

## CAMBRIDGE WORKING PAPERS IN ECONOMICS

# Mr Putin and the Chronicle of a Normalisation Foretold

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## **Abstract**

Major central banks have been caught in a low interest rate trap for over a decade. The temporary response to the financial crisis of 2008-9 has become something of a regime. The Federal Reserve, for example, attempted to ease quantitative easing in 2013 but this stalled following the "taper tantrum" and commenced a normalisation in the Federal Funds rate from 2015 but during Covid major central banks around the world rapidly returned policy rates to around zero. Low policy rates have been the response to tighter credit conditions, excessive global savings, low levels of investment and fiscal consolidation. But they have also played a role in propelling asset price growth and increasing levels of indebtedness. The accommodative stance in monetary policy, as well as the impetus from previous monetary and fiscal interventions seem like to have stoked inflation to a higher level that might otherwise have been the case following the shock of a war on the European continent. But may also have finally secured a normalisation in policy rates.

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Introduction

Mr Putin's invasion in Ukraine has imparted a considerable shock to the world economy. At the

end of 2020, inflation in the OECD countries stood at 1.2%. By the end of the first quarter of

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alone.

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2023, it had risen to 8.8%. Over the same period, global policy rates rose from -0.5%, 0.2% and 0.1% in the Euro Area, USA and UK respectively to stand at 3.25%, 5.0%, 4.5% by April 2023. Accordingly, the National Institute of Economic and Social Research had forecast world GDP to grow at 4.2% and 3.5% in 2022 and 2023 in February 2022 but by February 2023 this had been heavily revised down to 2.3% and 2.8% respectively. The sharp increase in energy and food costs since the Russian invasion of Ukraine has not only threatened price stability but has also asked severe questions of the monetary and fiscal frameworks which coped so well with stabilising the global economy over the previous quarter of a century. Many had argued that this period of extraordinary monetary policy, while helpful in avoiding an extended depression after the global financial crisis, had been extended too long and expanded too far. The consequence of this was an unnecessarily large amount of quantitative easing, burgeoning public debt, and an increase in the fraction of unproductive firms, as well as the mispricing of risk in financial markets. If not a secular stagnation, by which I mean a period of slow structural growth that has required historically low interest rates to prevent deflation, the period seems to have had many of the characteristics of a liquidity trap, with firms hoarding cash rather than investing. It would be ironic indeed if an act of international aggression were to be provide the impetus to correct a misalignment in the stance of monetary policy.

#### Context

The invasion of Ukraine came at a precarious moment for a global economy still trying to recover from the impact of the Covid pandemic. Output had barely reached its pre-Covid peak in most OECD economies when Russia's tanks crossed Ukraine's border. Across the world, the fiscal response to Covid, in terms of additional expenditure and foregone revenue, amounted to some 18% of advanced economies GDP in 2020 prices, as well as another 10% of GDP in terms of equity loans or guarantees.[1] While many maintained that the Covid shock was primarily one to the supply-side, with real markets in dysfunction and workers withdrawn from the labour force, there were also an impact on the demand-side. These were manifest most obviously with a radical increase in the savings rate, with some of this rise forced and some precautionary. As the pandemic receded, the world entered into a period of readjustment from around 2021. Such a world was not business as usual, or even coming close to it, not least as a result of significant supply chain disruptions, with China maintaining a strict Covid regime with manufacturing, and with global shipping still facing disruptions. Monetary policies had been accommodative over the Covid period with the period of abnormally low rates extended further and fresh bouts of central bank

balance sheet operations re-ignited. In the UK, for example, the quantum of QE rose from £495Bn to £895Bn at a peak at over 35% of GDP.[2]

It was into this fertile mix of loose monetary and fiscal policy that the impact of war was unleashed in February 2022. The immediate impact was practically to double raised energy and food prices.[3] As a result of the increase in the cost base for consumption and for production, economic policy makers were presented with the problem of stabilising inflation and providing support for those households that would find it difficult to bear the impact on their disposable income. In ordinary times alone, this would have been pretty difficult. But simultaneously engineering an emergence from the expansionary policy stance amplified the nature of the problem. The initial position meant that the impact of the negative supply shock was exacerbated and that countries had levels of public debt, at 100 per cent of GDP or more, far above notions of peace-time normality. In the language of the post-financial crisis; fiscal space was limited and monetary policy had a considerable distance to travel.

The emerging prospect of a prolonged war of attrition in Ukraine has further exposed some of the limitations of the economic settlement that was established following the end of the Cold War in 1991. The acceleration in de-industrialisation in the West since the 1990s, has contributed both to a reduction in global inequality but an increase, or least, an entrenchment of domestic inequalities that have probably promoted a move towards populist movements. But a war asks directly whether some of the peace dividend that allowed defence expenditure to fall may now need to be claimed back. OECD defence expenditure had fallen from 3.5% of GDP in 1988 to 2.4% of GDP in 2020.[4] Furthermore, would the discovery that Ukraine accounted for some \$27bn of global food exports accounting for significant fractions of sunflower oil, wheat, corn, rapeseed and barley exports bring forward the move to onshoring? And if the calls for greater economic resilience in the light of Covid were also to be addressed, there would have to be an extended period over which public and private investment would build up domestic supply networks and inventories. Each of these responses will tend to put upward pressure on domestic absorption around the world, and accordingly on domestic interest rate. And so I focus the rest of this essay on why we may observe that it was the invasion in Ukraine that finally led to the reversal of global rates back to historical norms.

#### The Case for Normalisation

Policy rates hovering around zero were a rare phenomenon prior to the global financial crisis. In the immediate aftermath of World War I and World War II, there were periods when policy rates supported the creation of fiscal space and fiscal consolidation.[5] In more normal times, the monetary authorities were typically handed an exchange rate target and, latterly, an inflation target by their governments that was thought both to be reasonably consistent with price stability and yet not likely to induce too many costly deflations. Typically, a target of around 2 per cent for the CPI was settled upon. This was coupled with a natural rate, which ensured that the market was cleared for savings and investment or at least directed path towards market clearing, which was generally of around 2–3 per cent. Together, this meant that policy rates were expected to lie in the region of 4–5 per cent.

In the face of economic shocks, monetary policy decisions set a temporary rate that offsets the shock or accelerates the economy's adjustment to the new economic circumstances. Let us suppose, for example, that a greater degree of economic uncertainty drives down investment demand. Monetary policymakers might seek to offset this uncertainty shock by reducing the policy rate so as to provide a lower hurdle for investors to surmount, and thus promote demand and offset the shock. The policy function in normal times, when monetary policy was actively trying to offset shocks and stabilise the economy efficiently, involved changing the policy rate by more than any change in actual or expected inflation, so that the temporary deviation in the real interest rate brought forward or delayed demand in such a manner as to bring inflation under control at the policy horizon.

In a nice, compact world with small shocks, we have a good idea of what the central bank may do, as its policy rate will follow inflationary pressure in a uniform manner. But with a sufficiently large negative shock to overall activity, the policy rate might have to fall to zero and then find itself in a bind. Indeed, while hypothetically the central bank might prefer even lower rates but this may not be possible. Because as policy rates tend to zero, cash will give a similar rate of return to bank deposits, which are linked to policy rates, and this will prevent or limit the extent to which central banks can affect even lower policy rates. In principle, people would rather hold cash than see their bank balance diminish through negative interest rates. This observation implies that the policy function with respect to inflation is not linear and at, or close to, zero may become horizontal,

with policy facing little room for manoeuvre in response to a large enough or sustained negative shock. In such a scenario, we have a world in which monetary policy is 'passive'. By this, it is meant that policy rates move by less than any change in inflation and cannot by itself get the economy back to the 'normal' equilibrium.

Such a situation leaves monetary policy authorities with a choice over affecting longer-term rates by making signals about the future stance of policy or influencing premia by exchanging central bank liabilities for assets held by the private sector. There are two separate interpretations of this situation. One is that it allows activism by other means by determining longer term interest rates promoting. The other is that there has been an acceptance of 'passive' monetary policy, which allows fiscal policy to take the strain. And yet after the financial crisis fiscal policy was, at least in terms of the normal perception of the acceptable level of public debt to GDP, already exhausted, so activism by other means was the prescription if it could be found. The weight of controlling nominal demand was placed on central banks who embarked on policies that expanded their balance sheets. While it seems to have prevented a prolonged depression, most advanced economies have subsequently been the doldrums with stagnation in the growth of real incomes per hour worked. I maintain these two outcomes are unlikely to be independent. But could the change in the forces acting on the global economy in light of Covid and the war, allow monetary policy to escape the bind?

#### The War and Easy Money

There has been much written on how to escape from a growth or liquidity trap or what popularly came to be known as a secular stagnation. Some have argued that such a trap was highly unlikely and should not have been too much of a concern in the design of monetary policy operating procedures [6], particularly if central banks had credibility because it would always be expected that the inflation target would be achieved and so rates would be expected to return to normal. And since the 1970s the discussion of the liquidity trap had increasingly fallen out of focus as the problem was rather how to bring down inflation and attain price stability, by reducing demand, rather than how to boost demand. But the theoretical possibility remained. In light of Japan's experience since the 1990s, a number of exit strategies were offered. Harking back to the original problem of money and bonds being perfect substitute at zero interest rates, Buiter and Panigirtzoglou [7] suggested placing a negative (Gesell) tax on base money - currency and reserves

- as a way of discouraging holding. Svensson [8] suggested engineering a large exchange rate depreciation in order to bring about a temporary inflation and a loosening of monetary conditions. Many have argued for the deployment of a temporary expansion in fiscal policy, mostly through expenditure rather than tax cuts, in order to stimulate demand, starting of course with Keynes himself. But do note that attempting to stoke aggregate demand will tend to be most effective when public spending on goods and services or on investment does not offer a good substitute for private sector demand and so adds to demand, ideally by nurturing supply. [9]

Could we have escaped with better management of expectations? That is to lower real rates by creating inflationary expectations. A famous strategy developed by Eggertsson and Woodford suggested exploitation of the expectations channel with the central bank proving a credible commitment to create a boom.[10]. It is though difficult to conceive of a way that an institution, in this case a central bank, committed to or designed for the achievement of price stability might reasonably expected to commit to a boom. A variant of this idea was though adopted by the Federal Reserve in 2020 with the inflation averaging regime. I shall return to this regime later, but the idea here is that following a deflationary shock inflation may fall below target for some time but if the long run average inflation target is credible households and firms will start to expect higher than average inflation for a short period which will perforce ease monetary conditions by lowering the real interest rates and so stimulate demand. Others have focussed on the inherent instability of models that rely so heavily on forward-looking expectations and argued that a liquidity trap was always beckoning, and that the way out was to build confidence by raising interest rates and signalling a return to normality.[11, 12] A natural consequence of this form of reasoning was the deployment of various forms of forward guidance which attempted to provide statements as to when interest rates would return to normal, either in terms of a commitment to a time in the future or a particular state of nature. But these forms of verbal guidance have not been judged to have been a great success and I have previously suggested that longer term expectations of policy rates responded more to the actual duration of policy rates at zero rather than any specific statements.[13] It seems more that the market learned more from actually observing that rates would not change rather than being told they would not change. Indeed, Woodford and Xie suggest that "default expectations are best shaped by systematic action in accordance with a relatively simple rule, since they are learned by induction from past experience".[14]

In all this discussion, over the past 15 years escape velocity from the zero lower bound looked very hard to achieve. The US tried both to tune down quantitative easing in 2013 but quickly retreated in the face of a "taper tantrum". The Federal Reserve tried to engineer a lift off in rates from late 2015. In a similar vein, the Bank of England started to raise rates in late 2017. But both attempts were stymied by Covid. And the irony is that just as it seemed that the United States only completed its recovery to full employment in 1942 [15] in the two years from 1940 to 1942 when fiscal policies became instrumental during wartime and mobilisation, a return to normal levels of interest rates seem to have been prompted by a war started in 2022, which has provided a large inflation shock and a fillip to public indebtedness. So it might be that it is a more or less standard response to a large inflationary shock and the build-up of inflationary momentum that allows us to leave the low interest regime once and for all.

#### The Natural Rate of Interest

There has, of course, been a secular decline in the global real rate since the 1990s and that has increased that likelihood of central banks being caught in a low interest rate trap. The standard explanation for this decline is that households in the rapidly industrialising countries have had a lower rate of time preference and so built-up the stock of globally available savings rapidly. The market for global savings therefore cleared at successively lower rates of interest rates as this stock of savings was built up. The rate at which savings and investment schedules clears is the natural rate of interest and has accordingly drifted downwards over time. And it is deviations from the natural rate that determine the traction of monetary policy.

The increase in global supply capacity without a parallel increase in overall spending tended to reduce progressively the rate at which savings and investment cleared. An impetus to this trend was provided by the financial crisis, which by lowering the quantum of financial intermediation, acted to lower further the natural rate and thus led to both an extended period over which policy rates hovered around zero and prompted extensive purchases of government bonds that acted to lower interest rates at term.

In light of the invasion of Ukraine, there are now a number of factors that are acting both to limit the growth in potential supply and also push up expenditures, which may support a reestablishment of normal policy rates. Higher energy prices will tend to constrain potential growth, as will the fragmentation of trade, which may ultimately lead to the formation of new trading blocs. As the newly industrialised economies reach the productivity frontier, we can also expect their growth rates to fall to advanced country levels. At the same time, the war and Covid have revealed a need for more public expenditure. For example, world military expenditure rose by 3.7 per cent in real terms in 2022, to reach a record high of some \$2,2 trillion.[16]. These pressures, particularly if they are significant and aggressive, will tend to raise the natural rate of interest. And this about turn may not yet have been fully factored in by financial markets [17], which often adjust more slowly to changing secular trends than one might think optimal.

To illustrate, Figure 1 [18] shows how the natural rate is determined at the intersection of global potential output and clearing in the goods market (IS curve). Positive global growth with a stable schedule for clearing expenditures on goods will tend to push down the natural rate. In principle, this could lead to fall in the natural rate to a negative level from **A** to **B**. We could choose to characterise the period since the global financial crisis as having obtained that state, particularly if the IS curve has also shifted down (not shown). The war though may not only have reversed this step but provided some impetus for the situation to reverse with the natural rate eventually rising to **C**, as shown in Figure 2, which will result if the newly industrialised countries start consuming rather than saving. The secular forces that have driven down the natural rate may be about to reverse.

#### The Monetary Policy Stance

The final part of the jigsaw is the monetary policy stance as we have come out of the Covid cloud. The global monetary support for fiscal policies during Covid was understandable at the time and with hindsight. The absence of a clear exit strategy for reversing emergency support arguable allowed the support to stay in place for too long and caused us to forget that prior to Covid we had sought to normalise rate. The deployment of average inflation targeting and increasing reliance on flexible inflation targeting, along with peripheral monetary issues such as climate change, employment and financial regulation, meant that both the Federal Reserve and the Bank of England may have moved some distance from simple inflation targeting. The European Central Bank has confronted complex control problems as the member countries do not constitute an optimal currency area, which has arguably led to some sluggishness in policy.

In its August 2020 statement on monetary policy the Federal Reserve stated that:

"In order to anchor longer-term inflation expectations at this level, the Committee seeks to achieve inflation that averages 2 percent over time, and therefore judges that, following periods when inflation has been running persistently below 2 percent, appropriate monetary policy will likely aim to achieve inflation moderately above 2 percent for some time...the Committee seeks over time to mitigate shortfalls of employment...The Committee intends to ... undertake roughly every 5 years a thorough public review of its monetary policy strategy, tools, and communication practices."[19]

And this statement might be interpreted as involving both an occasional shift in the medium-term inflation target and the adoption of a supplementary target to support employment, which would imply trade-offs in the face of negative supply shocks and possibly a lower aversion to inflation by the central bank. The Bank of England, on the other hand, has had a clear secondary remit to support the economic policy of the government, including objectives for employment and growth.

This remit states:

"the objectives of the Bank of England shall be:

a. to maintain price stability;

and b. subject to that, to support the economic policy of Her Majesty's Government, including its objectives for growth and employment." Which allows it to pick the horizon over which inflation is brought back to target following a significant overshoot or undershoot. In this case, the deployment of that path has not been credibly communicated.

How does all this translate into an inflation response when there has been a supply shock? Well, Figure 3 traces a linearised Phillips curve showing how short run supply responds to demand and higher inflation. But also two monetary policy reaction lines: MPR<sup>H</sup> when the policy maker has a high level of distaste for inflation, a so-called hawk, and MPR<sup>D</sup> when the policy maker is more willing to accept a higher level of inflation temporarily, a so-called dove. We can thus immediately note in Figure 4 that upon a negative supply shock, inflation will rise to **A** or **B**, depending on the inflation credentials of the central bank. In other words what we see in terms of inflation

incorporates not only the supply shock but also the assumed policy response. It cannot be stated strongly enough, that observed inflation always is a result of shocks and responses, actual or expected. Furthermore, if there are supply chain issues or a break in trade, for example, as a result of Brexit, this Phillips curve may steepen. And in this case, as drawn in Figure 5,  $A^2 > A > B^2 > B$ . Finally, as shown in Figure 6, in the case of the Federal Reserve, which may temporarily increase its implied inflation target or in the case where it is expected that the central may raise its target, in this case I have suggested that even the MPR<sup>H</sup> curve may shift up and drive inflation up even further with  $A^3 > A^2$ . In the UK, the government had stated a wish to halve inflation in 2023, which may have inadvertently introduced a temporary inflation target for 2023 of 5% and played a role in more persistent inflation. My basic point here is that although we are right to assign much or the greater part of the inflation shock to the one-off increase in energy and food prices, these interact with the actual or perceived stance of monetary policy to create the actual inflation dynamics we observe. The impact of the war on inflation has thus been amplified by the initial conditions of monetary policy and now produced the long-heralded policy normalisation.

#### Conclusion

One of the consequences of the invasion of Ukraine is that over a decade after we entered the period of ultra-low or unconventional monetary policies, the combined shock to the fiscal positions and to inflation have finally jolted policy rates back into historically recognisable territory.[13] The good news story would involve a more secure deposit base, under these higher short term interest rates, with incentives to save and financial intermediation operating to locate higher real returns [21], as inflation returns to levels associated with price stability over the next 18 months. The bad news story would be one where the overall deflationary impetus, as we moved from the low interest rate regime back to the normal one, has simply been too large and rates have to correct downwards back towards zero as recessionary forces build up. To the extent that inflation has been more elevated than it might have been, this has increased the possibility of the second and much worse outcome. And to that is at least in part due to some slippage in the actual or at least perceived commitment to price stability. [22] It is important that central banks are not given too many objectives which will require trade-offs against the attainment of price stability when we have a limited number of independent instruments. And that some earlier attention to the exit strategy from extraordinary monetary policies was outlined, particularly following their reignition during the Covid cloud. While it is not impossible that we may get dragged back into the liquidity trap, at least for the moment we are out. And that is one monetary benefit from the war.

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Figure 1: Natural Rate of Interest

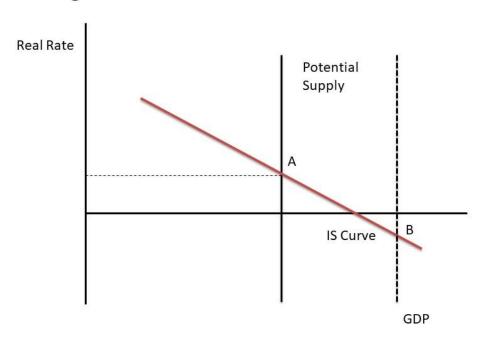
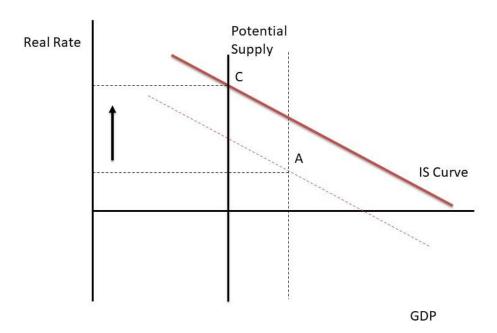


Figure 2: Natural Rate of Interest





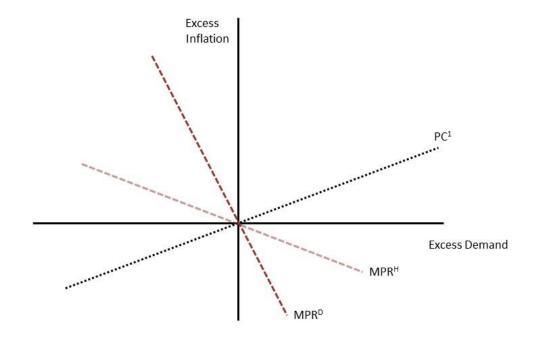
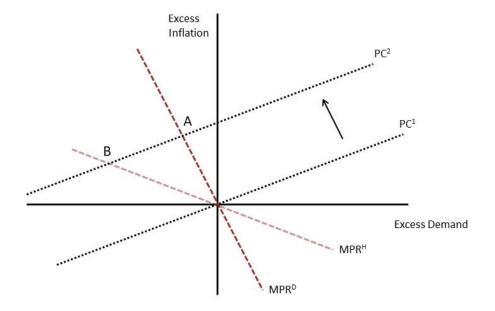


Figure 4: The Negative Supply Shock





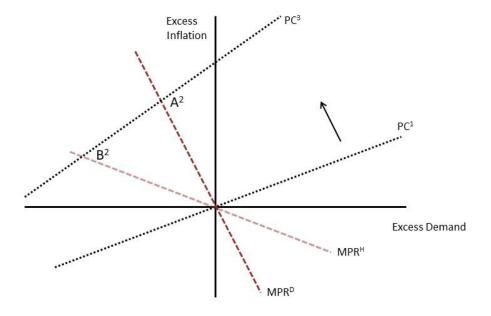


Figure 6: The Negative Supply Shock, Steeper Phillips Curve and Shifting Target

