

# Should the Bank of England Pursue Another Round of Quantitative Easing?

Second Prize – 2<sup>nd</sup> Year Undergraduate Category

By Amay V Narayan<sup>\*</sup>

*“One thing we can see clearly is that the recovery and rebalancing of the UK economy are proceeding at a slow and uncertain pace. At this stage, it is difficult to know whether some of the recent more positive signs will persist. The Monetary Policy Committee will think long and hard before it decides whether or not to make further asset purchases. But should those signs fade, the MPC does stand ready to inject more money into the economy.”*

– Sir Mervyn King (October 2012)

## **Abstract**

Since early 2009, the Bank of England (BoE) has engaged in an extensive programme of ‘Quantitative Easing’ in an effort to decrease long-term borrowing costs, thereby stimulating private lending, and boosting demand in the economy. Domestic credit for firms and financial institutions had become increasingly scarce as the full impact of the financial crisis set in, followed by the on-going crisis in the Eurozone. This essay sifts through evidence in the available literature, as well as observable evidence in the economy, to gauge whether further monetary expansion through Quantitative Easing (QE) will help in alleviating the UK’s economic problems. In general we see that the results of conducting such ‘unconventional’ monetary policy, as in the recent past, have been disappointing in many respects.

## **Introduction**

The debate of whether or not further quantitative easing would be an effective policy measure in England is clearly rooted in how efficacious the same policy has been in the recent past. It is also important beforehand to have a clear understanding of the nature and objectives of QE, for this enables us to analyse how effective it could be today.

---

\*BSc. Economics

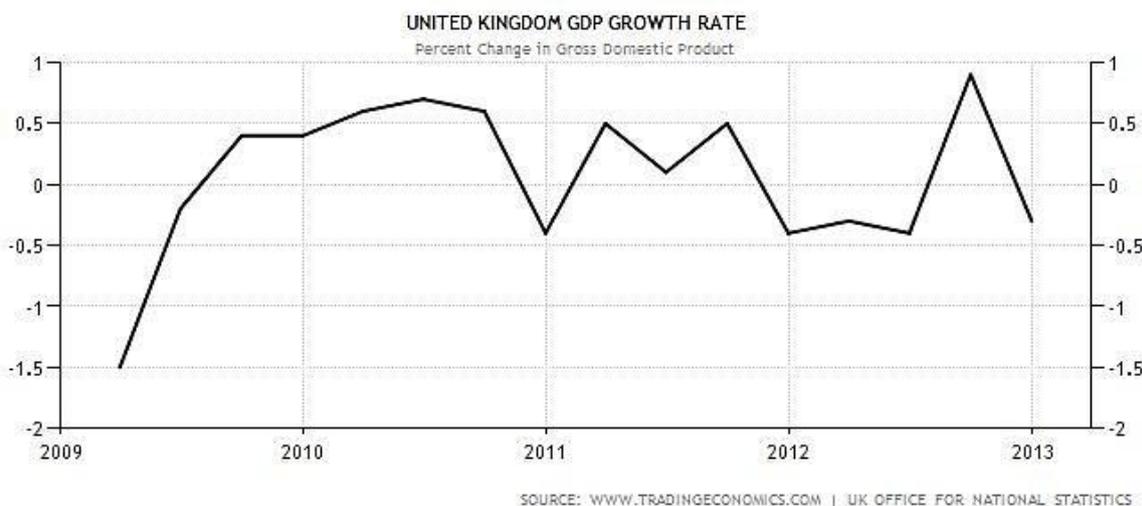
Very briefly, QE differs from the more conventional 'Open Market Operations' (OMOs) pursued by central banks in the following fundamental ways:

- It is not conducted regularly, and is a tool of last resort, used only when nominal interest rates are at, or near, the *zero lower bound*.
- Whereas open market operations deal with only short-term government debt, QE involves the purchase of both longer maturity treasury gilts as well as, in some countries, private securities.
- The objective of QE is to influence long-term interest rates and spur private lending, as opposed to short-term interest rates as is the case with OMOs.
- QE also has a far more substantial, longer-term impact on the balance sheets of central banks.

### **Analysis of QE in the UK**

Between March 2009, post creation of its 'Asset Purchase Facility Fund', and 31<sup>st</sup> December 2012, the Bank of England added a net £375 Billion through QE to its portfolio of purchased assets (2012a: 2). GDP for the UK over the same period looks like this:

**Figure 1**



Source: <http://www.tradingeconomics.com/united-kingdom/gdp-growth>

Unfortunately, discerning the success of QE simply through looking at macroeconomic data is a rather problematic affair as we simply cannot hypothesise what the situation would have been had the central bank refrained from purchasing any assets at all. Also, the results of QE cannot

effectively be separated from the impact of other economic influences stemming from the vicissitude of the global economy, especially the euro-zone.

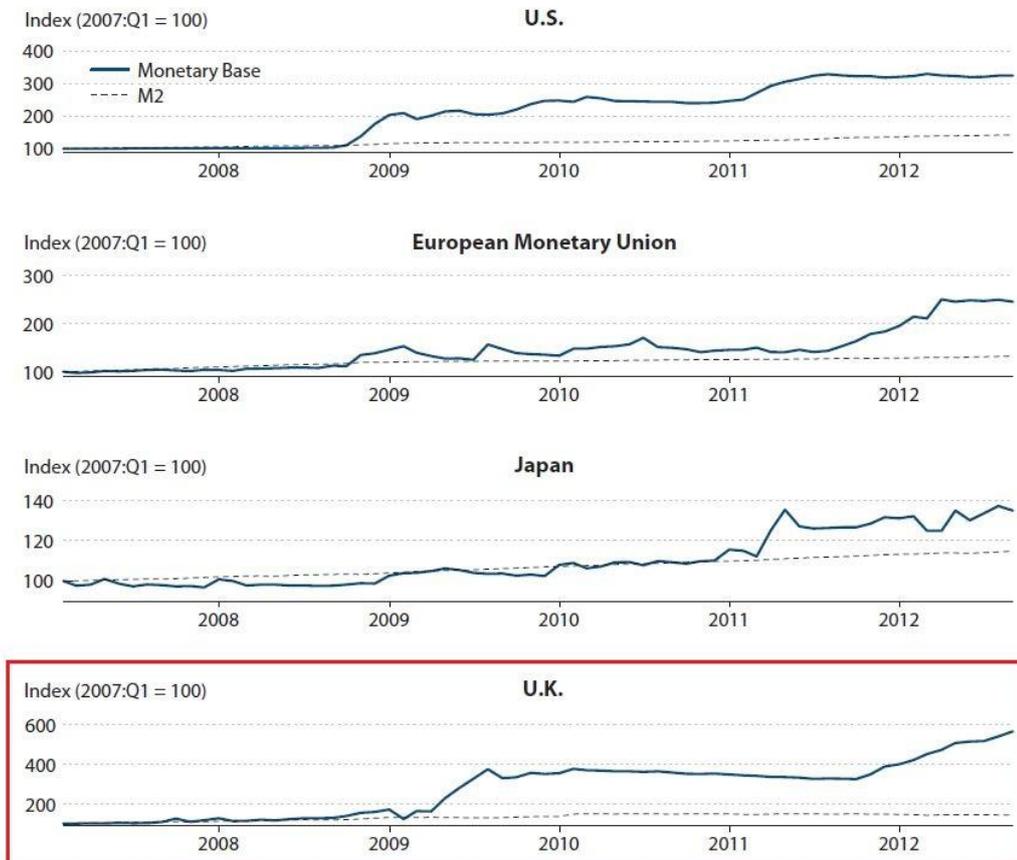
A lot of literature concerning the effectiveness of QE looks at its impact on bond yields. In their paper for the Bank of England, Joyce et al. deduce that “medium to long-term gilt yields were about 100 basis points lower than they would otherwise have been as a result of QE” (2011: 155). Christensen and Rudebusch (2010) as well as Krishnamurthy and Jorgensen (2011) found similar correlations between QE and interest rates, both in the USA and the UK. However, an alternate explanation could be that these declines in bond yields arose at least partly due to a ‘flight to relative safety’ as agents became increasingly pessimistic about the global economic slowdown and the crisis in the Eurozone.

Economists have also explored what *other* effects QE may have had apart from lowering gilt yields; evidence suggests that while bond yields seem to have responded to QE, other ‘broader’ macroeconomic variables have not responded in kind. A quick glance at Figure 1 above shows that no perceptible positive trend in GDP has emerged since the middle of 2009. In fact, according to the Office for National Statistics, “GDP was estimated to have decreased by 0.3% in Q4 2012 compared with Q3 2012...and been flat when compared with Q4 2011” (2013: 1). Therefore, one could perhaps claim that QE has not translated into a revival of aggregate demand in the economy as a whole. Conversely, some economists suggest that the drop in output and demand would have been even more precipitous had the central bank not intervened at the time and in the manner that it did (BoE, 2012b: 1).

Furthermore, there is evidence to suggest that much of the increase in money supply has been retained by banks in the form of reserves, rather than being lent out to corporations and easing credit constraints. Fawley and Neely investigated the QE policies in four regions: The USA, UK, Japan and the EU. They conclude that “while all measures led to sharp increases in the monetary base, none led to sharp increases in broader monetary aggregates. The broader aggregates did not increase because banks voluntarily held the increased monetary base as bank reserves—safe, liquid assets in high demand during periods of economic uncertainty.” (2013: 81). This has been illustrated in Figure 2 below where one can clearly see that the large increases in the monetary base have not been matched by corresponding increases in M2:

**Figure 2**

**Monetary Base and M2 Expansion**

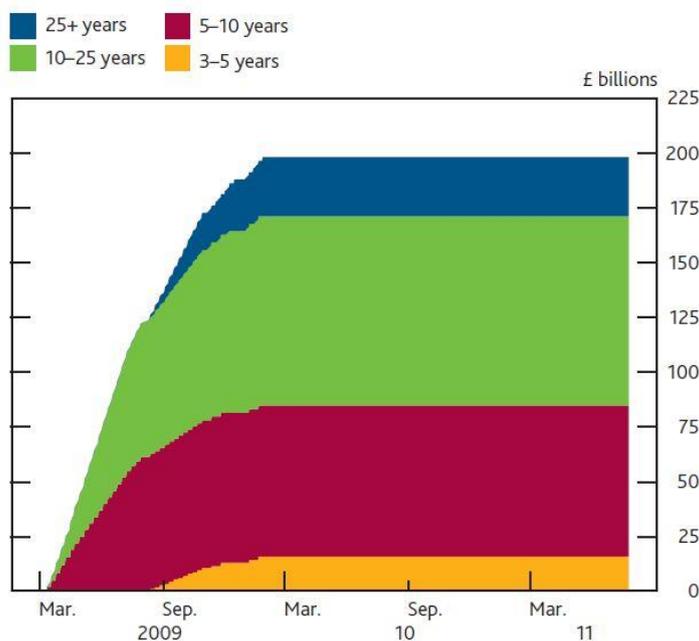


Source: (Fawley & Neely, 2013)

There have also been concerns regarding the ‘distributional effects’ of asset purchases. Certain classes of individuals have been adversely affected by quantitative easing e.g. savers and pensioners. Some households have seen their incomes decline as interest payments on their deposits fell sharply. To see who exactly benefitted or suffered due to QE and how, we must look at the composition of the central bank’s asset purchases. This can be seen in the following diagram:

Figure 3

Chart 4 Cumulative gilt purchases by maturity

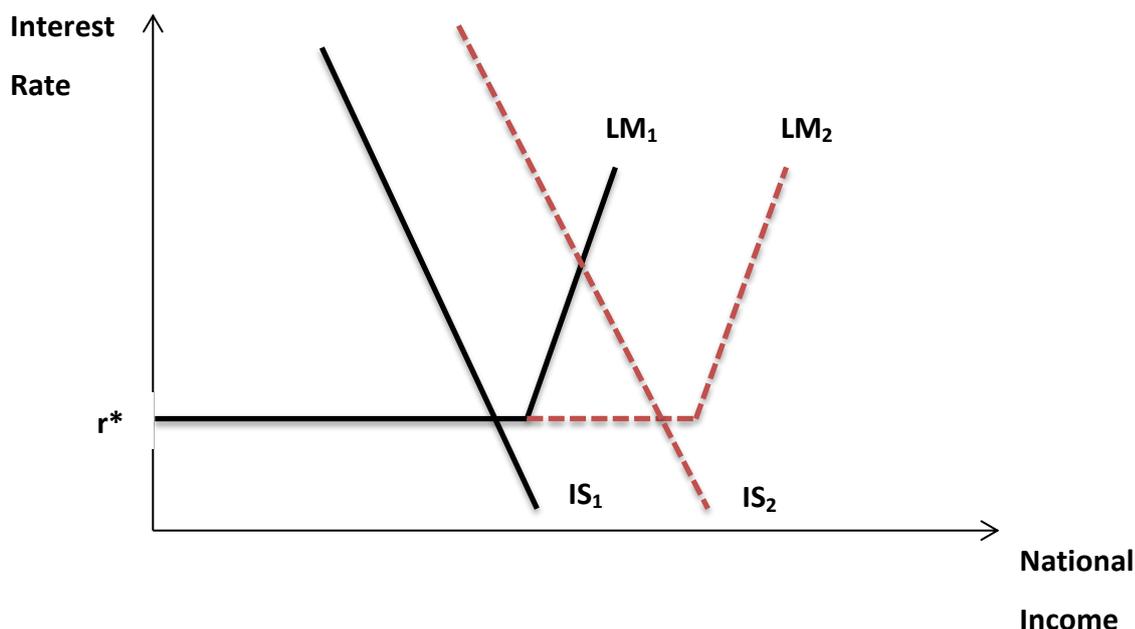


Source: Joyce, M. et al. (2011)

As can be seen above, most of the assets purchased were medium- to long-term gilts. This in turn increased the prices of gilts and hence reduced yields and the annuity rate. This had a severely negative impact on the income of pension funds and pensioners. In contrast, households who possessed financial assets saw a significant increase in their wealth. Perhaps the hope was that the positive impact of higher asset prices would outweigh the losses in other forms of income. In fact, the Bank of England has clearly stated that “Without the loosening in monetary policy, it is likely that the economic downturn would have been far more severe, to the detriment of almost everyone in the economy, including savers and pensioners”. However, the Bank goes on to say that although on average the value of shares and bonds increased by roughly 26% due to QE, “...holdings are heavily skewed with the top 5% of households holding 40% of these assets” (2012b: 21). It is therefore unclear whether further instrumentation of the same policies is justified from a broader ethical standpoint.

Economists who are of a more Keynesian inclination also argue that monetary policy is relatively ineffective when the economy is caught in a ‘liquidity trap’. IS-LM analysis can be employed to understand this perspective better. At the zero lower bound, the LM curve is relatively flat when compared to normal times. This is depicted in Figure 4:

Figure 4



In this scenario, the adverse shock in aggregate demand (AD) causes the IS curve to shift from  $IS_2$  to  $IS_1$ . At this point, the central bank keeps lowering the interest rate trying to stimulate AD, but to no avail. Ultimately, the effective *zero lower bound* is reached (at interest rate  $r^*$ ), below which nominal interest rates cannot be set. The economy is now stuck in a liquidity trap. At this point, the LM curve is relatively much flatter, as shown above. QE effectively shifts the LM curve outwards ( $LM_1$  to  $LM_2$ ), which in this case doesn't impact output. In reality of course the effect isn't so distinct, as presumably increasing asset prices cause some households to spend more, causing the IS curve to shift outwards slightly. However, this type of analysis highlights the relatively high efficacy of fiscal policy in contrast to monetary policy in a liquidity trap. The flat LM curve allows governments to utilise the fiscal multiplier to its fullest extent by shifting the IS curve back to  $IS_2$ . Clearly from this perspective, further QE is not the remedy for the ailment that is currently debilitating the UK economy.

Another possible obstacle explaining why Quantitative Easing and monetary policy in general might not have an effect on the economy of the magnitude anticipated, is pessimistic expectations. The rationale behind this is that even if interest rates are at the zero lower bound, "the monetary authority can influence current conditions by announcing its intention to maintain low interest rates in the future" (Devereux, M. 2010: 373). While this approach seems sound in theory, it has had little success in practice. Expectations seem to be particularly negative, and consequently, investment and demand have not recovered. In general, expectations can be inferred by looking at long-run gilt yields. This is because long-run gilt yields are generally seen to

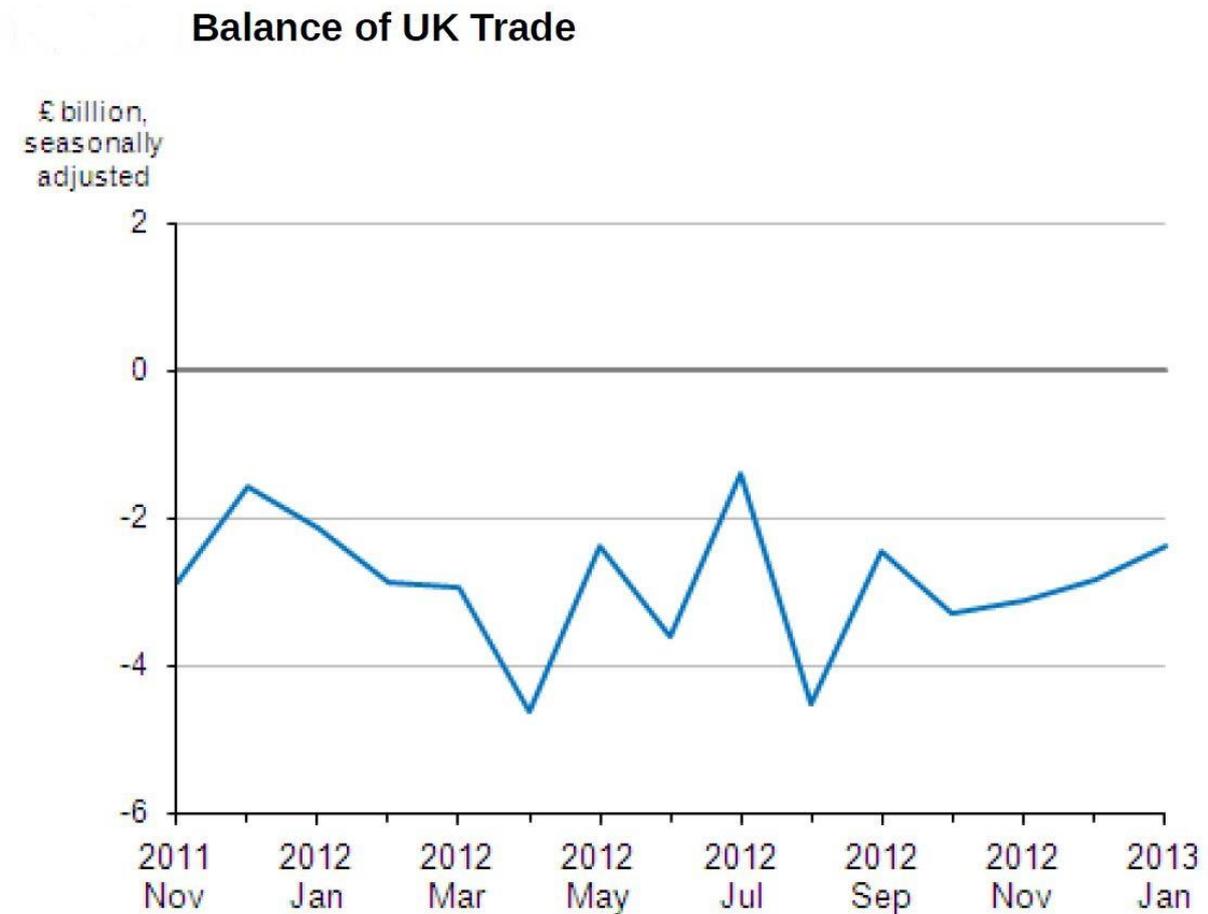
be the average of short-run gilt yields, and since short-run yields tend to reflect expected inflation, we can use the long-run yields to gauge what the general perceptions of long-run economic performance are. In the current situation, agents expect low inflation due to a weak economy even in the medium- to long-term, and so gilt yields have been depressed. This is an explanation contrary to what the BoE often advocates; that low gilt yields are primarily due to the sense of ‘credibility’ about the government’s finances. Jonathan Portes, the director of the National Institute of Economic and Social Research, sums up: “We know, both as a matter of theory and evidence, why long-term interest rates are low. It reflects the persistent weakness of the UK and international economies. There is no mystery here” (Liberal Democrat Voice, 2010).

The positive effect of QE on the trade balance through a fall in the exchange rate has not transpired either, in the manner that was expected. A quick glance at the following graphs illustrates this point:

**Figure 5**



Figure 6



Source: ONS Statistical Bulletin, UK Trade, January 2013

Quantitative Easing was expected to cause the pound to depreciate since there was simply a higher supply of the currency. By extension, one would then expect that the depreciated currency would spur exports and growth and hence improve the trade balance. While the pound has indeed depreciated significantly (Figure 5), the growth in exports and improvement of the trade balance has not ensued as expected. One explanation for this would be that this is truly a *global* economic downturn, with vast portions of the western world experiencing sluggish growth. Since most countries are suffering from depressed levels of demand in the economy, the demand for UK exports has not increased in the way that it would have in 'normal times'.

## Conclusion

In general, there is convincing evidence that Quantitative Easing as a policy measure, when short-term interest rates are at the zero lower bound, is relatively impotent. However evaluating its efficacy, or lack thereof as a policy in the UK, is complex since there is “no generally accepted theoretical framework in which to assess QE” (Breedon et al. 2012: 278). Nonetheless, some basic inferences can be safely made; the general drag on the economy due to pessimistic expectations, coupled with QE’s distorted effects on various classes of the population, suggest that further monetary expansion is *not* the way forward. Data on broader macroeconomic variables, as well as patterns in narrow and broad money supply, leads one to draw similar conclusions. While long-term borrowing costs have been reduced to record low levels, it is impossible to discern whether this is due to Quantitative Easing in particular, or a response by investors to more general phenomena in the global economy. In addition, gains from trade due to exchange rate depreciation have not materialised in the manner that one would have wished.

‘Conventional’ IS-LM analysis, which has undergone a resurrection during the great recession, points towards fiscal policy as a much more effective solution in these unusual circumstances. Well-known advocates for this approach include Simon Wren-Lewis, who in his paper declares that “an expansionary fiscal policy is required because monetary policy-makers are reluctant to promise higher future inflation, and the impact of quantitative easing is likely to be small” (2010: 71). Taking into account the difficulties of the current economic situation, this does seem to be the most advisable policy route going forward.

Still, caution must be exercised when occupying a position at either end of this spectrum. It remains unclear exactly to what degree governments can pursue fiscal expansion without causing concerns regarding their solvency and damaging long-term growth prospects. Policy-makers need to prioritise reviving aggregate demand and alleviating unemployment *today*, while simultaneously preserving the prosperity of the economy in the future. Given the global nature of this crisis and the fact that in the UK it has now lasted longer than the Great Depression, policy-making *must* go well beyond conventional thinking and its associated boundaries. While QE was a step in the right direction, especially at a time when some countries were wedded to calamitous policies of fiscal austerity, it is evidently **not** enough to rejuvenate the UK economy. A new policy direction is warranted.

To use the title of Rogoff and Reinhart’s popular book: *This time is different*.

---

**Reference list**

---

- Bank of England, (2012a). *Asset Purchase Facility*, Quarterly Report 2012 Q4.
- Bank of England, (2012b). *The Distributional Effects of Asset Purchases*, July, 1–22.
- Breedon, F., Chadha, J. S. & Waters, A. (2012). The Financial Market Impact of UK Quantitative Easing. *Studies in Economics 1211*, Department of Economics, University of Kent. Retrieved from: <ftp://ftp.ukc.ac.uk/pub/ejr/RePEc/ukc/ukcedp/1211.pdf>
- Devereux, M. B. (2010). Fiscal deficits, Debt, and Monetary Policy in a Liquidity Trap. *Globalization and Monetary Policy Institute Working Paper 44*, Federal Reserve Bank of Dallas. Retrieved from: <http://www.dallasfed.org/assets/documents/institute/wpapers/2010/0044.pdf>
- Fawley, B. W., & Neely, C. J. (2013). Four Stories of Quantitative Easing, *Federal Reserve Bank of St. Louis Review*, (February), Vol. 95, 1, pp. 51-88. Retrieved from: <http://research.stlouisfed.org/publications/review/13/01/Fawley.pdf>
- Joyce, B. M., Tong, M. & Woods, R. (2011). The United Kingdom's Quantitative Easing Policy: Design, Operation and Impact. *Bank of England Quarterly Bulletin*, 51(3), pp. 200-212.
- Joyce, M., Lasoosa, A., Stevens, I., & Tong, M. (2010). The Financial Market Impact of Quantitative Easing. *Bank of England Quarterly Bulletin*, 15(393), 408–414.
- Krishnamurthy, A., & Vissing-Jorgensen, A. (2011). The Effects of Quantitative Easing on Interest Rates. *Brookings Papers on Economic Activity*, Fall, 1–37. Retrieved from: [https://fisher.osu.edu/blogs/efa2011/files/APE\\_3\\_1.pdf](https://fisher.osu.edu/blogs/efa2011/files/APE_3_1.pdf)
- Office for National Statistics: Statistical Bulletin (2012), *Gross Domestic Product Preliminary Estimate*, Q4 2012, (January), 1–18.
- Office for National Statistics: Statistical Bulletin (2013), *Trade, U. K.* (January).
- Portes, J. (2012) 'The Independent View: Low borrowing rates signal economic weakness, not strength', *The Liberal Democrat Voice*. Available at: <http://www.libdemvoice.org/the-independent-view-low-borrowing-rates-signal-economic-weakness-not-strength-30297.html>
- Reinhart, C. M., & Rogoff, K. S. (2009). *This Time is Different: Eight Centuries of Financial Folly*. Princeton: Princeton University Press.

Rudebusch, G. D. (2010). Macro-Finance Models of Interest Rates and the Economy. *Federal Reserve Bank of San Francisco Working Paper 10-01*, 78 (January), 25–52. Retrieved from <http://www.frbsf.org/publications/economics/papers/2010/wp10-01bk.pdf>

Wren-Lewis, S. (2010). Macroeconomic Policy in Light of the Credit Crunch: The Return of Counter-Cyclical Fiscal Policy? *Oxford Review of Economic Policy*, 26(1), pp. 71–86. Retrieved from: <http://oxrep.oxfordjournals.org/content/26/1/71.full.pdf>