

# **PROFESSOR ÖZLEM ONARAN, UNIVERSITY OF GREENWICH – WRITTEN EVIDENCE (QE10005)**

## **QUANTITATIVE EASING INQUIRY**

### **1. The effects of Quantitative Easing on the macroeconomy**

- 1.1.** Quantitative Easing (QE) helped to stabilise financial markets and prevented a new Great Depression. If the Bank of England (BoE) had made no changes to monetary policy at all we would have experienced a higher drop in GDP, house and equity prices. higher rate of unemployment than actually occurred. However, we should understand the orders of magnitude of these effects: there has been a massive expansion in the BoE balance sheet. For £200bn early QE in the UK, which is about 10% of GDP, the growth effect on GDP in 2009 was about 1.5-2% according to the own forecast of the BoE (as recently cited by Bailey et al., 2020). If we had fiscal spending of 10% of GDP at a time of recession, we might have achieved 15% growth effect, assuming cautiously a multiplier of 1.5. This multiplier is consistent with our econometric estimates (Onaran, Oyvatt, Fotopoulou 2019, 2021; Obst, Onaran, Nikolaidi, 2019) and is at the lower end of the estimations of multipliers in recessions (Blanchard and Leigh, 2013, Stockhammer et al., 2019).
- 1.2.** QE does not seem to be an effective policy tool for bringing the UK out of stagnant, low growth rates. QE has had some impact on financial markets but less so on output and employment. QE reduced corporate bond rates, so firms large and secure enough to access this market could raise finance cheaply. This has not resulted in increased investment by these firms.
- 1.3.** QE has further contributed to financialization and higher wealth concentration at the top 1% via asset price inflation; both of these led to lower private corporate investment according to our research (Onaran, Oyvatt, Fotopoulou 2019, Tori and Onaran 2018, 2021). This in turn leads to low productivity and deepens a vicious circle of low paid precarious jobs despite low unemployment
- 1.4.** Another side effect of QE is that real estate has increasingly become a financial asset leading to a decline in affordable housing in cities like London. Housing is still overpriced in the UK.
- 1.5.** The effects of QE in the UK has been mixed with the effects of cuts in public spending and changes in the social security and labour market institutions. QE increased growth but fiscal restraint led to a decline in demand and output.

### **2. The effects of QE compared with alternative policies**

- 2.1.** Monetary policy is less effective than fiscal policy, and one reason for this is that the elasticity (sensitivity) of private corporate investment to interest rate is low and its elasticity to demand is high. We estimate that

an increase public spending by 1% of GDP (about £20bn per year) leads to an increase in GDP by 1.3% and an increase in private investment/GDP by 0.14%; and public investment self-finances part of itself (about 12%); consequently budget balance/GDP decreases by 0.88 (Obst, Onaran, Nikolaidi 2020). We also simulate the effects of a mix of public spending, taxation and labour market policies, and find substantial positive effects on output, private investment, productivity, employment of both women and men, and budget balance.

- 2.2.** Our research shows that a mix of fiscal and labour market policies would have been effective in tackling inequalities and offsetting the unintended consequences of QE (Onaran, Oyvat, Fotopoulou 2019, 2021; Guschanski and Onaran, 2021; Tippet, Onaran, Wildauer, 2021): The provision of an effective public social infrastructure with universal basic services in health, social care, education and childcare increases the wage share, decreases wealth inequality and increases gender equality. The labour market policies such as minimum wages, enhancing trade union representation and progressive taxation of income and wealth improve equality in income, wealth, and gender.

### **3. The effects of QE on inequality in the UK**

- 3.1.** QE has perpetuated existing inequalities in wealth, income, gender, race, across regions and age groups in the UK. The positive effects of QE appear to be higher for the top of the distribution and lower for the bottom of the wealth and income distribution due to a combination of factors, in particular, the low sensitivity of investment to interest rate and high sensitivity of investment to demand, modest employment effects, a low effect of employment on wages, credit rationing by banks at the expense of low income and wealth groups, high asset prices inflation, and the initial wealth distribution being very unequal. Dafermos and Papatheodorou (2018) present a formal theoretical model analysing some of these aspects.
- 3.2.** Wealth inequality has increased substantially both before and after QE apart from a brief decline during 2010-12 (Tippet, Onaran, Wildauer 2021). The share of top 1% in total net personal wealth is about 20% (as of 2017 based on data from WIID and Credit Suisse). The top 1% income share is still very high at 13% (2019) and declined only marginally compared to 2008 (1%-point, based on data from WIID).
- 3.3.** BoE researchers, Bunn et al. (2018), focusing on between 2008 and 2014 suggest that the effects of monetary policy on inequalities was small in the UK, and it has led to a negligibly small decrease in income and wealth inequality measured by the Gini coefficient (0.001 in income, 0.017 in wealth Gini).
- 3.4.** Evgenidis and Fasiano (2021) find that QE shocks have significant and lingering effects on wealth inequality; it raises wealth inequality across households, as measured by both their Gini coefficients and percentile shares; the financial asset price and house price effects widen the wealth gap, outweighing the counterbalancing impact of the savings redistribution

and inflation channels; home ownership moderates the redistributive effect of QE only in the middle of the wealth distribution.

**3.5.** Mumtaz and Theophilopoulou (2017) find that QE worsened income and consumption inequality in the UK.

**3.6.** UK WBG (2020) highlight important facts on gender inequality in wealth, which are crucial in terms of assessing the effects of QE. Existing gender inequalities related to unequal distribution of care responsibilities as well as gender pay gaps are perpetuated by QE. As QE has increased the gap between returns on financial assets vs. cash, it is also likely to lead to an increase in gender inequality in wealth. Evidence shows that women, once they have children, are more likely than men to have little or no savings and even less in financial assets. After relationship breakdowns women tend to have less claim to household financial assets than their former male partners.

#### **4. The effects of international QE programmes on inequality**

**4.1.** Regarding the effects of QE on income inequality in the US, Montecino and Epstein (2018) find that QE is dis-equalizing, in contrast to earlier work by Bivens (2015), who argues that QE is equalizing. Montecino and Epstein's (2018) findings offer important policy lessons for the UK. They highlight that

**4.1.1.** surprisingly, even the employment channel is dis-equalizing because of the large declines in real wages and hours worked, despite large increases in employment;

**4.1.2.** there were no effective mechanisms to clear away obstacles for lower income households to refinance loans at lower rates;

**4.1.3.** there were no innovative programs to use lending facilities to lend directly to state and local governments or others who would expand employment, which could have lessened the Fed's dependence on bidding up asset prices in an attempt to generate employment and wage increases;

**4.1.4.** the long-term deterioration in labour market opportunities for many workers have contributed to long term wage stagnation;

**4.1.5.** raising interest rates will not have an equalizing impact as it would likely reduce employment growth, and make mortgage refinancing more expensive;

**4.1.6.** this indicates a paradox: given the current structure of the economy both loose and tight monetary policy are likely to be dis-equalizing;

**4.1.7.** fiscal policy and labour market policies are needed to reduce the massive levels of inequality.

**4.1.8.** Regarding the effects in the Eurozone, the ECB (2016) suggests that through the wealth effects, “wealthier households benefited more in relative terms compared with poorer households” but “a balanced assessment of the overall distributional effects of monetary policy must also include its macroeconomic (growth) effects.” ECB (2016) derives the following policy conclusion: “tackling any unwarranted redistributive effects is not in the realm of monetary policy in view of its primary objective of price stability. Governments can shape the income and wealth distribution via their policies, notably via targeted fiscal measures. More decisive growth-friendly structural and fiscal policies are crucial to complement the ECB’s accommodative monetary policy stance so as to accelerate the return of the euro area economy to potential GDP, and to elevate the growth path of potential output.”

**4.2.** With respect to the effects of QE on gender inequality in the Eurozone, Young (2019) and Metzger and Young (2020) argue that QE may unintentionally benefit the wealthier strata of society, which is on average more male, at the expense of the poorer strata, which is on average more female.

**4.3.** Research at the BIS by Domanski et al. (2016) on six advanced economies (UK, US France, Germany, Italy, Spain,) find that QE has led to higher net wealth inequality.

**4.4.** For the case of Japan, Saiki and Frost (2019) find that QE has increased income inequality due to the absence of wage growth, while Inui et al. (2017) argue that the effects were distributionally neutral albeit time-varying.

## **5. Implications for the UK’s macroeconomic policy framework and the BoE’s mandate**

**5.1.** QE has been policy without theory. Previous common wisdom in mainstream macro policy has considered i) the interest rate as the main policy tool, ii) monetary policy as the main policy for macroeconomic stabilisation. On both accounts the experience of the past decade shows that this macroeconomic policy stance has not been effective. Future QE programmes will be less effective even on interest rate because long-term bond rates are at historic lows. Negative interest rates are being considered, but they are unlikely to be effective as they are unlikely to lead to more credit by banks, and as private investment is more sensitive to demand.

**5.2.** The strict separation between monetary and fiscal policy is becoming more difficult to justify. Effective QE requires coordination with expansionary fiscal policy targeting long-term public investment in social and physical infrastructure, building on a needs-based approach to fiscal policy considering long term needs to tackle inequalities, social, economic, and ecological sustainability. An example of social infrastructure is hiring more social care workers, nurses, doctors, teachers, nursery teachers and

paying them higher wages. Considering their long-term effects on productivity, such spending could be considered as public investment in social infrastructure rather than current expenditure. On a related matter, from a long-term perspective, it would be beneficial if fiscal sustainability did not narrowly focus on public borrowing or public gross debt, but at least on net wealth.

- 5.3.** BoE working with a UK national development bank for channelling funding for long term private and public investment is another policy tool to increase the effectiveness of QE.
- 5.4.** The coordination of QE with fiscal policy and a national development bank may be more effective than a one-off crediting of all households with a sum of money (the so-called helicopter money) as the government can better target long term social, economic and ecological needs. While helicopter money is seen to have an advantage due to its low administrative costs; it is likely to have low multiplier effects during the pandemic, cannot target spending and involves a transfer of income to top income groups as well.
- 5.5.** The lessons of the past decade show that the BoE's mandate should include a dual target of full/high employment (hours of work) and an inflation target higher than 2% moving within a band, with a higher weight for employment.
- 5.6.** The 2% inflation target leads to an interest rate rather close to the Zero Lower Bound and leaves little area of manoeuvre in recessions. A higher inflation target would also help as the UK is overleveraged, needs to reduce debt/income and an inflationary adjustment is more beneficial than a deflationary adjustment.
- 5.7.** Finally, for effective macroeconomic policy coordination the mandate should align with other government goals such as equality or green transition (e.g. see Dafermos, et al, 2020).

*22 February 2021*

## References

- Bailey A., Bridges J., Harrison R., Jones J., Mankodi A., 2020.  
The central bank balance sheet as a policy tool: past, present and future, Paper prepared for the Jackson Hole Economic Policy Symposium, 27–28 August 2020, Bank of England.
- Bivens, J. 2015.  
Gauging the impact of the Fed on inequality during the Great Recession. Working Paper 12, Hutchins Center Working Paper, June 2015.
- Blanchard, O. J. and Leigh, D. 2013.  
Growth forecast errors and fiscal multipliers, *American Economic Review*, vol. 103, no. 3, 117-120
- Bunn, P., Pugh, A., and Yeates, C., 2018.  
The distributional impact of monetary policy easing in the UK between 2008 and 2014, Staff Working Paper No. 720, Bank of England.
- Dafermos, Y., Gabor, D., Nikolaidi, M., Van Lerven, F. 2020.  
Decarbonising The Bank Of England's Pandemic QE, New Economics Foundation [Report](#)
- Dafermos, Y. and Papatheodorou, C. 2018.  
How does monetary policy affect income and wealth inequality? An agent-based stock-flow consistent analysis, Paper presented at the Annual conference of Forum for Macroeconomics, Berlin.
- Domanski D., Scatigna, M., Zabai, A. 2016. Wealth inequality and monetary policy, *BIS Quarterly Review*, March 2016, 45-64.
- ECB 2016. [Annual Report](#), Frankfurt.
- Evgenidis, A. and Fasiano A. 2021. Unconventional Monetary Policy and Wealth Inequalities in Great Britain, *Oxford Bulletin of Economics and Statistics*, 83, 1, 115-175
- [Guschanski A. and Onaran, Ö. 2021](#)  
The decline in the wage share: falling bargaining power of labour or technological progress? Industry level evidence from the OECD, *Socio-Economic Review*, forthcoming,
- Inui, M., Sudou, N. and Yamada, T. 2017.  
The effects of monetary policy shocks on inequality in Japan, *BIS Working Paper*
- Metzger M. and Young, B. 2020.  
No gender please, we're central bankers: distributional impacts of quantitative easing, *IPE Working Papers* 136, Berlin School of Economics
- Montecino, J.A. and Epstein, G. 2018.  
Did Quantitative Easing Increase Income Inequality? *PERI Working Papers*, 407, University of Massachusetts, Amherst.

Mumtaz, H. and Theophilopoulou, A. 2017.  
The impact of monetary policy on inequality in the UK: an empirical analysis, *European Economic Review*, 98, 410–423.

[Obst, T., Onaran, Ö., Nikolaidi, M. 2020](#)

"The effects of income distribution and fiscal policy on aggregate demand, investment and the budget balance: the case of Europe", *Cambridge Journal of Economics*, 44(6): 1221–1243,

[Onaran, Ö., Oyvat, C., Fotopoulou, E. 2021](#)

A macroeconomic analysis of the effects of gender inequality, wages, and public social infrastructure: the case of the UK, [Feminist Economics, forthcoming](#)

[Onaran, Ö., Oyvat, C., Fotopoulou, E. 2019](#)

"The effects of gender inequality, wages, wealth concentration and fiscal policy on macroeconomic performance", ESRC Rebuilding Macroeconomics project report, Greenwich Papers in Political Economy, University of Greenwich, [#GPERC71](#)

Saiki, A. and Frost, J. 2019

Unconventional monetary policy and inequality: is Japan unique? *Journal of Applied Economics*, 52, 44, 4809-4821

Stockhammer, Engelbert, Qazizada, Walid, Gechert, Sebastian. (2019) 'Demand effects of fiscal policy since 2008', *Review of Keynesian Economics* 7, 1: 57-74

[Tippet, B., Onaran, Ö., Wildauer, R., 2021](#)

The Determinants of Wealth Inequality in the UK, USA and France, Greenwich Papers in Political Economy, University of Greenwich, [#GPERC80](#)

[Tori, D. and Onaran, Ö. 2020](#)

Financialisation, financial development, and investment: evidence from European non-financial corporations, *Socio-Economic Review*, 18(3): 681–718

[Tori, D. and Onaran, Ö. 2018](#)

The effects of financialization on investment: evidence from firm-level data for the UK, *Cambridge Journal of Economics*, 42(5): 1393–1416

WBG 2020.

Tax on savings and investments: gender issues, A pre-budget briefing from the Women's Budget Group

Young, B. 2019

The impact of unconventional monetary policy on gendered wealth inequality, *Papeles de Europa* 31(2), 175-185