# MONETARY AND FISCAL OPTIONS IN THE EVENT OF A 'NO-DEAL BREXIT'

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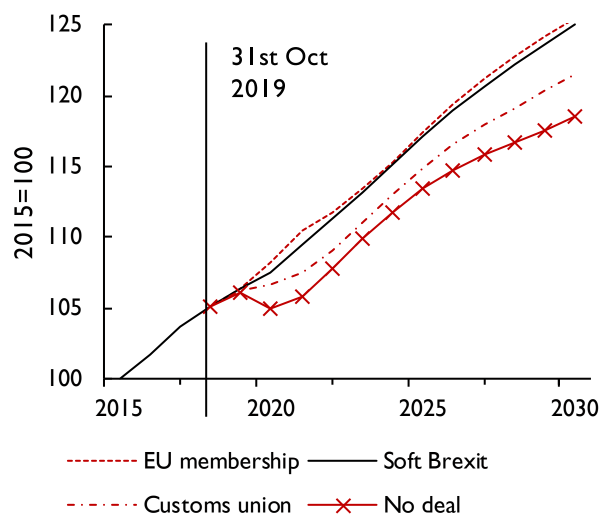
"It will all be over by Christmas" *popular British refrain*

The prospect of leaving the European Union has acted to hamper much economic activity and the formulation of forward-looking plans over the past three years. The Institute has outlined the consequences arising from the various EU Exit scenarios that the UK may face, each of which will leave output lower than would otherwise have been the case (see figure 1 for our modelled exit paths). Whilst our analysis, which is at the consensus of the academic and policy-related literature, outlines an economic loss from the likely path of output on EU Exit there are a number of possible responses to be considered when setting monetary and fiscal policy. The question of impact and response is particularly heightened in the event of a so-called 'No-Deal Brexit', in which trading relations with the EU and, by default, with the rest of the world will no longer pivot around membership of the EU and will depend in the first instance on WTO rules.

In this Commentary, I outline the likely economic shock of such an EU Exit – that of 'No-Deal Brexit' – and the responses available to monetary and fiscal policy. The primitive economic shock may be as much as several percentage points of GDP. But I suggest that policymakers have room to inject monetary and fiscal stimulus to stabilise output. Monetary policy has some room to respond if inflation expectations and labour costs are anchored (and also thought to be anchored by policymakers) at a level that is consistent with the medium-term 2 per cent inflation target. And if fiscal responses are adjusted to allow for higher government spending, which implies a looser interpretation of the 'fiscal rules', some of the effects of an abrupt exit from the EU can be mitigated. It is, though, important that some of the requirements for re-building public and social capital, so-called enabling (Dasgupta, 2005), can be addressed and not lost in an attempt to placate economic losers from a No-Deal Brexit alone. The primitive impact though seems unlikely to be fully offset and we can anticipate a sharp reduction in economic growth for a sustained period.

Figure 1. The impact of different Brexit scenarios on GDP




Source: NIESR.

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## The no-deal problem

There is a material risk that the UK leaves the EU at the end of October without a deal or a comprehensive transition arrangement in place. The betting odds have moved quite substantially and currently place the probability of such an exit in the range of 30–35 per cent. Changes in this probability seem closely related to both movements in the sterling exchange rate and expected short-term interest rates. And this is simply because market participants expect that such an exit would lead to a significant loosening in the stance of monetary and fiscal policy.

## A no-deal scenario

Should the clock run down without the government, Parliament or the EU agreeing on a deal or a further extension beyond 31 October, the UK will be subject to trade under WTO terms for the foreseeable future. This change would mean that customs duties are collected on UK borders, the regulatory regime of the EU single market would no longer apply and certain goods and services could no longer be exported. However, we assume that until the end of the current extension period in October, contingency planning will, as it did prior to the original deadline in March, be stepped up. We estimate that the negative shock on impact, without accounting for any policy response, may be in the region of some 2–3 per cent of GDP. In context this primitive shock might be around one third of the size of the financial shock that triggered the financial crisis. But both the UK government, the EU and member state governments have provided information to citizens and businesses, to assist them with withdrawal preparations (European Commission, 2018a, annex 3; Department for Exiting the European Union, 2018).

In November 2018, while it made clear that the UK would be treated as a third country, the European Commission proposed "a limited number of contingency measures to mitigate significant disruptions in some narrowly defined areas" (European Commission, 2018a), some of which the Commission started to implement in December (European Commission, 2018b). On 18 December, the UK government made no-deal preparations an operational priority accelerating legislation, and staffing and infrastructure decisions. In this *Review*, table A1 on F13 provides an overview of selected measures adopted or planned that will determine the economic impact of 'No Deal' in the short term.

It is important to note that most of the mitigating measures outlined by the European Commission would only be effective if reciprocated by both sides. A number of EU measures, for instance regarding financial services, are explicitly temporary and serve the purpose of allowing EU importers to switch from UK to EU suppliers. Putting procedures, infrastructure and staff in place to facilitate visa applications and customs checks will help mitigate temporary disruptions and queues but will not change the fact that freedom of movement will end, a number of services may no longer be tradable and the cross-border costs of goods trade will increase.

The long-run assumptions underlying our no-deal scenario are laid out in detail in Hantzsche *et al.* (2018). The Institute assumed that goods trade with the EU will be 50 per cent smaller compared to continued EU membership, services trade will be 65 per cent smaller and foreign direct investment will be 24 per cent lower leading to overall business investment being 3.5 per cent lower. We further assumed that net migration halves and the combination of lower investment, reduced levels of international competition and the potential lack of skilled labour from abroad reduce productivity by some 1.5 per cent in the long run compared to continued EU membership. To reflect contingency measures announced by both sides and assuming reciprocal treatment, we phase in trade shocks gradually over the final part of 2019 and 2020–21 such that half of the total shock materialises over two years. We then allow for further gradual adjustment over the course of a decade to account for regulatory divergence over time. Economic uncertainty around the exit date is reflected in higher investment, equity and term premia.[1] Overall, the impact of this form of exit may leave the level of UK GDP some 5 per cent lower than it would otherwise be in the event of remaining in the UK. In order to adjust to that lower path of activity the economy will have to undergo a period of below average growth. There is no unique path for growth as the economy adjusts, so the short-run impact of a no-deal Brexit depends very much on the responses of monetary and fiscal policy to which I will now turn.

## Modelling responses

How will policymakers react to a No-Deal Brexit? The response will be conditioned by the scale and specific nature of the disruption, as well as the reaction of banks and financial markets (see also Chadha, 2018). We focus here on the macroeconomics, i.e. the response of inflation and output to a No-Deal Brexit and the mitigating action that the Chancellor and the Bank of England's Monetary Policy Committee might take to stabilise the economy.

We have not explicitly modelled a disorderly no-deal as we think a 'Sudden Stop' in activity lies beyond the realm of the sliding scale approach to calibrating Exit. *In extremis* we would have to make some *ad hoc* assumptions about the scenario in which the country may find itself. The disruption to normality may have consequences that stretch outside of basic GDP calculation if, for example, food and medicines became unavailable for some time. There would also in the event of such a scenario be a sequence of policy reactions, as well as some pre-planning, that might mitigate some of the short-run consequences. To understand the scale of these tail risks and in response to a request from the House of Commons Treasury Committee, the Bank of England published the results of an assessment of the risk of a no-deal by considering the financial sector's ability to respond to a worst-case scenario with a systemic stress test. Indeed, the FPC developed a disorderly scenario (Bank of England, 2018, p59) and judged that "major banks would also be resilient to the disorderly Brexit scenario". For our purposes it means that, given the comfort of more capital and liquidity than in previous downturns, the financial sector would not necessarily substantively amplify the negative primitive shock from a No-Deal Brexit.

## Policymaker preferences

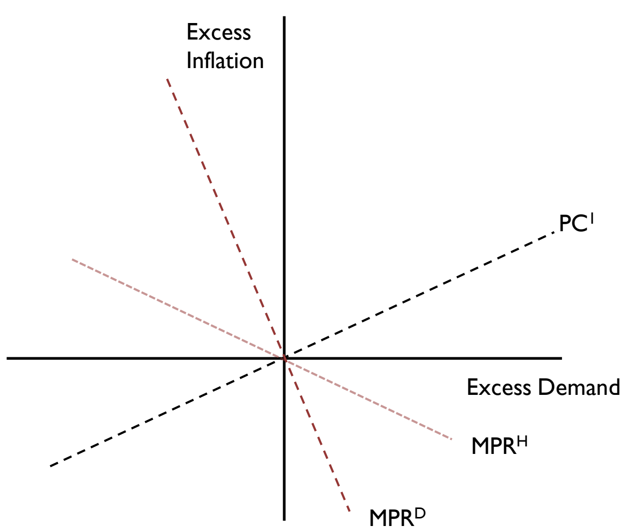
Policymakers can help stabilise GDP growth in the short term and so smooth its path to a lower level by deciding to allow some flexibility (by which I mean delay) in the time horizon over which the inflation target is met. This option would not be available in a scenario where wage growth picks up and policymakers believed that inflation expectations would be dislodged if monetary policy did not actively and immediately offset an EU exit-related spike in inflation. I focus on the short run and how policymakers can ease the transition of the economy to a new trading equilibrium by delaying some of the economic impact that will materialise in the future. The long-run impact arises mainly from a slowdown in capital, employment and productivity growth and therefore leaves little scope for monetary and conventional (counter-cyclical) fiscal policy to respond.

## Shocks and responses

The response of monetary policy to a No-Deal Brexit will depend on the magnitude and direction of aggregate demand and supply shocks. If mostly the former and negative, then monetary policy can respond by lowering Bank Rate, signalling limited scope for a return in rates to some neutral level for an extended period, as well as sanctioning the possibility of more asset purchases or support for commercial bank lending. To the extent that manipulations of the path of Bank Rate and operations on risk premia may not be sufficient, given that Bank Rate is so near to the zero-lower bound, there is a case for some countercyclical fiscal policy as well, in which case aspects of the Chancellor's fiscal rules may need to be relaxed. It gets more complicated if we get both types of shocks and what then should be done?

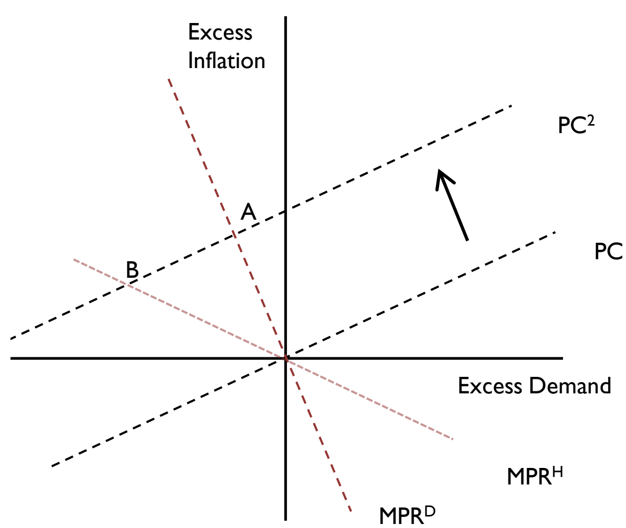
In the standard framework of economic fluctuations used by monetary policymakers, there are two key

Figure 2. The monetary policy trade-off



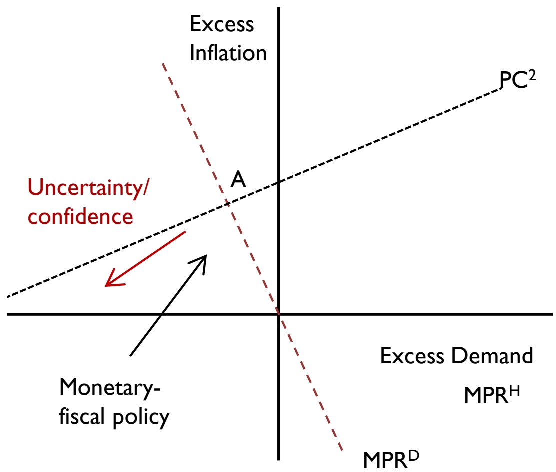

Source: NIESR.

Figure 3. The negative supply shock




Source: NIESR.

Figure 4. The negative demand shock




Source: NIESR.

relationships (figure 2). First, inflation is thought to be a function of excess demand (whether real or apparent or expected)[2] and may be shifted up or down by shifts in supply for every given level of excess demand. This 'Phillips curve' (PC) goes though the origin, which we take to represent the long-run growth path on the x-axis and the inflation target on the y-axis. The slope of the PC curve tells us something about the short-run supply constraints in the economy, and we might in our current situation also think of this as being affected by quality of contingency planning.

The second line represents the monetary (and fiscal) policy response (MPR) and is traced to outline the stabilisation required following a shock. On the one hand, if there is excess demand in the economy, policy will try to reduce it by raising Bank Rate (or tightening fiscal policy) and this will create downward pressure on inflation. Analogously, if demand is deficient in the economy, then inflation will tend to be injected into the economy with a reduction in Bank Rate or looser fiscal policy. The slope of the MPR curve is critical in a No-Deal Brexit. It tells us what the policymaker preferences are to inflation versus output responses in following any perturbations in supply. $MPR^D$ (D for Dove) traces preferences in which inflation is allowed to respond by more than output and $MPR^H$ (H for Hawk) suggests a greater response in output than inflation. An active monetary policy response to inflation, may limit inflation volatility but will also imply a much larger short-run fall in output, as a consequence. The trade-off between inflation and output variance is not outside the scope of inflation targeting, as practised by the MPC, and if it is decided that the target is to be pursued flexibly it is quite possible to accept a prolonged deviation in inflation from target with a monetary accommodation.

A No-Deal Brexit means that the level of inflation for a given level of excess demand will be temporarily higher, as the supply path adjusts to its lower long-run level. This means that $PC^1$ will shift to $PC^2$ and output-inflation will go to the points consistent with either $MPR^D$ at A or $MPR^H$ at B. The latter, B, implies tighter monetary policy than the former, A. And the former, A, will tend to lead to smoother path of output without necessarily threatening the credibility of the inflation target. It simply implies a slower adjustment of output to its long-run level and a less than restrictive path for Bank Rate.

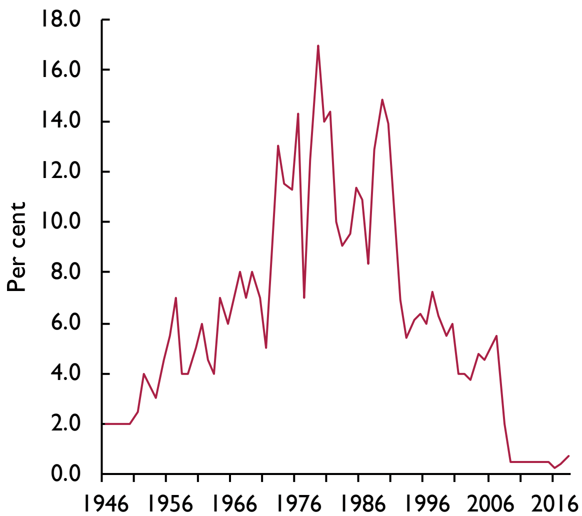
Even though the dominant, or what is called permanent, shock from an EU Exit is that on supply, there has been evidence to suggest that demand will also be affected. In the case of a No-Deal Brexit, we can expect uncertainty to become chronic and business investment to be deferred in line with both lower future economic activity but also in proportion to the level of that uncertainty. There is some evidence to suggest that inward FDI has stalled somewhat as well (see Box D on FDI in the UK section of this *Review*). We might also expect some fall in net exports. While admittedly the consumer has surprised us by continuing to behave in a robust manner since the referendum, the impact on investment and net trade alone will tend to reduce inflationary pressure and policymakers may find the economy arriving at some point to the South West of point A. In which case, both arms of monetary and fiscal policy will have a job to do in order to stabilise demand by loosening monetary and financial conditions. Whereas point A can be considered to be the anticipated response of policy, to the extent that demand may also shift activity downwards, policy will have to stand ready to respond in a more expansionary manner to limit the size of any contraction in activity.

## The counterfactual

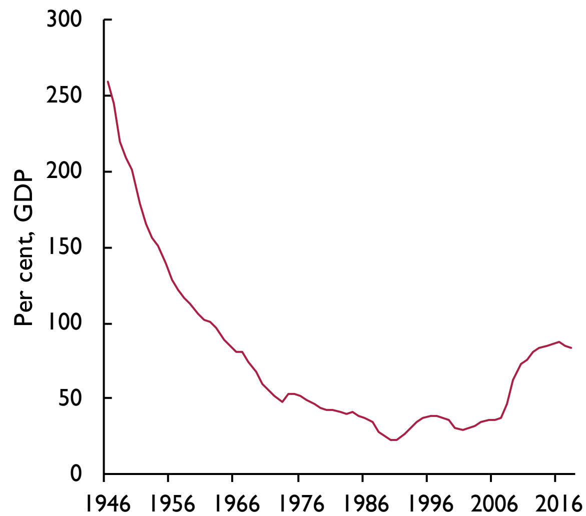
Our central forecast conditions on a soft EU exit, to which we apply a no-deal Brexit counterfactual that in the short term is characterised by an interruption to trade and productivity as well as a rise in risk premia. In this counterfactual, the productive capacity becomes constrained immediately after exit, for instance because supply chains are interrupted, and border barriers erected. Investment, interest rate and equity risk premia dampen economic sentiment and thus, aggregate demand.

Figure 5. Policy at limits?

Policy rate 1946–2018




UK public debt to GDP, 1946–2018




Source: Bank of England, 3 centuries dataset.

Despite many simplistic observations to the contrary (figure 5), which point to the low level of Bank Rate and the high level of public debt, policymakers have a wide range of instruments at their disposal and should deploy the tools that most effectively mitigate the dislocation. From the view of the central bank, there are various macro-prudential measures, Bank Rate, quantitative easing, liquidity injections, foreign currency swap lines etc. At this point, clear communication about the duration of low interest rates and about the likely level of long-run neutral rates would be particularly helpful, as well as outlining the scope for further asset purchases.[3] From a fiscal point of view, these tools range from tax cuts, spending measures, retraining for workers and loan guarantees. But countercyclical fiscal policies responding to a no-deal Brexit should not substitute for or prevent the fiscal authority from meeting the social requirements for further education, infrastructure and social care that we have repeatedly suggested should be a priority.

In our counterfactual (see the lines in figure 1) we focus on taxes, transfers and Bank Rate. Using NIESR's global econometric model, NiGEM, we assess the impact of these levers on inflation and GDP growth, assuming that policymakers will deploy these tools depending on their perception of the size of the shock and the persistence of inflation.

Our analysis suggests that a mix between accommodative monetary policy and expansionary fiscal policy has the potential to prevent the economy from a sharp slowdown in activity, and should therefore be adopted promptly in the case of a no-deal outcome, as long as wages do not respond to temporary increases in inflation and remain consistent with anchored long-run inflation expectations. Even with these measures, we would not expect a return to stable growth rates in output for some years, with the intervening period showing little or increase in the level of output. It must also be stressed that such a policy mix will not directly resolve any disruptions to supply as a result of trade restrictions and interrupted value chains or alter the fact that a no-deal Brexit would have some distributional consequences. But monetary and fiscal measures as 'blunt' instruments can be used temporarily to ease the transition of the UK economy to a new trading equilibrium. In the long run however, monetary and fiscal policy will not be capable of addressing structural changes arising from the new set of trading relationships.

While leading to a somewhat smoother adjustment, expansionary monetary and fiscal policy measures would not come without a longer-term cost. As a result of looser borrowing conditions, the risk of asset price inflation rises and levels of private and public debt would increase further from currently elevated levels. At the end of this response, we are then likely to have an economy that is more vulnerable to financial shocks and may reduce the space available to monetary and fiscal policy to react to shocks unrelated to the EU

Exit we are undergoing. We might then consider once again tools aimed at safeguarding financial stability, for instance using NiGEM's macro-prudential modelling suite (Carreras *et al*., 2018). The policy mix proposed here may be considerably less effective if a no-deal Brexit leads to structural disruptions to economic relationships that our modelling approach is not able to pick up.

## Concluding remarks

A no-deal exit from the European Union is an economic shock that will, at least over planning horizons, leave the UK's capacity to produce goods and services denuded relative to the *status quo*. Given that under the *status quo* we do anticipate growth, the impact of such an exit has to be lain over the growth path to understand the resultant exit velocity. The more friction that is thrown into trade in goods and services, the more detrimental the literature suggests the impact on overall economic activity is likely to be. It seems likely given the experience of the past three years that the transmission of this will be from lower business investment and inward FDI that would otherwise have been the case and some drag on the growth of total factor productivity, as frictions on trade in goods and services act to limit technological progress. Given that this is a permanent fall in supply, relative to the *status quo*, how can demand management through monetary and fiscal policy help, if at all?

Given that both arms of monetary and fiscal policy are bound by rules, one possible answer is to do nothing to shift the level of aggregate demand and simply accommodate a higher temporary inflation and sharp fall in output growth. It could be argued that the monetary policy committee of the Bank of England is bound to meet its inflation target and that the Chancellor has a bespoke straitjacket that includes a fiscal mandate, objective and supplementary target for deficits and debt. If, however, we think that the variance in output matters, by which we mean we can smooth the path to the new lower level of activity, then there is a strong case for a prompt and flexible response to limit the violence in any economic fluctuations.

## NOTES

1 See Chadha, Hantzsche and Mellina, 2018, for a discussion how premia are offset by financial market expectations of an expansion of the asset purchase facility.
2 See Farmer (2016) for the challenge that it is beliefs rather than actual activity or demand that link to inflation.
3 See Barwell and Chadha (2013) who outline one way in which the MPC can communicate the path of Bank Rate and the stock of assets held by the APF.

## REFERENCES

Bank of England (2018), 'EU withdrawal scenarios and monetary financial stability – A response to the House of Commons Treasury Committee'.

Barwell, R. and Chadha, J.S. (2013), 'Complete forward guidance', pp.125–32 in den Haan (ed.), *Forward Guidance*, CEPR VoxEu E-book.

Carreras, O, Davis, E.P., Hurst, I. Liadze, I., Piggott, R. and Warren, J. (2018), 'Implementing macroprudential policy in NiGEM', NIESR Discussion Paper No. 490.

Chadha J.S. (2018), 'Written Evidence to Treasury Committee ahead of the Oral Evidence Session: "The UK's economic relationship with the European Union"', held on 3 December 2018, NIESR Policy paper No. 9.

Chadha J.S., Hantzsche, A. and Mellina, S. (2018), 'Bremia: a study of the impact of Brexit based on bond prices', NIESR mimeo.

Dasgupta, P. (2005), 'The economics of social capital', A.C. Mills Lecture.

Department for Exiting the European Union (2018), 'How to prepare if the UK leaves the EU with no deal', online: https://www.gov.uk/government/collections/how-to-prepare-if-the-uk-leaves-the-eu-with-no-deal.

European Commission (2018a), *Preparing for the withdrawal of the United Kingdom from the European Union on 30 March 2019: a Contingency Action Plan*, COM(2018) 880.

—(2018b), *Preparing for the withdrawal of the United Kingdom from the European Union on 30 March 2019: Implementing the Commission's Contingency Action Plan*, COM(2018) 890.

Farmer, R. (2016), *Prosperity for All*, Oxford University Press.

Hantzsche, A., Kara, A. and Young, G. (2018), *The Economic Effects of the Government's Proposed Brexit Deal*, NIESR report, November 2018, also published in The World Economy, 42(1), pp. 5–20.

Hantzsche, A. and Young, G. (2018), *The Economic Impact on the United Kingdom of a Customs Deal with the European Union*, NIESR report, May 2019.