Feminist perspectives on monetary policy

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Executive Summary

This research takes as its point of departure that the continued dominance of monetary policy for macroeconomic management provides an imperative for feminist interventions on this critical area of public policy. Such a perspective can reveal not only important gendered distributional implications of monetary policy for consumption, income, employment and wealth, but also how these outcomes in turn impact upon gendered roles and power in the household, workplace and public spaces, and our collective ability to build a more caring society.

The New Keynesian Economics (NKE) monetary policy (MP) framework has for over three decades stood behind the conventional approach to central banking and monetary policy, that of an independent central bank using short-term interest rates to target an inflation rate of 2%, the so-called 'inflation targeting regime'. In terms of distribution, the balance of empirical evidence suggests that contractionary (/expansionary) conventional monetary policy (CMP) leads to increased (/decreased) income and wealth inequality. The crisis of 2008 posed an important challenge to NKE monetary policy orthodoxy. It became clear that the requisite turn to unconventional monetary policy (UMP), most notably quantitative easing (QE), was reliant on a wealth effect for impact, bringing increased attention to distribution. Expansionary UMP appears to have increased income and wealth inequality in the UK. To date very little research exists which examines the gendered distributional impact of either CMP or UMP. The distributional impacts of both CMP and UMP are not unambiguous; a range of institutional characteristics, the nature of central bank intervention, and the fiscal framework into which MP is conducted, all play a role in determining the ultimate distributional outcome of a particular set of MP measures. Also important, and under-researched, is the impact of the timing of intervention and the asymmetry of the impacts over the business cycle.

The NKE framework is beset by a number of fundamental problems. These include its grounding in the controversial theoretical precept of a 'natural' interest rate; the arbitrary choice of inflation target; tenuous support for the hypothesised impacts of incremental changes in the short-term interest rate on output and inflation; and an over-emphasis on the role of domestic wage pressure in generating, and therefore managing, inflationary pressures. A feminist approach to monetary policy, by abandoning the shibboleths of the NKE framework, could adopt a very different approach: moving from a rigid focus on price stability to the recognition of complex social realities in its goals; considering the use of a broader range of central bank tools to target real variables in addition to price stability; and taking a less dogmatic approach to inflation management involving both a more nuanced understanding of causality and greater willingness to cooperate with fiscal authorities in addressing its impact.

What would reform of monetary policy from a feminist perspective look like in concrete terms? More easily accomplished will be those reforms which do not threaten the hegemonic

NKE monetary policy framework. This would include: criteria for increased diversity on both formal governance bodies of central banks and citizens' forums which provide feedback on central bank policy; greater attention to gender, race and class in data-gathering exercises; research into the impact of gender discrimination on monetary policy transmission; ex-ante impact assessments of the gender, race and class-based impacts of proposed monetary policy; and greater public accountability for the central bank over investment in the care economy. While such reforms may be important in their own right, they run the risk of becoming gender ‘window dressing' and even perhaps reinforcing the ongoing commodification and financialisation of care.

In the longer-term, more fundamental reforms that challenge the hegemonic model of NKE MP must be considered: revisiting central bank goals and independence; a greater role for the central bank in channelling low-cost credit to social and environmental priorities; the integration of social and environmental standards into capital requirements and financial regulation; and greater coordination with Treasury to ensure the financial sustainability of increased public investment in and support of a caring economy. However, any such calls for a more interventionist role of the Bank of England in pursuit of gender equity must be carefully calibrated so as not to endorse monetary dominance, given the greater effectiveness of fiscal policy to directly impact a range of macroeconomic outcomes, distribution and gender equity. Moreover, it is clear that any such challenges to monetary policy orthodoxy will face significant opposition from powerful voices within policy circles, the private sector and academia.

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1. Introduction[1]

The earliest mainstream attention to the potential distributional impacts of monetary policy dates from only 25 years ago[2]. The issue remained largely ignored until the advent of unconventional monetary policy (UMP), namely quantitative easing or QE, after the onset of the Great Recession in 2008. But even with the significant increase in research interest over the past decade, little attention has been paid to dimensions of difference other than income and wealth. This failure of economists to consider the distributional impact of monetary policy has been, perhaps more surprisingly, replicated in gender studies[3], with a few important exceptions[4].

There are a number of possible explanations for this omission. Training and research interests have undoubtedly played a role. Practically, where research time and advocacy budgets are constrained, it has probably made sense to focus on the more powerful lever for gender equality of fiscal policy. For more mainstream economists, there has likely been an acceptance of the (usually unstated) premise that monetary policy as practiced in recent decades is distributionally neutral over the business cycle: 'Interest rates go up, interest rates go down; whoever gets hurt during the crunch gets helped during the subsequent period of stimulus'.

This research takes as its point of departure that the continued dominance of monetary policy for macroeconomic management provides an imperative for feminist perspectives on monetary policy. Such a perspective can reveal not only important gendered distributional implications of monetary policy for consumption, income, employment and wealth, but also how these outcomes in turn impact upon gendered roles and power both in the household and the workplace, and the ability of a given society to build a more caring society.

In the next section, a brief sketch of the dominant intellectual framework governing monetary policy, the New Keynesian Economic (NKE) framework, is laid out. This is followed by an assessment of the research examining the impact of conventional monetary policy (CMP), that is short-term interest rate interventions, on economic inequality. The balance of evidence suggests that contractionary CMP increases economic inequality, however the evidence is not unanimous and there appears to be an important role for contextually specific factors. There are also important question marks surrounding the symmetry and timing of contractionary versus expansionary interventions. The section continues with a summary of the small literature which explicitly looks at the gendered distributional impact of CMP, where the case has been made that women bear the greater burden of contractionary CMP in terms of increased unemployment, falling incomes and a rising pay gap. However, there are once again contradictory studies which find that the gendered distributional impact of CMP is negligible. Section 3 starts by describing the changes wrought on the NKE MP framework by the tumultuous events set off by the crisis of 2008. This is followed by an appraisal of the empirical literature examining the broader distributional impact of QE on economic inequality, where the evidence appears to more unambiguously support the

[1] This paper includes a glossary with key definitions, which can be found at the end of the document.
[2] Christina D. Romer and David H. Romer, 'Monetary Policy and the Well-Being of the Poor', *NBER Working Paper*, no. 6793 (November 1998), https://doi.org/10.3386/w6793.
[3] B Young, 'A Macro-Level Account of Money and Credit to Explain Gendered Financialization', *NEW POLITICAL ECONOMY* 25, no. 6 (18 September 2020): 944, https://doi.org/10.1080/13563467.2019.1664448.
[4] For example: Martina Metzger and Brigitte Young, 'No Gender, Please, We're Central Bankers: Distributional Impacts of Quantitative Easing' (Berlin: Institute for International Political Economy, 2020), https://www.hwr-berlin.de/fileadmin/institut-ipe/Dokumente/Working_Papers/ipe_working_paper_136.pdf; Brigitte Young, 'The Impact of Unconventional Monetary Policy on Gendered Wealth Inequality', *Papeles de Europa* 31, no. 2 (2018): 175–86; Elissa Braunstein and James Heintz, 'Gender Bias and Central Bank Policy: Employment and Inflation Reduction', *International Review of Applied Economics* 22, no. 2 (1 March 2008): 173–86, https://doi.org/10.1080/02692170801889643; Stephanie Seguino and James Heintz, 'Monetary Tightening and the Dynamics of US Race and Gender Stratification', *The American Journal of Economics and Sociology* 71, no. 3 (1 July 2012): 603–38, https://doi.org/10.1111/j.1536-7150.2012.00826.x.

argument that QE increases income, consumption and wealth inequality, though here too there are dissenting voices. The very limited literature on gender and racially disaggregated distributional impacts raises concerns about QE, thus pointing to the need for further research.

Sections 4 and 5 take a step back from the analysis in sections 2 and 3 of the distributional impacts of monetary policy *as practiced*, to ask what would an alternative to the NKE MP framework look like, and what would be the implications from a feminist perspective. After a critical assessment of the foundations of NKE MP, a number of fundamental reforms are considered. First is the move from an exclusive goal of price stability to a multi-goal framework balancing the goals of price stability, growth and financial stability with the adoption of cross-cutting objectives of social equity and environmental sustainability. Second to be considered is whether inflation targeting (IT) is the most effective regime to achieve price stability or whether, within a multi-goal framework, there should be consideration of a move towards targeting real economic variables; there is considerable controversy over this possibility with concern from a number of quarters over whether the central bank can or should play such a role. Section 4 concludes with a critical discussion of the current approach to managing inflation which defaults to the use of short-term interest rates to snuff out any perceived risk of a wage-price spiral, asking whether both broader macroeconomic goals as well as those of gender equity would be better served by a more complex and tailored approach.

Section 5 opens with a brief assessment of the strength of women's voices both within the formal hierarchies of central banks, and within the more informal structures that have been created to inform their decision-making processes; unsurprisingly finding that there is room for improvement. In the second part of section 5 a number of tools are considered to more pro-actively guide credit towards both public and private activities which support greater gender equality. This includes: increased transparency and accountability for levels of private investment in the care economy; cooperation with fiscal authorities to oversee an expansion of public bank support for gender equality and public provision of care services; the introduction of capital requirements related to banks' lending to the caring economy; and, finally, an explicit role in ensuring the affordability of government borrowing explicitly targeting social and green infrastructure.

The final section concludes, drawing out lessons both for narrative framing and for a policy agenda. The policy agenda is divided into, first, less confrontational (and therefore more likely achievable) initiatives related to diversity, data, research and accountability, and, second, more fundamental reforms with perhaps more profound implications both for their gendered impacts but also for the continued dominance of monetary policy orthodoxy.

2. Conventional monetary policy

a. The fundamentals of the New Keynesian monetary policy framework

The orthodox New Keynesian Economics (NKE) framework for managing the business cycle, which has underpinned monetary policy for three decades, perches uneasily atop both a number of contested assumptions and the shifting terrain of the international financial system laid bare through the experience of crisis. First and foremost of these assumptions, is that of the existence of a natural rate of interest which – given a certain quantum of capital, labour and technology – ensures that an economy cleaves to its long-run equilibrium output growth path, accompanied by a low and stable level of inflation (arbitrarily understood to be 2%). Within this framework, the main job of the central bank is to manipulate the short-term market rate of interest[5] so as to ensure that the inflation-adjusted real interest rate matches that underlying – and unobservable – natural rate. If the observed inflation rate (setting aside for the time being precisely how it is measured or what is causing the rise in prices) is above the target rate of inflation, then – by assumption – it must be because the market rate has been set too low relative to the natural rate of interest, generating excessive credit creation and inflation (the argument is reversed if observed inflation is *below* the target rate).

To cool down the economy, the central bank must raise short-term interest rates; this is premised on the second key assumption that incremental changes in the short-term interest rate can effectively lead to a gradual fall in output, employment and ultimately inflation. The impact of the rise in the bank rate is felt through its impact on: borrowing for consumption and investment related to changes in both borrowing costs and confidence/profit expectations of firms and households; asset prices; and the exchange rate, with impacts on net exports. The central causal mechanism is asserted to be the impact of falling consumption and investment on output and employment, thereby raising unemployment and decreasing wage costs, with the tacit assumption that inflation can best be managed through control of (if not primarily driven by) domestic wage pressures.

The 'art' of central banking then, lies in the timing, speed and management of the process of short-term interest-rate manipulation in order to engineer a relatively smooth reversal of what has been judged to be an overly expansionary phase of credit creation. By announcing its inflation target publicly and making the necessary adjustments to short-term interest rates to successfully achieve that target, it is argued that the 'sacrifice ratio', that is the number and size of interest rate rises (and accompanying rise in unemployment) that will be needed to cool down the economy, will be less than it would have been under alternative institutional arrangements. Under an inflation targeting regime, it is argued that the credibility of the central bank to maintain its inflation target will go up in the eyes of private market agents; this, in turn, will make the central bank's job easier as firms and households respond more effectively to the 'signals' of the central bank. This belief has underpinned a significant increase in both central bank 'forward guidance', that is public announcements of the central bank's intentions for monetary policy over a given timeframe and/or states of the economy, and the transparency of its decision-making processes. The more successful that an inflation targeting regime is judged to be, the more credence is given to the theoretical premise that monetary policy is a more effective tool than fiscal policy for macroeconomic management.

Estimation of the underlying natural interest rate, analysis of price trends in the economy, and modelling of the dynamic impacts of different policy decisions on the central bank's primary goal of price stability, are understood to be technical tasks best left to highly trained experts. The experts should be shielded from political influence since politicians, understood as rational agents aiming to maximise their chances at re-election, are assumed to prioritise growth and employment over price stability, particularly in the run-up to an election. This argument is used to justify the edifice of central bank independence. While coordination with the legislature may be needed for the central bank to alter its overall goals, the institution is given operational independence on how to achieve those goals, as well as an unrivalled level of financial and staffing independence by public sector standards.

We will return to the implications of material challenges posed to the NKE MP framework by the crises of the past 15 years in section 3. In section 4, we will turn to examining the

[5] The so-called 'bank rate' is the policy interest rate set by the Monetary Policy Committee (MPC) of the Bank of England (sometimes referred to as the 'base rate'). It is the interest rate that the BoE pays to commercial banks that hold money (reserves) with it and is the foundation from which the BoE attempts to influence a whole range of market interest rates. Market interest rates are those rates that are charged by commercial banks to private agents (financial and non-financial firms and households) over a range of lending maturities (from overnight to multiple-year loans). The market rate of loans to large corporations at short maturities will be close to the bank rate, while loans to households over longer maturities will typically be much higher.

implications of questioning the fundamentals of the framework and what this might mean from a feminist perspective. First, however, we turn to the distributional implications of NKE conventional monetary policy (here abbreviated to CMP) as currently practiced.

b. Conventional monetary policy and its distributional implications

Increasing research attention has gone into the investigation of the channels through which changes in the short-term interest rate affect the distribution of consumption, income and wealth. Overwhelmingly this research has focused on the question in relation to segments of the population disaggregated by purely economic measures of income or wealth, with scant attention paid to other dimensions of heterogeneity such as gender, race or other population characteristics. Furthermore, from a feminist perspective, it is also worth re-iterating that conventional analysis of distribution captures only one aspect of gender inequality, ignoring how changes in economic distribution also affect women's relative autonomy and intra-household power.

Within the literature on the impact on income distribution, findings about the impact of monetary policy on inequality are mixed. They run the full range from inequality-increasing, to inequality-neutral, to inequality-decreasing, with some studies finding a U-shaped effect over the income/wealth distribution. Further complicating matters are debates over the degree of symmetry in the effects of expansionary versus contractionary monetary policy, and the distributional impact of the timing of monetary policy decisions in relation to different phases of the business cycle. This matters from a feminist perspective because, despite the absence of an explicit discussion of gender in these studies, we know that women are disproportionately represented as we move down the distribution of income and wealth.

While there are some differences in how different authors describe and distinguish them, there are generally seen to be four key channels through which interest rate changes affect distributional outcomes:

- The **income composition channel** refers to the differential impacts on transfer income (government benefits), labour income (wages) and capital income (dividends, interest and profit receipts). If expansionary monetary policy leads to falling unemployment and wage rises, this may lead to rising income inequality between low- and middle-income households (the latter being relatively more reliant on wage income) but falling income inequality between middle- and upper-income households (the latter being relatively less reliant on wage income). The reduction in income inequality between middle- and upper-income households may be amplified by a fall in interest income which falls relatively more on the upper-income households. How monetary policy impacts different sectors in the economy will have important differences for its relative impact on incomes across gender, race, geography and age. If house building, for example, stands to benefit relatively more than other sectors in a given economy, then this is more likely to benefit households including lower-income working-age men, in areas at the centre of any construction boom.

- The **earnings heterogeneity channel** drills down into the impacts on earnings by showing that lower-income groups' earnings are more linked to overall levels of employment, while the earnings of those higher up the income distribution are driven more by wage increases in occupations judged to be more highly skilled. This tends to result in a greater pro-cyclicality of earnings for low-income households (that is, wages rise more quickly during periods of economic growth, and less quickly or even falling in periods of economic contraction), but this finding would extend to single-parent households and those of economically marginalised ethnic groups. An expansionary monetary policy in an economy that favours highly skilled sectors may be inequality-inducing; conversely, in an economy dominated by low-skilled sectors it may be equality-inducing as those workers are able to both gain employment and enjoy wage rises.

- The **savings redistribution channel**, or sometimes referred to as the 'debt burden channel' accounts for the differential impacts on net creditors versus net lenders, with a reduction in interest rates making net borrowers better off by reducing interest payments, while net savers are worse off due to an equivalent reduction in their interest incomes. This impact can often be overlooked as conventional income inequality measures such as the Gini coefficient do not include debt payments[6]. If the interest rate reduction successfully leads to a rise in inflation, this can reduce wealth inequality through a devaluation of the real value of creditors' assets, and an equivalent reduction in borrowers' liabilities.

- The **portfolio composition channel** examines how different households' holdings of assets are impacted by monetary policy. A reduction in interest rates leads to a rise in prices of both financial assets and real estate, assets that are more likely to be held by men. This can variously amplify wealth inequality (if higher-income groups reap relatively greater capital gains on both asset classes) or reduce it (if middle-income groups earn relatively greater capital gains on housing as compared to the capital gains on financial assets of the upper-income groups) depending on institutional realities such as the degree of concentration of home ownership. While not discussed in the conventional literature, there is also likely to be an impact on housing accessibility, with differentiated impacts beyond those related to the wealth effects on existing homeowners. There may also be impacts on income inequality as increases in financial asset prices yield greater dividend payments.

Surveys of the literature on conventional monetary policy and distribution tend to conclude that, on balance, contractionary monetary policy increases income and wealth inequality (while expansionary policy decreases it)[7]. However, individual studies emphasise the importance of the time period and country/countries under examination. Research also suggests that the impact of CMP on inequality may be different across the wealth distribution. (For a more detailed summary of the research, refer to the appendix.)

A critical under-explored issue in the empirical literature is the degree of symmetry between the distributional impacts of contractionary and expansionary monetary policy over the business cycle. Typically, contractionary interest rate shocks are more in number and are executed within a shorter timeframe, while expansionary interest rate reductions are carried out in a more gradual manner, meaning they are less likely to constitute a shock for empirical purposes[8]. If one side of an interest rate hiking cycle has greater distributional impacts than the other, then monetary policy cannot be neutral in the long run as is typically assumed. Furceri et al[9] examine 32 countries over the period 1990-2013, finding that the increase in income inequality that results from contractionary monetary policy is not compensated for by the decrease in income inequality that follows an expansionary phase.

[6] Juan Antonio Montecino and Gerald Epstein, 'Did Quantitative Easing Increase Income Inequality?', *PERI Working Papers,* no. 407 (October 2015): 7, https://peri.umass.edu/component/k2/item/670-did-quantitative-easing-increase-income-inequality.
[7] SA Kappes, 'Monetary Policy and Personal Income Distribution: A Survey of the Empirical Literature', *REVIEW OF POLITICAL ECONOMY* 35, no. 1 (2 January 2023): 211–30, https://doi.org/10.1080/09538259.2021.1943159; Andrea Colciago, Anna Samarina, and Jakob de Haan, 'Central Bank Policies and Income and Wealth Inequality: A Survey', *Journal of Economic Surveys* 33, no. 4 (1 September 2019): 1199–1231, https://doi.org/10.1111/joes.12314.
[8] This, of course, was decidedly not the case with the rapid and severe reductions in interest rates in the OECD in the period 2008-10.
[9] 'The Effects of Monetary Policy Shocks on Inequality', *Journal of International Money and Finance* 85 (1 July 2018): 168–86, https://doi.org/10.1016/j.jimonfin.2017.11.004.

In addition to symmetry is the important issue of the timing of monetary policy shocks. Adolph[10], highlighting differences in the earnings heterogeneity channel in the USA, argues that "If high-income workers receive raises in all but the initial stages of a bust, and low-income workers receive raises only in the hottest stages of a boom, then the Fed is pulling away the punch bowl when it is finally low-income workers' turn." These issues of symmetry and timing pose important and under-researched challenges for understanding the distributional effects of monetary policy along other dimensions of difference, such as gender and race.

c. Conventional monetary policy and gender

Unlike the large and rapidly growing literature on the impacts of CMP on inequality along economic dimensions, the literature looking specifically at the impacts on gendered distribution is modest. Braunstein & Heintz[11], in one of the first studies looking at the gender impacts of inflation reduction, find that, for a sample of developing countries, when inflation reduction is accompanied by unemployment growth, women "experience a larger loss of employment, in percentage terms, than men". In their analysis of the USA for the period of 1979-2008, Seguino & Heintz[12] examine the intersection of gender and race, discovering that black people and white women suffer a greater increase in unemployment due to contractionary monetary policy than white men, though black people as a group are more adversely affected than white women, and black women face the greatest negative impacts. Liosi & Spyrou[13], in a study of the eurozone countries for the period 2005 to 2017, find that contractionary monetary policy is associated with rising income inequality, with the female inequality response larger. The issues of symmetry and timing are of particular importance when assessing distributional impacts along the dimensions of gender and race. As argued by Metzger & Young[14]: "The most vulnerable groups of society are first and foremost squeezed during economic downturns or periods with restrictive policy, but these groups are not lifted back up to their pre-crisis social and economic status during expansionary phases."

Empirical work has also started to look at the impact of monetary policy specifically on the gender pay gap. Israel & Latsos[15], in their study of Japan in the period 2003-2014, find that a 1% reduction in interest rates is associated with a 3.7% reduction of the gender pay gap. They believe this is due, first, to the induced rise in women-dominated low-income employment; and second, to lower productivity growth (low-cost funding taking the pressure off of firms to invest in innovation) leading to real wage repression[16] forcing women to work longer, gaining more experience, and catching up with men in labour income. The overall message is consistent with that of Apergis et al[17], who find that in the UK for the period of 1991-2015, a 1% increase in the interest rate increases the gender pay gap by 0.8 points. No explanation for the finding is offered, with the authors acknowledging the need for future work to explore the specific channels through which monetary policy impacts gender pay gaps.

[10] 'The Missing Politics of Central Banks', *PS: Political Science & Politics* 51, no. 4 (2018): 3, https://doi.org/10.1017/S1049096518000847.
[11] 'Gender Bias and Central Bank Policy: Employment and Inflation Reduction', 183.
[12] 'Monetary Tightening and the Dynamics of US Race and Gender Stratification'.
[13] 'The Impact of Monetary Policy on Income Inequality: Evidence from Eurozone Markets', *Journal of Economic Studies* 49, no. 3 (1 January 2022): 522–40, https://doi.org/10.1108/JES-07-2020-0328.
[14] 'No Gender, Please, We're Central Bankers: Distributional Impacts of Quantitative Easing', 18.
[15] 'The Impact of (Un)Conventional Expansionary Monetary Policy on Income Inequality - Lessons from Japan', *APPLIED ECONOMICS* 52, no. 40 (26 August 2020): 4403–20, https://doi.org/10.1080/00036846.2020.1735620.
[16] A number of arguments are made here. If productivity growth is low, the scope for real wage increases is curtailed. Real wages for non-financial workers may also fall relative to those financial workers whose wages are linked to financial profits drawn from asset market inflation. Finally, if the expansionary monetary policy is associated with increased financial instability, it is likely the bargaining power of employees will be negatively impacted in the ensuing crises.
[17] 'Monetary Policy and the Gender Pay Gap: Evidence from UK Households', *Applied Economics Letters* 26, no. 21 (15 December 2019): 1807–10, https://doi.org/10.1080/13504851.2019.1602702.

However, in contrast to the research referenced above, there are a small number of studies which downplay the impact of monetary policy on gender inequality. Drawing on a sample of nine OECD countries for the period 1980 to 2004, Takhtamanova & Sierminska[18] look at sectorally-disaggregated (agriculture, industry and services) impacts of monetary policy shocks on male and female employment. Their hypothesis is that women's employment may be differently impacted by monetary policy due to sectoral and occupational segregation; differences in seniority, tenure and precarity; and outright gender discrimination. They find "only weak evidence that the employment costs of tighter monetary policy are inequitably distributed across genders", though this may reflect the fact that the link between interest rates and overall employment is also found to be weak, that is, it may be a critique of the ability of short-term interest rate manipulation to achieve desired employment outcomes, rather than a rejection of the gendered inequality of monetary policy *per se*.

Chung[19] reveals that contractionary monetary policy shocks only reduce demand for young male workers in South Korea in the period from 1999 to 2015. Interesting for what it reveals about the relative impact of domestic interest rates versus key international rates, Chung also finds that employment falls for all age/gender groups with an increase in the interest rate of the US Federal Reserve. Finally, Grigoli & Sandri[20], using a database of credit card expenditure for Germany for 2017-2021, find that contractionary monetary policy restricts spending while interest rate cuts fail to stimulate it; the shocks have a greater impact on higher-income groups, and find no gendered differences.

3. Unconventional monetary policy

a. A brief return to the New Keynesian monetary policy framework

In the previous section, we outlined the New Keynesian framework which for three decades has justified the dominant approach to central banking and monetary policy, that of an independent central bank using short-term interest rates to target an inflation rate of 2%. From 1990 to 2008, the generally accepted view was that this approach had been successful, with some going as far as to declare the end of the business cycle (though it is important to note that there were dissenting voices throughout).

The collapse of the sub-prime mortgage bubble in the USA in 2008, and global banking crisis which it catalysed, rapidly put an end to any complacency on the part of central bankers that had crept in over the previous two decades. As interest rates were rapidly lowered to zero, the famous dictum (incorrectly) attributed to Keynes was borne out, that, during a severe economic contraction, using monetary policy to stimulate the economy is like 'pushing on a piece of string'. For a brief period there was a renewed emphasis on the role of fiscal policy in stimulating aggregate demand, however this quickly gave way, particularly in the UK, to so-called 'unconventional monetary policy' (UMP) in the form of quantitative easing (QE).

For our purposes here, there are three important challenges to the NKE monetary policy framework posed by the experience of the crisis of 2008 and the subsequent 13 years spent effectively at the zero lower bound. First, it became clear that, to the extent that QE stimulated the economy, the heavy lifting was being done through the transmission channel of rising asset prices and the concomitant wealth effect (the 'portfolio composition channel'

[18] 'Gender, Monetary Policy, and Employment: The Case of Nine OECD Countries', *FEMINIST ECONOMICS* 15, no. 3 (2009): 323–53, https://doi.org/10.1080/13545700902893122.
[19] 'Age and Gender Group Differences in Employment Responses to Monetary Policy Shock in a Small Open Economy: The Case of Korea', *ASIA & THE PACIFIC POLICY STUDIES* 4, no. 2 (May 2017): 207–24, https://doi.org/10.1002/app5.169.
[20] 'Monetary Policy and Credit Card Spending', *IMF Working Paper*, no. WP/22/255 (December 2022), https://www.imf.org/en/Publications/WP/Issues/2022/12/16/Monetary-Policy-and-Credit-Card-Spending-527011.

as described previously), as compared to CMP where the credit creation transmission channel and its income/employment effect is understood to dominate (the 'income composition channel'). Second, as a result of this new *modus operandi*, renewed attention is being paid to the distributional implications of QE. At least superficially, it is clear that relying on a 'wealth effect' to stimulate the economy serves the interests of those who hold that wealth. Third, in the fifteen years since the onset of the crisis of 2008, central banks have assumed a new role as liquidity provider of last resort; increasingly, disruptions (or even anticipated disruptions) to the smooth functioning of asset markets are met either with the return of the central bank to asset purchases or the promise of the same. This new tactic of monetary policy dominance has longer-term implications for our understanding of the operations of the modern central bank and its distributional implications.

b. Unconventional monetary policy and its distributional implications

In the last decade, the literature on the distributional impacts of QE has grown. The focus of the literature has been on the impacts of QE on income and wealth inequality, and, to a lesser extent, consumption inequality. UMP is understood herein to work through the same distributional channels as CMP, as outlined in section 1, however the relative importance and the dynamics of the channels may be considerably different. In the context of the US, there have been some attempts to examine the impacts of UMP on distributional outcomes disaggregated by race, but work examining gender-disaggregated impacts remains, to my knowledge, almost completely absent[21].

Meta-surveys of the literature find that the impacts of UMP on income and wealth inequality "are not clear cut"[22]. Kappes's survey[23] suggests that the impact of UMP is geographically-specific, "…in Europe, UMP reduced inequality, while in the US and Japan, it increased." Guerello[24], in a study of 17 eurozone states for the period 1999 to 2015, reveals that countries with households closely connected to financial markets see rising income inequality following expansionary UMP. This is echoed by Domanski et al[25], who simulate the impacts of UMP for 4 advanced economies, concluding that increased wealth inequality may be the result of changes in equity returns and UMP's reliance on the wealth effect as compared to CMP. Montecino & Epstein[26], using data from pre- and post-QE periods of the US Survey of Consumer Finances and employing a set of counter-factual scenarios, conclude that QE was 'modestly dis-equalising'. In contrast to these findings which argue that UMP is associated with rising income and wealth inequality, Casiraghi et al[27], in a study of all transmission channels using Italian household data find negligible impacts on income and wealth inequality.

The growing consensus in the UK context is that UMP has increased economic inequality. Mumtaz & Theophilopoulou initially found that QE worsened income and consumption inequality[28], followed up by a study using the UK Wealth and Asset Survey 2006 – 2018 finding that expansionary UMP raises the value of both financial and real estate assets, which, in turn boosts the value of defined contribution pension schemes, driving up wealth

[21] The sole exception being: Young, 'The Impact of Unconventional Monetary Policy on Gendered Wealth Inequality'.
[22] Colciago, Samarina, and de Haan, 'Central Bank Policies and Income and Wealth Inequality: A Survey'.
[23] 'Monetary Policy and Personal Income Distribution: A Survey of the Empirical Literature', 224.
[24] 'Conventional and Unconventional Monetary Policy vs. Households Income Distribution: An Empirical Analysis for the Euro Area', *JOURNAL OF INTERNATIONAL MONEY AND FINANCE* 85 (July 2018): 187–214, https://doi.org/10.1016/j.jimonfin.2017.11.005.
[25] 'Wealth Inequality and Monetary Policy', *BIS Quarterly Review*, March 2016, 45–64.
[26] 'Did Quantitative Easing Increase Income Inequality?'
[27] 'A "Reverse Robin Hood"? The Distributional Implications of Non-Standard Monetary Policy for Italian Households', *Journal of International Money and Finance* 85 (1 July 2018): 215–35, https://doi.org/10.1016/j.jimonfin.2017.11.006.
[28] 'The Impact of Monetary Policy on Inequality in the UK. An Empirical Analysis', *European Economic Review* 98 (2017): 410–23.

inequality[29]. This finding is reinforced by Evgenidis & Fasianos'[30] finding that expansionary UMP in the period 2006-2016 increases wealth inequality through the effects of higher financial asset prices. Against other studies which suggest that housing revaluation effects can offset these financial asset revaluation effects, they find that home ownership only moderates the redistributive effect in the middle of the wealth distribution. Ballabriga & Davtyan[31] find that QE in the period 2009-2019 increased income inequality "mainly because of its effect on the upper part of the income distribution" (defined as the top 20%). One of the only studies to contradict this verdict in the UK setting is that of Pugh et al[32] which finds that the impact of QE in the period 2008-2014 on income and wealth inequality is "small".

The uneven experience of QE by racial group in the US has led to a small number of studies that attempt to quantify the differential impact. Ume & Williams[33], assessing the period 2009-2017, find that UMP is associated with a short-term *increase* in black unemployment, while white unemployment falls immediately; though in the longer-term (2 years post-shock) there is a greater decrease in black unemployment compared with white unemployment. The short-term impact is hypothesised to relate to employers up-skilling in a labour-abundant environment, which disproportionately impacts lower-skilled black workers. Bartscher et al[34] model the impacts of monetary policy shocks finding that the reduction in the earnings gap "pales in comparison" over time to the effects on the wealth gap. White households have more assets (both financial assets and real estate) which benefit from capital gains following an expansionary shock.

One of the only studies that pays explicit attention to the impact of UMP on gender-based inequalities is that of Young[35]. Using results of the Household Finance and Consumption Survey across 15 eurozone countries, Young finds that single-parent households, less educated and lower income/wealth quintiles – all disproportionately comprised of women – participate less in investing in risky assets. From this it is argued that UMP, which relies for its stimulative effect on asset price inflation, will therefore have gendered distributional impacts. The study highlights the need for more empirical work, not only on this channel in a variety of contexts, but on other channels so that a better assessment of the net impacts on gender-based inequality can be reached. Grazzini & Kim[36], find that after a contractionary shock in the USA for the period 2001-2017, the probability of women entering the stock market decreases, though they find no gendered differences in exit or portfolio rebalancing for existing stock market participants.

The empirical evidence suggests that UMP poses more significant problems for the generation of economic inequality, though work remains to be done to assess the impact along the dimensions of gender and race. This raises two questions. First, there is the question of why UMP became the preferred policy response in the wake of the 2008-10 crisis. While there is not the space to address this question in full, a crude response would be that UMP fit better with the prior belief in monetary policy dominance in macroeconomic management that emerged from the NKE framework which motivated powerful policy actors. The evidence on the disappointing macroeconomic performance of QE (not discussed here

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[29] 'Monetary Policy and Wealth Inequality over the Great Recession in the UK. An Empirical Analysis', *EUROPEAN ECONOMIC REVIEW* 130 (November 2020), https://doi.org/10.1016/j.euroecorev.2020.103598.
[30] 'Unconventional Monetary Policy and Wealth Inequalities in Great Britain*', *Oxford Bulletin of Economics and Statistics* 83, no. 1 (1 February 2021): 115–75, https://doi.org/10.1111/obes.12397.
[31] 'Distributional Impact of Monetary Policy in the UK: From Conventional to Unconventional Policy', *JOURNAL OF ECONOMIC POLICY REFORM* 25, no. 4 (2 October 2022): 435–50, https://doi.org/10.1080/17487870.2021.1949316.
[32] 'The Distributional Impact of Monetary Policy Easing in the UK between 2008 and 2014', *Bank of England Staff Working Papers*, no. 720 (2018), https://doi.org/10.2139/ssrn.3156913.
[33] 'The Differential Impact of Monetary Policy on Blacks and Whites since the Great Recession', *Journal of Economics, Race, and Policy* 2, no. 3 (1 September 2019): 137–49, https://doi.org/10.1007/s41996-018-0010-z.
[34] 'Monetary Policy and Racial Inequality', *Federal Reserve Bank of New York Staff Reports*, no. 959 (March 2022), https://www.newyorkfed.org/research/staff_reports/sr959.html.
[35] 'The Impact of Unconventional Monetary Policy on Gendered Wealth Inequality'.
[36] 'Is Monetary Policy Gender Neutral? Evidence from the Stock Market', *DIW Berlin Discussion Papers*, no. 1841 (2020), https://www.diw.de/documents/publikationen/73/diw_01.c.702638.de/dp1841.pdf.

due to space limitations) combined with the gathering evidence on the distributional outcomes should provide support for a position which puts more emphasis on fiscal responses to crisis.

The second important challenge of the empirical evidence relates to the *way* in which QE was implemented. Central bank purchases under QE programmes were limited to government-issued securities in so-called 'secondary' markets, that is, buying previously issued securities from the private agents which held them, rather than buying newly-issued securities directly from the Treasury. It was subsequently expanded to allow the purchase of private (corporate) securities in accordance with guidelines which were deemed to ensure the 'market-neutrality' of any such purchases, that is, the proportion of assets purchased had to broadly reflect the existing distribution of outstanding securities in any one sector. The implication was that the impact of QE on growth, employment and distribution was pre-determined to reinforce the existing *status quo*. As argued by Van Doorslaer & Vermeiren[37], QE, particularly in the USA and the UK, was reliant on asset price inflation. With firms lacking the long-term confidence in profit opportunities, investment was disappointing; instead financialised corporations used the cheap credit for debt restructuring, share buybacks (thereby boosting their share price), and the accumulation of financial assets. Banks were propped up to allow the return of the market for mortgage-backed securities. Combined with stagnant real wages and rising wealth inequality, this pushed households back towards the pre-crisis *status quo* of debt-led growth. In Europe, the inability to rely as heavily on the wealth effect of asset market inflation, led to reliance on exchange rate depreciation and an attempt to extend the German export-led mercantilist model to the broader region, ultimately reliant on debt-led consumption in other regions, especially the USA.

It didn't have to be this way. At a more superficial level, it is clear that 'market-neutrality' was anything but. Central banks purchasing private sector assets according to pre-existing market norms, equates to a reinforcement of existing market failures in relation to environmental and social externalities. Nikolaidi[38] has argued that capital requirements on central bank asset purchases should be tailored to encourage support for the green and caring economies (more on this in section 5). At a deeper level, the insistence that asset purchases were conducted via secondary markets served only to prop up the illusory assertion that QE would not disrupt market-led price discovery. The result was both disappointing overall growth, as banks prioritised balance sheet strength over broader economic recovery, as well as unequal growth, reliant as it was on asset market inflation. Instead of these contortions to maintain an ostensible commitment to market allocation, QE could have involved a circumscribed direct purchase by the central bank of government debt with a commitment on the part of the Treasury to spend the proceeds on a clearly laid out schedule of investment in the green and caring economy[39]. The result would have likely been greater in terms of growth (and achievement of inflation targets) and certainly better in terms of economic and social equity.

4. Alternatives to orthodoxy in addressing inflation

a. A brief critique of NKE monetary policy theory

[37] ‘Pushing on a String: Monetary Policy, Growth Models and the Persistence of Low Inflation in Advanced Capitalism’, *New Political Economy*, 15 December 2020, 1–20, https://doi.org/10.1080/13563467.2020.1858774.
[38] ‘Macrofinancial Policies for a Green and Caring Economy’ (London: Women’s Budget Group, November 2022), https://wbg.org.uk/wp-content/uploads/2022/10/Macrofinancial-policies-FINAL.pdf.
[39] Özlem Onaran and Cem Oyvat, ‘Synthesizing Feminist and Post-Keynesian/Kaleckian Economics for a Purple Green Red Transition’, *European Journal of Economics and Economic Policies*, no. forthcoming (2023); Marc Lavoie and Brett Fiebiger, ‘Unconventional Monetary Policies, with a Focus on Quantitative Easing’, *European Journal of Economics and Economic Policies* 15, no. 2 (2018): 139–46, https://doi.org/10.4337/ejeep.2018.0037.

While this is not the place for an exhaustive discussion of the debate over the natural interest rate, it is enough to point out that even within the community of central bank economists, the usefulness of the concept for policymaking is being questioned. The leading economists in attempts to empirically estimate the natural rate concede that any such efforts are "quite imprecise"[40]. Claudio Borio, Head of the Monetary and Economic Department at the Bank for International Settlements (BIS), in an exhaustive multi-country historical study[41], found no relationship between the real interest rate and the assumed real factors which determine savings and investment; this, the team argued, "…would raise questions about the theoretical and, above all, practical usefulness of the concept of the natural rate for policymaking."

The second glaring problem with the NKE model is its use of a 2% inflation target. Simply put, there is no empirical justification for the assertion that this should be the target level of inflation for all advanced economies during all stages of the domestic business cycle or global financial cycle. As nicely summarised by Harvard economist Ben Friedman[42]: "In retrospect, the paucity of serious empirical research underlying the identification of the 2 percent norm, now quite some time back, is a professional embarrassment."

The third assertion of the NKE model that deserves greater scrutiny is that manipulation of the short-term interest rate is the most effective way to achieve a given inflation target (and, thereby, price stability). Empirical evidence is absent for a robust link between either household consumption or business investment to changes in the interest rate[43]. The effects on public expenditure, due to changes in debt servicing costs, and net exports, due to exchange rate effects, are more certain[44]. Borio[45] found that: "the response of inflation to a measure of labour market slack has tended to decline and become statistically indistinguishable from zero."

The fourth problem with the standard framework is the emphasis it places on domestic demand-side pressures in the explanation of inflationary impulses. This is perhaps understandable, given that this is the only potential cause of inflation over which domestic interest rate interventions may have some impact, but that does not make it any less incomplete as an explanation of the complex picture of causal factors driving contemporary inflation. While economists acknowledge the potential role played by a range of domestic and international demand and supply-side factors, each of which demands a tailored fiscal and/or monetary response, the discussion in mainstream analysis inevitably returns to a focus on the potential for a wage-price spiral and the need for interest rate hikes to snuff out that possibility.

Why does all of this matter for a feminist perspective on monetary policy? The critique sketched out above suggests that the inflation-targeting monetary policy of the last three decades may be an obstacle both to additional stimulus to the economy during periods when inflation is at or below the arbitrary target of 2%; but, more importantly, that during periods

[40] Thomas Laubach and John C. Williams, ‘Measuring the Natural Rate of Interest’, *The Review of Economics and Statistics* 85, no. 4 (2003): 1063.
[41] ‘Why so Low for so Long? A Long-Term View of Real Interest Rates’, *BIS Working Papers*, no. 685 (December 2017): 37.
[42] ‘The Future of Central Banking’, in *The Future of Central Banking. Festschrift in Honour of Vítor Constâncio (Colloquium Held on 16-17 May 2018)* (Brussels: ECB, 2018), 187, https://www.ecb.europa.eu/pub/pdf/other/ecb.futurecentralbankingcolloquiumconstancio201812.en.pdf.
[43] Barry Z. Cynamon, Steven M. Fazzari, and Mark Setterfield, eds., *After the Great Recession: The Struggle for Economic Recovery and Growth* (Cambridge: Cambridge University Press, 2013), 13; Steven A Sharpe and Gustavo A Suarez, ‘Why Isn’t Investment More Sensitive to Interest Rates: Evidence from Surveys’, *Finance and Economics Discussion Series*, 2015, https://www.federalreserve.gov/econres/feds/why-isn39t-investment-more-sensitive-to-interest-rates-evidence-from-surveys.htm; Emanuel Kopp et al., ‘U.S. Investment Since the Tax Cuts and Jobs Act of 2017’, *IMF Working Paper*, no. 2019/120 (31 May 2019), https://www.imf.org/en/Publications/WP/Issues/2019/05/31/U-S-46942.
[44] Enrico Sergio Levrero, ‘Estimates of the Natural Rate of Interest and the Stance of Monetary Policies: A Critical Assessment’, *International Journal of Political Economy* 50, no. 1 (23 February 2021): 18, https://doi.org/10.1080/08911916.2021.1894829.
[45] ‘Through the Looking Glass’ (OMFIF City Lecture, London, 22 September 2017), 2, https://www.bis.org/speeches/sp170922.htm.

when inflation is above that target, the use of the blunt instrument of short-term interest rates in an attempt to drive up unemployment has had unnecessarily damaging effects on overall growth. Through both lower tax revenues and an increased cost of government borrowing, this translates into both reduced funding for public investment into the green and caring economies, and poses detrimental distributional outcomes along the lines of gender and race, as discussed in sections 2 and 3 above.

b. Alternatives to orthodox monetary policy

i. From an exclusive focus on price stability to the recognition of complex social realities

From a feminist perspective, the goals of monetary policy should align with broader macroeconomic goals of social equity and environmental sustainability; from this perspective price and financial stability, and even output and employment growth are simply *means* which may (or may not) assist in achieving the former *ends*. However, given how far away the existing policy debate is from this position, it is worth considering how the *status quo* might be moved in this direction.

While price stability will undoubtedly remain part of the central bank mandate, there is space to debate how the attainment of price stability should be balanced against other macroeconomic goals of growth, financial stability and distribution. Without the sleight of hand which assumes that the achievement of an inflation target ensures the achievement of maximum growth potential, there is no necessary relationship between price stability and growth. We can have stable prices and low (or no) growth, just as much as we can have stable prices and high growth. This makes it clear that price stability is only an intermediate target (even to growth, let alone the higher order goals earlier mentioned). Even where price stability and employment/output growth are both achieved, it may come at the cost of volatility in other macroeconomic variables (interest and exchange rates) and/or the accumulation of systemic risk leading to more frequent and costly crises, as was made evident by the crisis of 2008-10 emerging out of a long period of price stability.

It seems sensible then to call for the Bank of England, as a minimum, to follow the US Federal Reserve's lead, and promote output and employment growth to an equal status with price stability in its mandate[46]. A yet more progressive mandate would involve a balance of the triumvirate of price stability, employment/output growth and financial stability. Social equality and environmental sustainability should be adopted as critical cross-cutting objectives within the broader macroeconomic mandate. Indeed, a number of central banks have included social and environmental goals as part of their monetary policy strategy and operations in line with their overall mandates. This includes, for example, the ECB's steps to incorporate climate change into its mandate, or the Bank of Israel's inclusion of social inequalities among its official missions. The Bank of Ecuador has recently implemented policies explicitly aimed at supporting women, including changes to hiring and working practices of its own staff and the adoption of the Maya Declaration to promote the financial inclusion of women[47].

ii. From inflation targeting to real targeting?

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[46] Diane Elson, 'Macroeconomic Policy for a Gender Equal Economy: Briefing Paper for Commission on a Gender Equal Economy' (London: Women's Budget Group, 2020), 12, https://wbg.org.uk/wp-content/uploads/2020/06/Briefing-Paper-on-Macroeconomic-Policy.pdf; Özlem Onaran, 'The Political Economy of the Cost of Living Crisis in the UK: What Is to Be Done?' (Global Inflation Today, Amherst, Mass: PERI, 2022), https://peri.umass.edu/publication/item/download/1055_87630e3d869b7789a3a08df2758665ac.

[47] Guillaume Vallet, 'Gender Diversity as a Tool to Make Central Banks Progressive Institutions: The Case of the Central Bank of Ecuador', in *Political Economy of Central Banking in Emerging Countries*, ed. Mustafa Yağcı (London: Routledge, 2020), 151–67.

As previously stated, the most glaring shortcoming of inflation targeting (IT) as currently practiced is the lack of any empirical justification for a 2% target. There are also empirical question marks over whether or not inflation-targeting central banks have been any more successful than non-IT central banks at maintaining low and stable inflation[48]. At a deeper level of critique, studies have found no evidence that higher inflation rates (up to 20%) have any significant negative impact on growth, investment or other real variables[49]. It is argued instead that the focus on low inflation has meant higher interest rates, increasing the costs of production and reducing overall employment, as well as benefitting rentier incomes relative to industrial profits and the wage share. Altunbas & Thornton[50] look at 121 advanced and developing economies including 27 IT adopters during the period 1971 to 2015, finding that IT contributes to greater income inequality and a reduced labour share. Seccareccia & Khan[51], examining 14 OECD IT central banks over the period 1990 to 2018, similarly argue that a single-focus IT mandate drives a long-term decline in the wage share. The argument is typically made by central banks that the risks of deflationary bias are counterbalanced by the success of IT in reducing inflation which unduly harms the poor. However, this point is challenged by Braunstein[52], drawing on studies examining the marginal rate of substitution between unemployment and inflation, who concludes that: "From a well-being perspective, at least, overall unemployment is much more socially costly than inflation."

The alternative to the current approach of inflation targeting under an exclusive price stability mandate, would be to use the central bank's interest rate setting powers to target real variables such as employment, housing, investment and inter-group equality[53] under the auspices of a multi-goal mandate. Seccareccia & Khan[54] argue that central banks should use their interest rate-setting powers to push up employment until the real wage-to-productivity ratio achieved the desired distributional outcomes. In research for the then Shadow Chancellor John McDonnell, Turner et al[55] proposed that the central bank should coordinate its 'activist' tools (controlled lending, variable interest rates, etc) to direct the British economy towards higher productivity and/or the care and green sectors, an argument that was met with considerable critique in both policy and media circles[56].

The activist use of central bank powers to achieve goals other than price stability is, of course, heresy according to the NKE framework, but also arouses scepticism amongst some

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[48] Laurence Ball and Niamh Sheridan, 'Does Inflation Targeting Matter?', *IMF Working Paper No. 03/129*, 2003, https://www.imf.org/external/pubs/ft/wp/2003/wp03129.pdf; H.P. Balima, E.G. Kilama, and R. Tapsoba, 'Settling the Inflation Targeting Debate: Lights from a Meta-Regression Analysis' (IMF, 29 September 2017), https://www.imf.org/en/Publications/WP/Issues/2017/09/29/Settling-the-Inflation-Targeting-Debate-Lights-from-a-Meta-Regression-Analysis-45253.

[49] Robert Pollin and Hanae Bouazza, 'Considerations on Inflation, Economic Growth and the 2 Percent Inflation Target', in *PERI Working Papers* (Global Inflation Today, Amherst, Mass: PERI, 2022), https://peri.umass.edu/economists/robert-pollin/item/1672-considerations-on-inflation-economic-growth-and-the-2-percent-inflation-target; Gerald Epstein, 'Development Central Banking: A Review of Issues and Experiences', Working paper (ILO, 23 June 2015), http://www.ilo.org/employment/Whatwedo/Publications/working-papers/WCMS_377808/lang--en/index.htm.

[50] 'Does Inflation Targeting Increase Income Inequality?*', *JOURNAL OF POST KEYNESIAN ECONOMICS* 45, no. 4 (2 October 2022): 558–80, https://doi.org/10.1080/01603477.2022.2101475.

[51] 'The Illusion of Inflation Targeting: Have Central Banks Figured Out What They Are Actually Doing Since the Global Financial Crisis? An Alternative to the Mainstream Perspective', *INTERNATIONAL JOURNAL OF POLITICAL ECONOMY* 48, no. 4 (2019): 364–80, https://doi.org/10.1080/08911916.2019.1693164.

[52] 'Central Bank Policy and Gender', in *Handbook of Research on Gender and Economic Life*, ed. D.M. Figart (Cheltenham: Edward Elgar Publishing, 2013), 348.

[53] Onaran, 'The Political Economy of the Cost of Living Crisis in the UK: What Is to Be Done?'; Epstein, 'Development Central Banking'; Gerald Epstein, 'Rethinking Monetary and Financial Policy: Practical Suggestions for Monitoring Financial Stability While Generating Employment and Poverty Reduction', *ILO Employment Working Paper*, no. 37 (2009), http://www.ilo.org/public/english/employment/download/wpaper/wp37.pdf.

[54] 'The Illusion of Inflation Targeting: Have Central Banks Figured Out What They Are Actually Doing Since the Global Financial Crisis? An Alternative to the Mainstream Perspective', *International Journal of Political Economy* 48, no. 4 (2020): 364–80, https://doi.org/10.1080/08911916.2019.1693164.

[55] 'Financing Investment: Final Report' (London: GFC Economics & Clearpoint Advisors Ltd, 20 June 2018), http://labour.org.uk/wp-content/uploads/2018/06/Financing-investment-final-report-combined.pdf.

[56] Jim Pickard and Chris Giles, 'Labour Pledges to Boost Bank of England Role with Productivity Target', *Financial Times*, 19 June 2018, https://www.ft.com/content/07699c54-73e1-11e8-aa31-31da4279a601.

heterodox economists. While accepting the importance of the achievement of real targets, Michell & Toporowski[57] question whether the central bank's tools are appropriate to achieve them, and, furthermore, whether this risks entrenching monetary policy dominance. They argue instead for an enhanced financial stability mandate for the Bank of England in the form of a target to conduct open market operations to keep the yield curve, that is the range of interest rates paid on debt of increasing maturities, stable. This is in line with a body of Post-Keynesian research which pairs a call for a return to greater emphasis on the role of fiscal policy in the achievement of real targets with advocacy for greater interest rate stability. Proposals include 'parking' the nominal interest rate at zero[58]; setting the real interest rate near zero[59]; or setting the real interest rate equal (or just below) the growth rate of labour productivity to maintain the purchasing power of lent funds over time and ensuring that governments can run fiscal deficits without incurring explosive debt growth[60].

Regardless of how the debate over alternatives to strict adherence to an inflation targeting regime is resolved, it is clear that if the constraints of IT can at least be loosened, a more sophisticated approach to responding to the temporally- and spatially-specific causal drivers of inflation can be contemplated with important distributional implications. We turn to this challenge next.

iii. Inflation: from a hammer to a monetary and fiscal toolkit

The recent experience of inflation has made it clear that we need, first and foremost, to have a framework which encourages a complex and nuanced discussion of the causes of inflation and a toolbox that can respond appropriately. Restricted to the blunt tool of short-term interest rates, the temptation for central banks is to attribute all inflationary episodes to broad-based demand-side wage pressures. The risk is that if this prognosis is incorrect, then short-term interest rate interventions will not be addressing the causes of inflation, but rather the symptoms. It should not be surprising then that the interventions may – for a time – not be having a significant impact on consumption and investment, and therefore unemployment and output growth. What will be immediately impacted are the debt servicing costs of net debtors, disproportionately lower-income households and SMEs with an over-representation of women. At a certain point in the interest rate hiking cycle a tipping point is reached and a recession is instigated. This is associated with the potentially damaging distributional implications for women that were discussed in section 2 above. At a minimum the CMP inflationary response should be accompanied by an assessment of the distributional impact of the proposed monetary policy under current conditions and in light of equity objectives. This could invoke the necessity to implement accompanying amelioratory fiscal measures such as the strengthening of social welfare provisions or time-limited tax reductions on essential goods[61].

In the current period of inflation, the conventional narrative, while acknowledging the initial catalysts of Covid-induced supply chain re-structuring and energy price hikes linked to the Russian invasion of Ukraine, has moved quickly to focus on the propagating and amplifying role of (supposedly) pent-up aggregate demand and the potential for rising inflation expectations to feed into a wage-price spiral. This, it is argued, justifies a globally

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[57] 'Can the Bank of England Do It? The Scope and Operations of the Bank of England's Monetary Policy' (London: Progressive Economy Forum, 12 November 2019), https://progressiveeconomyforum.com/wp-content/uploads/2019/11/Can-the-Bank-of-England-Do-It-Michell-Toporowski.pdf.
[58] Mathew Forstater and Warren Mosler, 'The Natural Rate of Interest Is Zero', *Journal of Economic Issues* 39, no. 2 (June 2005): 535–42, https://doi.org/10.1080/00213624.2005.11506832.
[59] John Smithin, *Rethinking the Theory of Money, Credit, and Macroeconomics: A New Statement for the Twenty-First Century* (Lexington Books, 2018).
[60] Marc Lavoie, *Post-Keynesian Economics: New Foundations* (Cheltenham: Edward Elgar, 2014).
[61] Alonso Soto, 'Spain Unveils €10 Billion Package of Anti-Inflation Measures', *Bloomberg.Com*, 27 December 2022, https://www.bloomberg.com/news/articles/2022-12-27/spain-unveils-10-billion-package-of-anti-inflation-measures.

coordinated interest rate hiking cycle. However, it has been counter-argued[62] that greater attention needs to be paid to: supply-side capacity issues in the medium term; the role being played by rising mark-ups in the propagation of inflationary impulses in the short-term[63]; and greater emphasis overall on the benefits of protecting real wages, especially those at the bottom of the income distribution.

This is not the place to enter into the empirical details of this debate, but suffice to say that it has significant implications for the appropriate policy response reflecting an overall shift of emphasis from monetary to fiscal policy. Addressing supply bottlenecks may require a role for public investment in infrastructure or workforce training; particularly important from a feminist perspective is that this intervention needs to take careful consideration of the role played by caring and the care economy. Price spikes (and greater price volatility more generally) suggest the need to limit financial speculation on commodities, and consider buffer stock systems on a wider range of commodities and in more regions than currently exist. Evidence of rising mark-ups in systemically significant sectors could be met with higher taxes, time-limited regulations limiting the pace of price increases, or, as a last resort, strategic price controls[64]. Perhaps of most direct relevance to gender equality is the need to reject the narrative which asserts that inflation rates above 2% are most damaging for those on low-incomes, and should be addressed exclusively through monetary policy. As previously outlined, higher rates of inflation may not be wellbeing-reducing, especially if policies can be put in place to defend employment, real wages and benefits. Fiscal policies which seek to improve pay and working conditions, especially closing gender and race pay and education gaps, and providing better childcare could significantly improve labour force participation rates. This could serve to address both inflation, by helping to relieve supply-side pressures[65], and inequality, by avoiding measures which have a disproportionately negative impact on economically disadvantaged groups. Risks of inflation expectations could be dealt with by an incomes policy, linking sectoral wage rises to productivity gains[66] and taxing big firms if they allow wage rises which outstrip productivity gains.

5. Central bank governance, operations and gender equality

a. Central bank governance

Despite the appointment of a number of women to some of the most senior positions in central banking globally, central banks around the world continue to be male-dominated institutions[67]. While the overall share of women in senior positions is slowly improving[68], progress is uneven. At the Bank of England, while women make up half of the Executive Directors, they account for only 12 out of 34 senior policy committee posts. The Governor

[62] For example Joseph E Stiglitz and Ira Regmi, 'The Causes of and Responses to Today's Inflation', *Industrial and Corporate Change,* March 2023, https://doi.org/10.1093/icc/dtad009.
[63] Unite, 'Unite Investigates: Profiteering across the Economy—It's Systemic' (London: Unite, March 2023), https://www.unitetheunion.org/media/5452/unite-investigates-profiteering-across-the-economy-its-systemic-march-2023.pdf; Isabella M. Weber and Evan Wasner, 'Sellers' Inflation, Profits and Conflict: Why Can Large Firms Hike Prices in an Emergency?', *UMASS Amherst Economics Working Papers*, no. 343 (February 2023), https://scholarworks.umass.edu/econ_workingpaper/343; Onaran, 'The Political Economy of the Cost of Living Crisis in the UK: What Is to Be Done?'
[64] Weber and Wasner, 'Sellers' Inflation, Profits and Conflict: Why Can Large Firms Hike Prices in an Emergency?'; Isabella Weber et al., 'Inflation in Times of Overlapping Emergencies: Systemically Significant Prices from an Input-Output Perspective', *Economics Department Working Paper Series,* no. 340 (1 January 2022), https://doi.org/10.7275/0c5b-6a92.
[65] Matías Vernengo and Esteban Perez Caldentay, 'Price and Prejudice: A Note on the Return of Inflation and Ideology', *PKES Working Paper,* no. 2302 (February 2023), http://www.postkeynesian.net/downloads/working-papers/PKWP2302.pdf.
[66] Paul Davidson, 'Can, or Should, a Central Bank Inflation Target?', *Journal of Post Keynesian Economics* 28, no. 4 (2006): 689–703.
[67] Vallet, 'Gender Diversity as a Tool to Make Central Banks Progressive Institutions: The Case of the Central Bank of Ecuador'; Brigitte Young, 'Covid-19 and the Gender Dilemma: Blind Spots in Both Macroeconomics and Feminist Economics', in *Handbook on Critical International Political Economy and Public Policy*, ed. Christoph Scherrer, Ana Garcia, and Joscha Wullweber, Handbooks of Research on Public Policy (Cheltenham, UK: Edward Elgar, 2023), 65–79.
[68] D. Masciandaro, P. Profeta, and D. Romelli, 'Do Women Matter in Monetary Policy Boards?', *BAFFI-CAREFIN Centre Research Paper,* no. 148 (October 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3703641.

and 4 Deputy Governors are all men, and, indeed, only 2 women have served as Deputy Governors in the history of the Bank. It is worth noting that scrutiny of BoE hiring practices is likely to uncover similar shortcomings in racial diversity, class background and expertise.

Instrumentally, the organisational literature on the impact of gender composition suggests that central banks stand to benefit from increased participation of women in their governance structures. Deliberations of the Federal Reserve's Federal Open Market Committee are more "thorough and engaged" in more gender-balanced committees, though gender composition holds no explanatory power in decision-making outcomes[69]. Whether or not women are more hawkish or dovish than men in their attitudes towards monetary policy is contested in the literature, however Bodea & Kerner[70] find that women are less represented in senior central bank positions in countries with a history of significant inflation or politically dependent monetary policymaking. The authors suggest that less women are being appointed to senior positions in these countries with histories of high inflation because women are *assumed to be* less hawkish than men, and therefore will be less able, in the eyes of central bank authorities, to respond sufficiently aggressively to any future bouts of inflation.

If women's voices do not enjoy equal representation within the formal organisational hierarchies of central banks, what of the external inputs into the banks' decision-making processes? Data on the gender composition of respondents to central banks' opinion-gathering exercises, such as the Bank of England's Agents' Summary of Business Conditions (ASBC) or Decision Makers' Panel Survey (DMPS)[71], are unavailable. The DMPS does not ask respondents to disaggregate their responses (on, for example, hiring or pay rises) along any dimensions of difference such as gender or race.

A number of central banks either have existing bodies or have created new bodies to better connect central bank staff with a broader range of stakeholders. The US Federal Reserve's 15-member Community Advisory Council (CAC), formed in 2015, meets twice annually "to offer diverse perspectives on the economic circumstances and financial services needs of consumers and communities, with a particular focus on the concerns of low- and moderate-income populations". Its current membership is predominantly women and racially diverse. The CAC was instrumental in the coordination of participants for the 14 'Fed Listens' events over 2020-22 which sought the input of communities on a range of topics pertaining to the dual-mandate objectives of maximum employment and stable prices. Participants in the events highlighted, for example, the misleading nature of aggregate labour market statistics for LMI (low to middle-income) and communities of people of colour (POC). Interestingly, the word 'gender' does not appear once, and the word 'women' only 3 times, in the 140-page summary report of the '*Fed Listens*' events. The narrative on the differential experience of aggregate labour market tightness seemed to be influencing Fed operations for a time in 2021-22 as it allowed the labour market to run 'hot', that is register historically high levels of employment, in order to benefit economically marginalised communities. This position and the importance of this narrative seems to have now dissipated.

The BoE started Community Forums in 2017, holding some 50 events in the interim where BoE staff have met with over 1000 charity workers and the people they support. In 2018, the BoE Citizens' Forums were initiated, hosting 66 events and claiming some 4000 members (as of 1 March 2023), the gender composition of which is unavailable. The associated Citizens' Panel Survey considers representativeness in terms of region, income and age,

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[69] Erika Christie Berle, Kenneth Kavajecz, and Yuko Onozaka, 'Effect of Gender Composition of Committees', *Human Relations*, 18 October 2022, 00187267221135846, https://doi.org/10.1177/00187267221135846.
[70] 'Fear of Inflation and Gender Representation in Central Banking', *European Journal of Political Economy* 74 (September 2022), https://doi.org/10.1016/j.ejpoleco.2022.102192.
[71] The BoE's ASBC involves quarterly discussions with over 700 businesses. The DMPS was established in 2016 with ESRC funding. Quarterly surveys are sent to CFOs of small, medium and large UK companies representative of the population of UK businesses. Over 10,000 businesses took part in the panel as of February 2023.

though it is again unclear if this extends to gender and race. A recent Citizens' Forum on the cost-of-living squeeze found that: "Participants understood that the main drivers of inflation were higher energy prices … but they also felt that Brexit had been a factor, along with businesses taking advantage of the inflationary environment to increase profit margins."[72] However, it is not clear to what extent these fora influence BoE decision-making as against simply allowing the public to provide input, and BoE staff to better communicate decisions that have already been taken.

b. Central bank operations and the role of MP in building a caring economy

Beyond limiting the negative distributional impacts of monetary policy as currently practiced, it can reasonably be asked what pro-active role can or should monetary policy play in advancing gender equity and fostering the development of the care economy. Achievement of the latter delivers positive macroeconomic outcomes in terms of employment and output growth, as well as offering significant potential in supporting progress towards environmental sustainability goals by transforming the quality of growth. In addition to the distributional benefits that might be gained from a shift away from an exclusive focus on inflation targeting and the constraints it poses in our approach to addressing inflation (as discussed in section 4), the Bank of England could use an array of tools to both guide credit towards activities which support greater gender equality, and increase coordination with Treasury to strengthen its ability to do the same.

The different strategies to guide credit towards the care economy can be thought of along an increasing scale of the degree of market intervention, a scale which also indicates their likelihood of adoption given current constraints (this echoes the debate over a move from IT to real targeting discussed in section 4). At the most 'market-friendly' end of proposals could be a requirement for the BoE to regularly report to a parliamentary sub-committee such as the Women and Equalities Committee, on the levels of lending/investment in the care economy. This could be modelled along the stipulations in the USA Economic Growth Act of 1996 which requires the US Federal Reserve to report every 5 years to Congress on levels of small business lending by all creditors, including commercial banks, savings institutions, credit unions, finance companies and online lenders. This would provide an obvious point for advocacy around progress in private financing of the care economy, but run the risk of endorsing a view that equates private sector investment in and financialisation of the care sector[73] with the building of a caring economy.

From shining a light on the existing support of private and public financial institutions for the care economy, more ambitious would be for the BoE to assess what role it can or should play in the ongoing provision of low-cost credit to the care economy. It is likely that the more significant role here is to be played by the Treasury. The recently established UK Infrastructure Bank, wholly owned by HMT, could reasonably interpret its existing focus on tackling climate change and fostering local economic development, to include priority support for social infrastructure. Nikolaidi[74] goes further to argue for the "… creation of a strong network of regional public banks with explicit green and gender targets [that] could provide additional financing geared towards the needs of local communities". This echoes the role of the USA's Small Business Administration, established in 1953, a federal public agency with the most direct role in small business support and an explicit goal of promoting entrepreneurship opportunities for women and minorities. However, the direct role of such

[72] Bank of England, 'The Cost of Living Squeeze: Insights from the Bank of England's Outreach Programmes' (London: Bank of England, 1 March 2023), https://www.bankofengland.co.uk/about/get-involved/citizens-panels/insights-from-the-bank-of-englands-outreach-programmes.
[73] Benjamin M. Hunter and Susan F. Murray, 'Deconstructing the Financialization of Healthcare', *Development and Change* 50, no. 5 (September 2019): 1263–87, https://doi.org/10.1111/dech.12517.
[74] 'Macrofinancial Policies for a Green and Caring Economy', 13.

public institutions backed by the Treasury, could be complemented by the BoE creating financial incentives for private lenders to increase their support for the care economy. This could be accomplished by establishing a permanent facility, modelled on the (now expired) Term Funding Scheme for SMEs, which makes funds available at the bank rate to financial institutions which increase lending to the green and care economies[75], and/or where such initiatives are led by women and members of marginalised communities.

Yet more ambitious would be for the BoE to introduce capital requirements which, as argued by Nikolaidi[76], could "be adjusted on the basis of the gender and diversity performance of companies and on whether banks provide financing for the caring economy. Banks could be required to hold more capital against loans given to companies that have not achieved specific gender and diversity targets. Capital requirements could, at the same time, decline for loans provided to firms that support activities that are important for a caring economy or have achieved inclusion targets". Such a policy echoes long-standing advocacy for the use of asset-based reserve requirements (ABRRs), with banks required to allocate a specified portion of their lending to target activities or face higher reserve requirements[77]. Of course, careful checks and balances would need to be in place to ensure that such requirements did not simply result in token appointments in order to allow dominant firms to continue to access lower-cost funding.

Finally, perhaps the most challenging proposals for the BoE given its current policy framework are those that demand greater explicit coordination with fiscal policy[78]. Nikolaidi[79] has argued that the Bank of England could commit to buying government bonds whenever the interest rate rose above a set target. This would help to contain borrowing costs for the government's investments in and maintenance of the caring economy. Such a proposal is similar to the Transmission Protection Instrument (TPI) recently established by the ECB, which allows the European Central Bank to purchase government bonds in instances where an 'unwarranted' increase in the spreads between the interest rates paid by different euro area countries threatens the debt sustainability of a member country. The Bank of England could also commit to buying government bonds which are explicitly linked to investment in the green or caring economy (green bonds or social bonds) in order to ensure that the demand for the bonds will be sufficiently high, and interest rates therefore lower.

6. Conclusion: Towards a policy agenda

Taking a feminist perspective on monetary policy makes it clear that insufficient attention has been paid to not only the broader gendered impacts of monetary policy, but even the basic distributional implications. To draw attention to this latter gap, some researchers have taken to using the term 'monetary austerity' to describe the current contractionary monetary policy consensus[80]. The potential problem with this narrative framing is that it is asymmetrical in its critique, that is, it appears critical of contractionary monetary policy but not of expansionary monetary policy and the more general problem of monetary dominance in macroeconomic

[75] Nikolaidi, 16.
[76] 17.
[77] Thomas I. Palley, 'Asset-based Reserve Requirements: Reasserting Domestic Monetary Control in an Era of Financial Innovation and Instability', *Review of Political Economy* 16, no. 1 (January 2004): 43–58, https://doi.org/10.1080/0953825032000145454; Thomas I. Palley, 'Monetary Policy in the US and EU after Quantitative Easing: The Case for Asset Based Reserve Requirements', *Real World Economic Review*, no. 68 (2014): 2–9; S Seguino, 'Feminist and Stratification Theories' Lessons from the Crisis and Their Relevance for Post-Keynesian Theory', *EUROPEAN JOURNAL OF ECONOMICS AND ECONOMIC POLICIES-INTERVENTION* 16, no. 2 (September 2019): 193–207, https://doi.org/10.4337/ejeep.2019.02.05; Elson, 'Macroeconomic Policy for a Gender Equal Economy: Briefing Paper for Commission on a Gender Equal Economy', 12.
[78] Marion Sharples, 'Creating a Caring Economy: A Call to Action' (London: Women's Budget Group, September 2020), https://wbg.org.uk/wp-content/uploads/2020/10/WBG-Report-v10.pdf.
[79] 'Macrofinancial Policies for a Green and Caring Economy', 11.
[80] Louis-Philippe Rochon and David M. Fields, 'Monetary Austerity and the War on Workers', *Monetary Policy Institute Blog* (blog), 6 February 2023, https://medium.com/@monetarypolicyinstitute/monetary-austerity-and-the-war-on-workers-446ff4eaf456.

management. Preferable, therefore, would be to frame monetary policy as currently practiced as the 'central bank flat tax'; that is, whether short-term interest rates are moved up or down (CMP), or financial assets are bought or sold (UMP), the impact on society in terms of winners and losers can be regressive. Comparing central bank actions with the better-known and more widely opposed right-wing policy plank of flat taxes (wherein all citizens pay the same percentage of their income in taxes) might help to break through the shroud of complexity and misunderstanding that conceals monetary policy in the eyes of the public.

Such a framing could better accommodate the sometimes contradictory empirical findings regarding the distributional impact of both CMP and UMP complicated by issues of asymmetry and timing, as discussed in sections 2 and 3. The balance of evidence suggests that contractionary CMP is economic inequality increasing and expansionary CMP economic inequality decreasing, with the income composition and earnings heterogeneity channels dominating. Expansionary UMP, on the other hand, appears, on balance, to be economic inequality increasing with the portfolio composition channel playing the critical role (it is too early to draw any empirical conclusions regarding the impact of contractionary UMP). However, it is important to acknowledge that the distributional impacts are not unambiguous; a range of institutional characteristics (from sectoral composition and labour force skills development to patterns of pension and housing provision), the timing and nature of central bank intervention, and the fiscal framework into which MP is conducted[81], all play a role in determining the ultimate distributional outcome of a particular set of MP measures in a particular country over a particular period.

However, even in cases where MP is found to be distributionally neutral, we need to interrogate the meaning of 'neutrality'; there may be good reason to criticise policies which, while neutral in mathematical terms, hand much larger gains in absolute terms to rich white men. This reinforces the call to move beyond distributionally-blind monetary policy. We don't accept that all growth is good or that all fiscal expenditure is good – we demand high quality growth and progressive fiscal expenditure. The same demands should be placed on monetary policy. This will require more research into the issue of asymmetry; even if the impacts of MP shocks are symmetrical, there is a need to consider asymmetrical accompanying fiscal mitigation measures. This might mean, for example, that while there is a need to implement mitigating measures where contractionary MP is contributing to gender-based income inequalities, there is no equivalent need to do so where expansionary MP is contracting gender-based income inequalities. This supports the appeal for more research into the gendered (and racial) impacts of both CMP and UMP.

While the development of a policy agenda is the focus of a companion piece[82], it is worthwhile drawing out some of the measures which emerge from the discussion herein to consider where they might fit into both medium and long-term advocacy plans. To succeed, any such plan would necessarily first involve building interest and commitment amongst a broader coalition of CSOs, trade unions, progressive financial institutions, journalists, thinktanks and academics. Such an alliance could deploy an insider-outsider strategy, appealing to BoE staff who are sympathetic to a greater focus on distributional and gender issues. Together, this coalition could provide momentum for first achieving reforms of a 'lower hanging fruit' nature, that is, initiatives which do not threaten the hegemonic NKE analytical model of MP:

- **Diversity:** Minimum criteria for increased diversity along multiple dimensions (gender, race, class and disciplinary background) should be developed for BoE governance bodies, especially senior positions. Diversity must similarly be ensured in the BoE's Citizen and Community Forums, and, furthermore, explicit feedback should

[81] Furceri, Loungani, and Zdzienicka, 'The Effects of Monetary Policy Shocks on Inequality'.
[82] See "Feminist perspectives on Monetary Policy" by Nicolas Aguila

be sought on the gender, race and class distributional implications of monetary policy.

- **Data:** Existing systematic opinion-gathering exercises (Agents' Summary of Business Conditions and Decision Makers' Panel Survey) currently pay no attention to distributional issues; a representative survey of working people should collect data on perceptions of MP impact on employment/wages, and cost-of-living. Continued efforts should be made towards the collection, analysis and decision-making role of gender, race and class-disaggregated data on the lived effect of inflation that takes into account gendered and racially-differentiated consumption and employment patterns.

- **Research:** More research is required into how gender discrimination in labour and credit markets impacts the transmission mechanisms of monetary policy[83] and more broadly the potential rate and quality of output growth and employment[84]. Ex-ante impact assessments should be made of the gender, race and class-based impacts of proposed monetary policy (income/wealth effects, sectoral employment differences, impact on debt burden and access to credit, etc) with consideration given to changes to the social safety net to protect disadvantaged families. There may be lessons to be learned from the Opportunity and Inclusive Growth Institute at the Federal Reserve Bank of Minneapolis, established in January 2017 with the goal of conducting research that will "increase economic opportunity and inclusive growth for all Americans and help the Federal Reserve achieve its maximum employment mandate". There may be room to leverage the BoE's obligations under the Public Sector Equality Duty to introduce a requirement for such impact assessment.

- **Accountability:** Introduce a requirement for a senior BoE staff member to regularly report to a parliamentary sub-committee on the levels of investment in creating a caring economy, and the gendered and racial distributional impacts of monetary policy in the preceding period, outlining any mitigating measures that were taken. Pressure should be maintained from the outside through public comment at heightened moments of attention to monetary policy (MPC meetings, Governor reports to Treasury Select Committee, crisis interventions, official policy review episodes, etc.).

In the longer-term, deeper change, that is change which challenges the hegemonic model of NKE MP, would require working with both internal allies which have been cultivated with the BoE as well as political allies to call for an inquiry into the governance, operations and tools of monetary policy. Such an inquiry could consider more fundamental reform proposals:

- The distributional implications of BoE goals, with consideration of the effectiveness of IT compared with possible alternatives given the need to give greater priority to employment, distribution and stability goals;
- Re-visiting the question of central bank independence with consideration given to a broader societal understanding of central bank accountability;
- A significantly augmented role for the BoE in the oversight of a network of public banks with a mandate to channel low-cost credit to social and environmental priorities;
- Integration of social and environmental standards into capital requirements and financial regulation; and

[83] For example Ulrike Neyer and Daniel Stempel, 'Gender Discrimination, Inflation, and the Business Cycle', *Journal of Macroeconomics* 70 (1 December 2021): 103352, https://doi.org/10.1016/j.jmacro.2021.103352.

[84] Irene van Staveren, 'The Lehman Sisters Hypothesis', *Cambridge Journal of Economics* 38, no. 5 (2014): 995–1014.

- Greater coordination with HMT, up to playing a direct role in buying government debt so as to maintain interest rates within sustainable levels, either more generally or specifically in the case of the issuance of government green and social bonds.

Such calls for a more interventionist role of the BoE in pursuit of gender equity must be carefully calibrated so as not to endorse monetary dominance, given the greater effectiveness of fiscal policy to achieve a range of macroeconomic outcomes[85]; this could be balanced by calls for more research into the comparative redistributive effects of fiscal versus monetary policy. As argued by Bartscher et al[86], achieving racial, and we would add gender, equity should be first-order objective for economic policy objectives, "… but the tools available to central banks might not be the right ones, and could possibly be counter-productive". Moreover, it would be naïve to underestimate the strength of opposition to fundamental reform of BoE governance and operations given its role in disciplining workers' wage demands, ensuring price stability and providing a supportive regulatory framework for the profitability of the leading centre for global finance.

[85] Onaran and Oyvat, 'Synthesizing Feminist and Post-Keynesian/Kaleckian Economics for a Purple Green Red Transition'; Özlem Onaran, 'Quantitative Easing: Evidence to the Public Inquiry on Quantiative Easing by the House of Lords Economic Affairs Committee' (UK Parliament, 9 February 2021), https://committees.parliament.uk/writtenevidence/23107/pdf/.
[86] 'Monetary Policy and Racial Inequality', 37.

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Appendix

Monetary contraction raises unemployment hurting low- and middle-income households through the income composition channel, while upper-income households are both less likely to become unemployed, and benefit from higher interest income. Tzamourani, drawing upon the Household Finance and Consumption Survey for the eurozone countries in 2017,[87] finds that "…an increase in the policy interest rate in the euro area would tend to benefit wealthier, higher income, and older households, as well as outright homeowners." Martin-Legendre et al[88], conclude that for the countries of the EU-15 from 1995-2014, the medium-term effects of monetary policy shocks are 'unequivocally positive', that is rises in the real interest rate contribute to increasing income inequality. This is further supported by Rada & Kiefer's finding[89], looking at 13 OECD countries for the period 1971-2011, that contractionary monetary policy has a negative impact on the wage share.

However, other empirical evidence suggests that contractionary monetary policy may have insignificant impacts or even decrease income inequality. Guerello[90], in an analysis of 17 eurozone states for the period 1999 to 2015, finds that countries where households whose financial portfolios hold a high proportion of shares in companies face a short-lived contraction of income inequality following contractionary CMP (and equally an expansion of income inequality following expansionary CMP). This same reason for a negligible impact of monetary policy on income inequality is cited by Liosi & Spyrou[91]; examining eurozone countries for the period 2005-17, they find that countries with higher levels of investment in capital markets via pension funds see counterbalancing effects in the income composition

[87] 'The Interest Rate Exposure of Euro Area Households', *EUROPEAN ECONOMIC REVIEW* 132 (February 2021), https://doi.org/10.1016/j.euroecorev.2020.103643 p. 15.
[88] 'Monetary Policy and Income Distribution: Empirical Evidence for the EU-15', *REVISTA DE ECONOMIA MUNDIAL*, no. 55 (2020): 121–42, https://doi.org/10.33776/rem.v0i55.3820.
[89] 'Distribution-Utilization Interactions: A Race-to-the-Bottom Among Oecd Countries', *METROECONOMICA* 67, no. 2 (May 2016): 477–98, https://doi.org/10.1111/meca.12081.
[90] 'Conventional and Unconventional Monetary Policy vs. Households Income Distribution: An Empirical Analysis for the Euro Area'.
[91] 'The Impact of Monetary Policy on Income Inequality: Evidence from Eurozone Markets'.

channel. El Herradi & Leroy[92] in a long-run study of 12 OECD countries for the period 1920-2016 find that contractionary monetary policy decreases the share of national income held by the top 1 percent which they believe is the consequence of lower returns on equity, housing, and other safe assets. Similar results are found for the USA for the period from 1960 to 2012, where contractionary monetary policy leads to a significant decline in income inequality attributed to the use of an inequality measure which covers the top one percent of the income distribution[93]. In recent work focusing on the UK, Ballabriga & Davtyan[94] conclude that the impact of CMP on income inequality for the period 1993-2008 was "non-conclusive or marginal". The study of Bárcena-Martín et al[95], takes a different approach, looking at the impact of monetary policy shocks on relative income mobility across the EU countries in the period 2004-15, finding that expansionary monetary improves upwards mobility for middle-income groups more than for lower-income groups suggesting a skills premium in the earnings heterogeneity channel.

Other research suggests that the impact of CMP on inequality may be different at lower, middle and upper wealth strata of society. Using household data for Norway, Holm et al[96] estimate that expansionary monetary policy will have U-shaped effects on income and consumption across the wealth distribution. Asset-poor and asset-rich households increase their consumption more than households in the middle; similarly, stronger responses are seen in non-financial income for those with few financial assets, as well as financial income for those with the most. Similar conclusions are reached by Amberg et al[97] using household data for Sweden.

Glossary

By Nicolas Aguila and Jeff Powell

1. Asset Purchase Programmes: Asset Purchase Programmes (APPs) are a form of central bank operation that was adopted by many central banks, predominantly in the OECD, after the Global Financial Crisis of 2007-09 (though it should be noted that Japan was the first central bank to experiment with APPs from 2001). Unable to lower interest rates any further once they had reached the so-called ‘zero lower bound’ (see above), central banks were forced to consider other means by which they could stimulate the economy and reach their inflation targets. APPs involve the purchase of financial assets such as government bonds, corporate bonds, asset-backed securities, and, less commonly, equities. The stated goal of these programmes has changed over time: initially, it was hoped that the ensuing increase in the liquidity of the banking sector would encourage greater lending and therefore investment; when this effect proved disappointing, emphasis subsequently shifted to the role of APPs in propping up the price (thereby lowering the yield) of certain financial assets, lowering the cost of government long-term borrowing, and encouraging investors to shift their portfolios into higher-risk private securities.

2. Bank for International Settlements (BIS): Often referred to as the ‘central bankers’ bank,’ the BIS, located in Basel, Switzerland, and formed in 1930, has the ostensible goal of coordinating the world’s central banks to ensure monetary and financial cooperation and global financial stability. It has played an important, often criticized, role in setting the global regulatory framework for both bank and non-bank financial institutions.

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[92] ‘Monetary Policy and the Top 1%: Evidence from a Century of Modern Economic History’, *INTERNATIONAL JOURNAL OF CENTRAL BANKING* 18, no. 5 (December 2021): 237–77.
[93] K Davtyan, ‘The Distributive Effect of Monetary Policy: The Top One Percent Makes the Difference’, *ECONOMIC MODELLING* 65 (September 2017): 106–18, https://doi.org/10.1016/j.econmod.2017.05.011.
[94] ‘Distributional Impact of Monetary Policy in the UK: From Conventional to Unconventional Policy’, 438.
[95] ‘Effects of Monetary Policy Shocks on Income Mobility in the Euro Area Countries’, *PANOECONOMICUS* 66, no. 3 (2019): 307–24, https://doi.org/10.2298/PAN1903307B.
[96] ‘The Transmission of Monetary Policy under the Microscope’, *Federal Reserve Bank of San Francisco, Working Paper Series*, no. 2020–03 (31 January 2020): 01–87, https://doi.org/10.24148/wp2020-03.
[97] ‘Five Facts about the Distributional Income Effects of Monetary Policy Shocks’, *AMERICAN ECONOMIC REVIEW-INSIGHTS* 4, no. 3 (September 2022): 289–304, https://doi.org/10.1257/aeri.20210262.

3. Bank rate (of interest): The Bank Rate is the policy interest rate set by the Monetary Policy Committee (MPC) of the Bank of England (sometimes referred to as the 'base rate'). It is the interest rate that the BoE pays to commercial banks that hold money (reserves) with it and is the foundation from which the BoE attempts to influence a whole range of market interest rates.

4. Capital requirements: Capital requirements are a form of banking regulation consisting of establishing a minimum proportion of capital (the highest quality capital is the banks' own equity, that is common and preferred stock, as well as reserve/cash holdings and retained earnings) that banks have to keep in relation to their (risk-weighted) total assets (dominated by the loan portfolio). Higher capital requirements mean a bank is better able to absorb potential losses on its loan portfolio but are argued to raise bank costs and therefore reduce the availability of credit.

5. Collateral framework: The collateral framework refers to the rules guiding the uses of collateral (the asset pledged as security for a loan). It includes regulations on the eligibility and pricing of certain assets accepted as collateral.

6. Conventional monetary policy: Conventional monetary policy (sometimes shortened to CMP) refers to the manipulation of the short-term (1-day) interest rate charged by the central bank to borrowing financial institutions, in its attempts to stimulate/depress the economy. The dominance of this strategy emerged in the 1990s, and only became broadly referred to as 'conventional' monetary policy once central banks (mostly in OECD countries) were forced by the events of the Global Financial Crisis of 2007-09 to adopt - in contrast - 'unconventional' monetary policies (see below).

7. Cyclical – pro-cyclical and counter-cyclical: Capitalist economies tend to grow in cycles (periods of growth, stagnation, recession). Macroeconomic policy is considered pro-cyclical if it serves to stimulate (/weaken) the economy in a period of growth (/contraction), or counter-cyclical if it serves to stimulate (/weaken) the economy in a period of contraction (/growth).

8. Fiscal policy: Fiscal policy is a form of macroeconomic policy, which is usually the purview of the Treasury or Ministry of Economy/Finance. It includes spending and taxation, and has significant distributional implications.

9. Forward guidance: Central banks' public announcements of their intentions for monetary policy over a given timeframe ('we will buy £20 million worth of long-term government bonds each month for the next 6 months') and/or states of the economy ('we will maintain interest rates at the current level until unemployment falls below 5%'). It is argued that where central banks are judged to be more credible by the public, forward guidance will be more effective, and lower the 'sacrifice ratio' of monetary policy.

10. Gini coefficient: Named after Italian statistician Corrado Gini, the Gini coefficient is a measure of statistical dispersion often used to represent income, consumption, or wealth inequality.

11. Heterodox Economics: In a crude sense, heterodox economics is anything that is not orthodox economics. According to that understanding, it is a moving target; if the orthodoxy today is New Keynesian economics, then heterodoxy is anything which is not New Keynesian (or neoclassical economics). However, many heterodox economists argue that there is more to heterodoxy than simply what it is not. It has been argued that there are common ontological and epistemological threads running through the different schools of thought which are generally considered to be a part of heterodox economics (such as Post-Keynesian, Institutional, Evolutionary, Social, Ecological, or Marxist).

12. Inflation targeting: Inflation targeting (sometimes shortened to IT) regimes are those in which price stability is the main (or even only) goal of the central bank. They involve explicitly (and publicly) selecting a rate or a range of rates of inflation that the central bank should aim to achieve. IT became the dominant central bank operational regime from the early 1990s and is associated with the New Keynesian school of economic thought (see below).

13. Keynesian economics: Keynesian economics (sometimes referred to as 'Old Keynesianism' or 'Classical Keynesianism') dominated in academia and policy circles from the period post-Great Depression up until the 1970s. Based around the ideas of John Maynard Keynes and his followers at Cambridge University, Keynesian economics emphasizes the importance of managing aggregate demand in the macroeconomy; it is argued that the economy does not automatically return to its long-run equilibrium output growth path. Maintaining aggregate demand and full employment requires state intervention in the form of both fiscal and monetary policy.

14. Liquidity requirements: Liquidity requirements are a form of banking regulation consisting of establishing a minimum proportion of highly liquid assets (those that can easily be converted into cash) that banks have to keep in order to meet potential outflows over a particular period of time. Higher liquidity requirements are intended to ensure greater financial stability in the event of a crisis but come with greater costs to the holder. Examples of liquidity requirements are the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR).

15. Macroeconomic policy: Macroeconomic policy refers to the economic policies taken by the government with the aim to influence economic aggregates (such as GDP growth, unemployment, inflation). It typically comprises fiscal policy and monetary policy. Importantly, while often underemphasized, all macroeconomic policies have important implications for distribution and gendered roles/power.

16. Market rate (of interest): The market rate of interest can refer to a whole range of interest rates that are charged by commercial banks to private agents (financial and non-financial firms and households) over a range of lending maturities (from overnight to multiple-year loans). The market rate of loans to large corporations at short maturities will be close to the bank rate, while loans to households over longer maturities will be much higher.

17. Monetary policy (expansionary/contractionary): Monetary policy is a form of macroeconomic policy, which is generally a task of the central bank. It typically involves responsibility for ensuring price stability, liquidity management (ensuring that firms and households have access to credit when they need it), and financial stability, as well as, in some cases, supporting broader macroeconomic goals. Monetary policy can be expansionary if it aims to stimulate economic activity (for instance, by lowering interest rates) or contractionary if it seeks to depress it.

18. Natural interest rate: The natural interest rate is a theoretical concept from mainstream economics. It refers to a hypothetical interest rate that would bring equilibrium in savings and investment and would be consistent with non-inflationary long-run equilibrium output growth. Its level is usually argued to be affected by so-called 'real factors' such as changes in demography (more elderly people saving) or technology (change in AI spurring more investment). Importantly, it cannot be empirically measured; economists attempt to estimate it using a number of controversial techniques.

19. New Keynesian economics: New Keynesian economics (sometimes referred to as 'New Consensus macro' or 'Neoclassical synthesis') represents a mix of some aspects of Keynesian ideas on macroeconomic dynamics in the short-run with a long-run neoclassical foundation. It has constituted economic 'orthodoxy' within central banks (and more broadly in policy and academia) since the 1990s. State intervention is seen as necessary to address unemployment, justified by short-run market failures, with emphasis placed on monetary policy in addressing falling output growth and/or rising unemployment/inflation. Post-Keynesian economics criticizes the New Keynesian camp for abandoning many of the ideas that they believe were core to Keynes' framework, including the importance of animal spirits to investment and growth in a capitalist economy, and the role of fundamental uncertainty (as contrasted to 'calculable risk').

20. Nominal and real interest rates: The nominal interest rate is the rate actually quoted. The real interest rate is the nominal rate minus the rate of inflation.

21. Open Market Operations: Open market operations (often shortened to OMOs) refer to the purchase and sale of securities (usually government-issued bonds of varying maturities, often referred to as 'gilts' in the UK) by the central bank in the financial market, typically with the goal of influencing interest rates and the levels of liquidity.

22. Quantitative Easing / Tightening: Quantitative Easing, or QE, is the name that APPs were given in several countries, and thus the two terms are usually used as synonyms. Quantitative Tightening, or QT, refers to the reversal of Quantitative Easing, including not reinvesting the proceeds from maturing assets purchased during QE or going further and selling the same assets so as to reduce the overall size of the central bank balance sheet. To date, QT has only been implemented on a limited scale, predominantly by the US Federal Reserve.

23. Refinancing operations: Refinancing operations are a form of monetary policy in which the central bank gives collateralized loans (that is, loans that are given in return for the borrower pledging an underlying asset, usually a financial asset) to banks for a short or medium period.

24. Repurchase agreements: Repurchase agreements (repos) are a transaction in which one of the parties sells an asset under the promise of repurchasing it at an agreed higher price at an established future date (overnight, in seven days, etc). It is basically a form of secured lending, as price differences carry an implicit interest rate. If the borrower defaults, the lender keeps the asset which acts as collateral. Because of this, a haircut is applied to collateral in repo transactions to avoid loss in case of default, given that the price of collateral can drop. Central banks typically intervene using repos to control short-term interest rates. The BoE has the Short-Term Repo (STR) facility.

25. Reserve requirements: Reserve requirements are a form of banking regulation consisting of establishing a minimum proportion of cash and/or reserves that banks have to keep in relation to their liabilities (deposits) in order to meet potential withdrawals. Raising reserve requirements limits the credit creation capacity of the banking sector (and vice-versa). While still common in low- and middle-income countries, their use (either in law or in fact) has become uncommon in OECD countries where authorities have taken the view that banks will self-regulate their level of reserve holdings.

26. Unconventional monetary policy: Unconventional monetary policy (sometimes shortened to UMP) refers to the tools that central banks began to deploy in response to the Global Financial Crisis of 2007-09. As interest rates reached zero, it became impossible to stimulate the economy through further interest rate reductions. Central banks turned, instead, to asset purchase programs (such as quantitative easing, QE - see above). While most commentators use UMP as a way to refer to QE/QT, the term is also sometimes used to cover other monetary policy tools such as forward guidance, yield curve control, or tiered reserve requirements.

27. Yield curve: A yield curve is a graph that shows how the yield (that is, the interest rate paid) on debt instruments such as bonds changes over the period of time until their maturity (that is, when the outstanding principle comes up for repayment). Typically yield curves are rising, related to both expectations of higher future inflation (and therefore interest rates) and rising uncertainty and risk over time about the ability of the borrower to repay the principal.