 per cent) between 2008 and 2012, equivalent to an additional 1.1 million people being out of work. But that stands in sharp contrast to the 6.6 percentage point (or nearly two million) increase recorded following the 1980s recession. And unemployment subsequently fell very rapidly from the 2012 peak, paving the way for today’s historically low unemployment rate of 3.8 per cent.

What explains the apparently different relationships at play between GDP and unemployment movements across these different recessions? Figure 6 provides a clue. It plots the peak-to-trough changes in GDP and unemployment in each of the past five UK recessions, so that we can separate the episodes into two distinct groups. In the first (covering the GFC and the mid-1970s downturn), we observe instances where unemployment rose by less than might be expected. In the second (covering the 1961, early-1980s and early-1990s recessions), the unemployment increases are significantly larger relative to the sizes of the recessions themselves.

Figure 6: The extent to which the pain of a recession translates into higher unemployment varies with movements in sterling

Peak-to-trough falls in GDP (per cent) and maximum rise in the unemployment rate (percentage points) during post-1955 recessions, UK

Notes: Consistent data on changes in exchange rates against a broad basket of countries is only available from 1960 onwards, meaning that it is not possible to cover earlier recessions. The change in the exchange rate is defined as the peak in the year prior to the recession to the trough reached up to two years after the recession.
Sources: ONS, Bank of England, International Monetary Fund, Bank for International Settlements. Changes in sterling against a basket of other currencies are calculated from a long-run time series created by splicing together data from the BIS, IMF and Bank of England

What distinguishes these two groups from each other is movements in sterling. Both the 1970s and the 2008 recessions were characterised by large depreciations in the value of the pound. These devaluations meant firms could respond to lower demand by allowing
money wages to fall relative to the prices of products produced (which were rising rapidly because of the inflation caused by the fall in sterling), reducing overall labour costs. On those occasions where sterling didn’t fall as sharply, however, firms instead responded to weak demand by laying off workers, as inflation was lower and employees resisted falls in their monthly wages.

These differing patterns have implications for the distribution of recession pain. Ultimately, who most bears the pain associated with economic downturn depends on a number of factors, not least the policy response. And there is good reason for supposing that those at the bottom of the income distribution are particularly exposed - something we will return to in a forthcoming MPU paper. Indeed, unemployment-heavy recessions are much more likely to focus the burden of adjusting to lower output on the shoulders of the minority who lose their jobs – with potential geographical consequences – while wage-adjustments are more likely to result in a more generalised living standards squeeze.

Either way, though, the pain is likely to be sharply felt. And often it persists for some considerable time. Following the recession in the early 1980s and 1990s, that took the form of a prolonged period of elevated unemployment. In the post-crisis period, the lingering costs of the recession have instead been reflected in an unprecedented stagnation in incomes. But it is important to emphasise that even when the rise in unemployment is relatively small, recessions still have a big impact on living standards. In this respect the GFC provides a good example. While the rise in unemployment was smaller than after the 1980s and 1990s recessions, following sterling’s depreciation in 2008 and 2009, the inflation-adjusted value of incomes continued to fall for around six years. Indeed, the level of real incomes remains below the pre-crisis peak. As Figure 7 makes clear this is an unprecedented stagnation in incomes following a recession.

So the lasting costs of recessions, which are often thought to be associated with lingering unemployment, can also manifest as a persistent squeeze on living standards. Following the recession in the early 1980s and 1990s, there was evidence that the costs persisted in the form of higher unemployment. But after the GFC, the lingering costs of the recession reflect lower productivity and have manifested as a prolonged period of weak income growth. Viewed from the perspective of the overall impact on GDP, it is clear that this productivity hysteresis is as least as much of a problem as the more often cited effects of lasting unemployment seen after previous recessions.


Recessions clearly come with considerable immediate costs to the economy, leading to mass unemployment and lower incomes. And because those costs become entrenched, permanently affecting living standards, there is a powerful case not only for avoiding recessions in the first place, but also minimising their impact when they happen. So a key question here is what causes recessions, what – if anything – can be done to stop them, and how should policy respond to reduce the damage?

**Domestic policy is very unlikely to be able to avoid recessions altogether, but effective macroeconomic responses can play a crucial role in supporting the economy during a downturn**

UK recessions over the past century have had a variety of causes, with no two looking quite the same. Table 1 highlights this, by considering the last four recessions and setting out key drivers, economic effects and macroeconomic policy responses in each instance.
It is striking how often external developments have triggered a recession, with a deterioration in the global outlook coinciding with all of the UK’s downturns since 1955. That is not to say we can be complacent about domestic developments (with the GFC demonstrating how global developments can be a trigger for exposing domestic vulnerabilities for instance) but the trade and financial openness of the UK economy means it is particularly exposed to developments in the global market. The implication is that recessions can be triggered unexpectedly and normally from elsewhere in the world, well beyond the reach of UK policymakers.

But, while this means there is likely limited opportunity for using domestic policy to entirely avoid all recessions, it does not mean macro responses are entirely toothless. Stabilisation policy aims to reduce the severity of economic fluctuations: to apply the brakes if the economy starts to grow too quickly; and support the economy when growth slows. In doing so, effective stabilisation policy acts pre-emptively to avoid recessions, as well as supporting the economy when a recession inevitably appears.

Indeed, it is worth reflecting on the number of instances in Table 1 where bad macroeconomic policy has exacerbated the impact of international shocks. This has taken many forms, including overly tight fiscal policy in the face of a recession (as in the 1970s and 1980s), as well as overly tight monetary policy (early-1990s). Equally then, we should expect good macro responses to have a positive role to play in supporting economies during times of recession. Without sufficiently active stabilisation policy,
Resolution Foundation | Failing to plan = planning to fail

Macroeconomists have shown that economies can get stuck and stagnate. A common misconception is that economies will, given time, recover on their own, and that policy simply speeds that process up.\[7\]

Just as no two recessions are the same, so too should no two macroeconomic policy responses take the same form – a point brought out in Table 1. One way to think about how policy responds is to break it down into a component which supports overall demand and spending, and a component which addresses the underlying cause of the recession. During the GFC for example, where the recession was triggered by volatility in the financial sector, policymakers responded with both fiscal and monetary stimulus and with a number of measures designed to address that distress directly.

To support demand, the Monetary Policy Committee (MPC) cut interest rates by more than five percentage points and launched a programme of asset purchases (often referred to as Quantitative Easing, or QE). Fiscal policymakers simultaneously launched a significant stimulus package of tax cuts and spending rises which raised the annual budget deficit from 2.6 per cent to 9.9 per cent of GDP between 2007 and 2010. The effect of these stimulus packages on spending was considerable, as discussed in Box 1. These measures were reinforced by efforts which more directly sought to address underlying problems with the supply of credit to the real economy.\[8\]

Box 1: Assessing the macroeconomic policy response to the GFC

The power of macroeconomic policies is illustrated by estimates of their impact during the GFC. Indeed, studies – primarily for the US – of the macroeconomic policy response to the crisis find it played a crucial role in supporting the economy. For example, in an extensive review, Blinder and Zandi estimate that the post-crisis policy response in the US added 16 per cent to GDP by end-2012, and reduced the unemployment rate by 6.7 percentage points (adding around 10 million jobs).\[9\] Of those impacts, fiscal stimulus contributed around 3 per cent of GDP, with the rest coming through financial and monetary policies. Furman finds a very similar effect for the impact of fiscal policy.\[10\] On monetary policy, Chung, Laforte, Reifschneider and Williams find that the Fed’s unconventional monetary policy added 3 per cent to US GDP by 2012 with similar results found by Engen, Laubach and Reifschneider.\[11\] There has been much less research into the impact of the UK policy

\[7\] This stems from the idea that lower prices will be sufficient stimulus to ultimately right the economy. For an early discussion, see: D Patinkin, ‘Relative prices, Say’s law, and the demand for money’, Econometrica, vol. 16, pages 135–154, 1948.


response, and what is available has generally focused on the impact of monetary policy. But studies point to substantial impacts. For instance, Joyce, Tong and Woods concluded that the first round of QE raised the level of GDP by up to 2 per cent.\textsuperscript{[12]} Indeed, putting this together with conventional monetary stimulus, Bunn, Pugh and Yeates report a counterfactual scenario of no post-2007 monetary stimulus in which GDP is around eight per cent lower, and the unemployment rate is four percentage points higher.\textsuperscript{[13]}

There are even fewer studies of the impact of UK fiscal stimulus during the crisis. That stimulus included a temporary cut in the main rate of Value Added Tax (VAT), reductions in income tax (higher personal allowance), the bringing forward of £3 billion of capital spending, and a number of smaller measures. So to assess the impact of the path of fiscal policy on GDP growth, we use a simple estimate of the impact of fiscal policy derived from the change in the cyclically-adjusted primary balance.\textsuperscript{[14]} Using this method, we find an impact of around four per cent on GDP.\textsuperscript{[15]}

Figure 8 shows the impact of that estimate combined with the impact of monetary policy taken from Bunn, Pugh and Yeates. It is worth keeping in mind that this approach is indicative only, not least because it combines independently-produced estimates of the size of the impact of fiscal stimulus.

And, more importantly, it abstracts from any decay in the impact of policy (it is common to assume that the effect of fiscal and monetary policy on GDP will unwind in the medium term). Nevertheless, these estimates serve to illustrate the very substantial impact that policy support had on the economy during the crisis period. Absent that policy stimulus, GDP might have been around 12 per cent lower coming out of the crisis, equivalent to over £8,000 per household in the UK in today’s money.

\textsuperscript{[14]} This implies a ‘fiscal multiplier’ of one.
\textsuperscript{[15]} This is similar estimate to that produced in cross-country work by the OECD, see: OECD, ‘The Effectiveness and Scope of Fiscal Stimulus’, OECD Economic Outlook, Interim Report, March 2009.
Looking ahead, the low interest rate environment means policy makers can’t use the same approach when the next recession hits

Ahead of the next – potentially impending – recession, it is clear that UK policy makers do not have quite the same room for manoeuvre as they did ahead of the GFC. On the fiscal side, this reflects the fact that the government’s debt-to-GDP ratio has soared from 35 per cent in 2007-08 to nearly 85 per cent in 2017-18. Cuts in the cost of borrowing mean the debt servicing burden remains relatively low, and there is no suggestion that the government is coming up against any critical constraint just yet – but the backdrop is at least less benign than the one that prevailed in 2008. On the monetary side the restriction is much more obvious. And it is one that is repeated across large numbers of advanced economies.
As Figure 9 shows, policy rates around the world have edged up over the past few years, but remain at very low levels. Indeed, they were drifting downwards long before the GFC hit. The synchronised nature of this longer-run fall in policy rates suggests a common driver, and one that is likely to persist. Policy rates around the world look very unlikely to rise much further in the coming years, implying little scope for central banks to actively support demand during the next recession.

This is a problem. Model-based evidence shows that, if monetary policy is unable to perform its stabilisation role because of the effective lower bound on interest rates, then a recession may be much more damaging. For example, Kiley and Roberts have shown that a large recession can lead to a prolonged period in which rates are constrained by the zero lower bound on interest rates. They show that this constraint can lead the loss in output experienced following the onset of a recession to be magnified greatly. In particular, their results suggest that the loss in output can be nearly half as big again if monetary policy is constrained.

It is difficult to point conclusively to periods in history when insufficiently stabilising policy has had large effects on the economy, because it is hard to distinguish between periods in which stability has come about as a result of ‘good luck’ (with relatively few shocks to the economy) and those in which policy has played a more active role. But there is at least some empirical evidence. For example, Clarida, Gali and Gertler have suggested

---


that insufficiently stabilising monetary policy in the US during the 1960s and 1970s gave rise to unnecessary instability and can explain the macroeconomic turbulence of that period.\[18\]

In this context, the monetary constraint that is evident in the UK should concern us. Figure 10 shows that policy rates here have been cut by an average of over five percentage points – ranging from three to ten - in response to past recessions. With the Bank of England’s policy rate currently standing at just 0.75 per cent, the scope for conventional monetary policy loosening is clearly very small compared with what has been in place previously.\[19\] Moreover, there are doubts about how much stimulus can be delivered through further QE given the current low level of longer-term interest rates. So while rates can and will undoubtedly be cut when the next recession hits, but there is a clear need to explore alternative macro policy approaches too.

**Figure 10:** Large cuts in policy rates have been the cornerstone of the policy response to past recessions, but this will not be an option in the next

Bank of England policy rate during recessions (per cent)


Sources: Bank of England and RF calculations

**Conclusion**

With the current period of economic expansion long in the tooth and a number of risks already in clear sight, the UK faces a significant risk of experiencing a fresh economic downturn in the coming years. Given the costs associated with recessions and the evident

---


[19] The Bank of England has made it clear that, despite other central banks cutting rates to slightly negative rates, they see zero as the lower bound on the level of its policy rate, see: M Carney, ‘New Economy, New Finance, New Bank’, Speech given at The Mansion House, June 2018.
impact of policy on reducing their impact, it is crucial therefore that we do all we can to ensure that our macroeconomic framework is recession ready – particularly in a period of apparent policy constraints. Put simply, if policy is not able to respond, a recession can become a depression. And history tells us that if policymakers make bad choices, they can make matters worse.

All this sets the scene for the first Report from the Resolution Foundation’s new Macroeconomic Policy Unit, established to play a part in encouraging a better-informed and more inclusive macroeconomic policy debate. That Report will assess the ability of the current framework to provide effective support to the economy in the next recession. It will set out the broad direction that a reform agenda based on this framework assessment should follow. Each element of that agenda will be returned to in detailed papers in the months ahead.
The Resolution Foundation is an independent research and policy organisation. Our goal is to improve the lives of people with low to middle incomes by delivering change in areas where they are currently disadvantaged. We do this by:

• undertaking research and economic analysis to understand the challenges facing people on a low to middle income;
• developing practical and effective policy proposals; and
• engaging with policy makers and stakeholders to influence decision-making and bring about change.

For more information on this report, contact:

James Smith, Research Director
james.smith@resolutionfoundation.org

Download
This document is available to download as a free PDF at: resolutionfoundation.org/publications/

Citation
If you are using this document in your own writing, our preferred citation is:
J Smith, Failing to plan = planning to fail: The risk of recessions and the importance of macroeconomic policy in limiting the damage they cause, Resolution Foundation, July 2019

Permission to share
This document is published under the Creative Commons Attribution Non Commercial No Derivatives 3.0 England and Wales Licence. This allows anyone to download, reuse, reprint, distribute, and/or copy Resolution Foundation publications without written permission subject to the conditions set out in the Creative Commons Licence. For commercial use, please contact: info@resolutionfoundation.org