

‘In light of conventional monetary and fiscal policy currently reaching their supposed limits, assess alternative ways to resuscitate the economy.’

-----Stephen Yu

I. Introduction: Fiscal fatigue and conventional monetary policy running low on steam?

Early in January this year, Mark Carney, the former governor of BoE had warned against the possibility of a ‘liquidity trap’, saying it would wobble central banks’ approach to fight future recession with bank rates staying stubbornly low in the aftermath of the financial crisis (see **Figure 1**). Apart from the physical limit of zero lower bound (ZLB), reports have also pointed to the ineffectiveness of bank rate cutting at a point close to ZLB.¹ This is reflected in the unresponsiveness of retail interest rate despite a sustained near-zero level of bank rate (shown in **Figure 2**), which restrains the effective transmission of bank rate to household sectors.

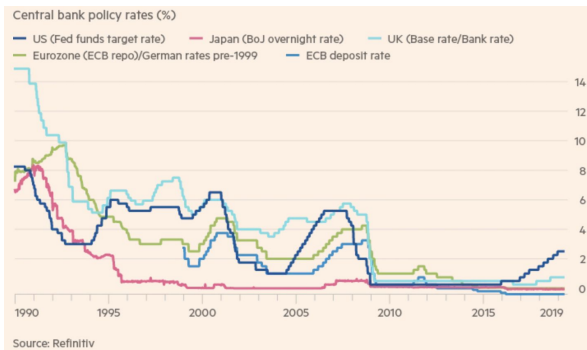


Figure 1: low benchmark rate around the globe
(Financial Times)

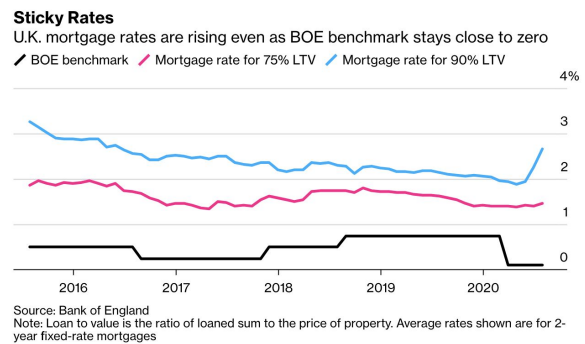


Figure 2: Unresponsive transmission
(Bloomberg)

In the meantime, fiscal stimulation has been wearing out rapidly with UK public sector net debt reaching 100.9% of its GDP at the end of May (which excludes its further spending on ‘Eat out to help out’ scheme, the kickstarter scheme, etc.), raising concerns about debt sustainability and fears of tax bombshell. More recently, the concern is shown through UK chancellor Rishi Sunak’s proposal for retrenchment and tax rise, already plotting a return to sustainable public finance despite a stream of new daily infections and a still near-zero interest rate.

Now, Mr Carney’s statement has held true from BoE’s hasty efforts to find its way around the conventional monetary measures. This essay will endeavour to assess the effectiveness and limitation of alternative ways to revive a depressed UK economy, which include unconventional extensions of monetary approach and a crossover of monetary and fiscal policy --- Helicopter Money.

¹ Commercial banks derive profit from the net interest margin (NBI) between the deposit rate and lending rate. The margin can be preserved when the bank rate is high by adjusting deposit and lending rate in tandem with bank rate. However, when bank rate is close to zero, it’s difficult for banks to further lower the deposit rate below effective rate of zero in the fear of depositors yanking their reserves out. Although commercial banks may be able to lower borrowing cost to make more profit due to relative elasticity of credit, a near-zero bank rate causes a sluggish pass-through to retail interest rate as banks face greater threat of unprofitability.

II. Monetary extension

i) Dual interest rate

Among all new monetary approaches adopted to lift the economy out of the liquidity trap, the dual interest rate and quantitative easing (QE) have proved to be fairly effective in compensating for weaknesses of conventional measures. The former eliminates commercial banks' constraints of net interest margin by allowing commercial banks to set lending rates independently of deposit rates through central bank's direct provision of cheap loans against collateral. Nevertheless, the lending is subject to eligibility criteria (extending how much worth of loans to private non-financial sector or even repricing of the existing loan books) and can be tailored to inject optimal amount of liquidity into economy with control of borrowing rates and maturity date² (Loneragan and Greene, 2020). The UK's implementation of a dual-rate system can be seen from the Terms Funding Scheme (TFS) and earlier Funding for Lending Scheme (FLS), which significantly reduces bank's both retail and wholesale longer-term funding cost (see **Appendix 1**). This lowering requirements of other sources of funding consequently drives down the cost of issuing term debt in the wholesale market as they are disincentivised to offer debt at a higher coupon rate to attract enough investors (which is an extra cost to themselves). Lower yield will then cause a 'portfolio balancing' effect when financial institutions seek for higher-yield corporate bonds to invest in, thereby bringing the reduction in funding cost to business and even households (Joyce, Tong and Woods, 2011).

In Europe, however, where commercial banks have access to loans at steeply negative rates from ECB, there has been rising concern about the negative effects of a possible bank loss on equity holders, however, it is pointed out that the asset purchased ECB is likely to offset its liability of interest payment (Crow, 2020). The worst scenario would be that the net loss over interest rate gained from assets gets passed to the government, which will eventually be reflected in taxpayers' bills.

But overall, the dual-rate system has successfully protected commercial banks' profitability during periods of near-zero benchmark rate and reinforced the pass-through of low bank rate to mortgage rate (shown in **Figure 3**) during 2016-18, with even some falling below bank rate possibly due to the inter-bank rate competition.

² Its flexibility is reflected from European Central Bank's successive schemes at different scales targeting different sectors of economy: long-term repo operations (LTROS) during Euro area's sovereign debt's crisis in 2011; VLTROS -- 'very long term'; TLTROS --- 'targeted' from 2014-2019; and PELTROS --- 'Pandemic Emergency'

Chart 3 Changes in quoted mortgage rates from launch of the August 2016 policy package

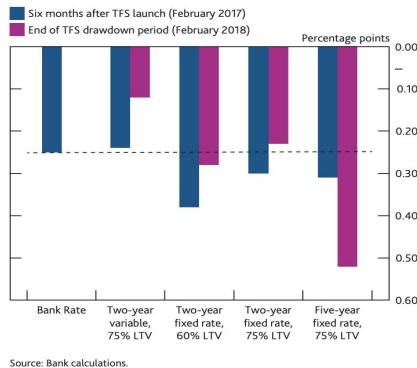


Figure 3: General reduction in the mortgage rate under TFS

ii) Quantitative easing

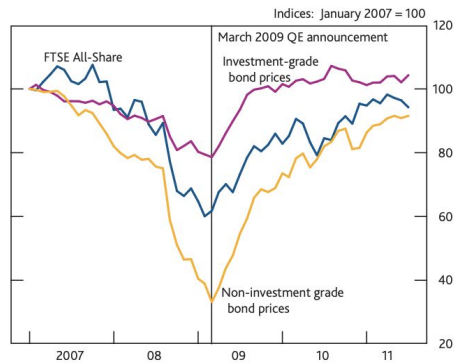
The latter in the toolkit --- quantitative easing (QE), has produced mixed results during years that saw its wide implementation. Generally, QE has two primary transmission channels (Benford, Berry and Young, 2009) that theoretically increase money supply and therefore nominal spending: 1) Portfolios-balancing and asset prices effect, whereby central bank's injection of cash in return for asset purchase leads to higher asset value (consequently a lower yield), which creates wealth effect and incentivises borrowing in private sector³; 2) Bank lending and quantity effect, in which bank's increased supply of broad money⁴ should lead to a lower cost of borrowing faced by households and businesses.

Here, QE will be assessed on micro and macro levels, distinguishing its different efficacy in uniformly benefiting the population and achieving macroeconomic inflation targets (Sinclair and Ellis, 2012). On macro level, QE has turned out to be quite effective despite a time lag in transmission: major asset price indices experienced a swift rebound, marking a boom for shareholders and bondholders (see **Figure 4**); breakeven inflation rate also recovered fast, suggesting more investors are confident about government's QE measure and some switched from normal gilts to inflation-linked gilts, which pushed down its yield and therefore increased the breakeven rate (see **Figure 5**).

³ A more detailed explanation would be that both the lower yields on gilts and a need for other investment (as broad money is not perfectly substitutable to financial asset) would push institutions to purchase higher yield corporate bond or invest in equity market, which will eventually push up the asset value and will be beneficial to bond holders and shareholders

⁴ M4. This includes the UK non-bank private sector's holdings of notes and coin, sterling deposits and other sterling short-term instruments issued by banks and building societies, but excludes reserve balances held by banks at the Bank of England.

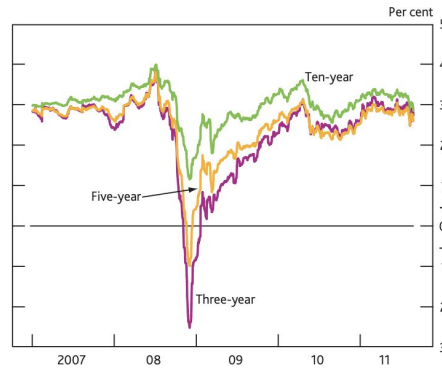
Chart 8 Changes in major UK asset prices



Sources: Bloomberg, Merrill Lynch and Bank calculations.

Figure 4: Promising rise in asset price (BOE quarterly bulletin)

Chart 9 Inflation breakeven rates from gilts^(a)

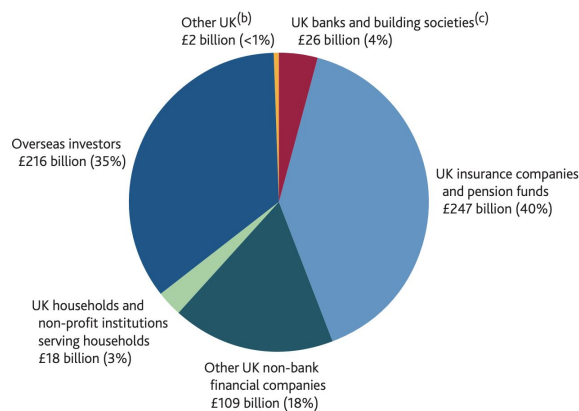


Sources: Bloomberg and Bank calculations.

Figure 5: Rising inflation breakeven rate (BOE quarterly bulletin)

However, it remains highly questionable that the benefit is evenly passed on to all players in the economy. With 40% of total gilts owned by pension funds and insurance companies and 35% by foreign investors (see **Figure 6**), injected money will either be very quickly re-invested in stock and bonds as pension and insurance funds need to quickly readjust their portfolio⁵ (which is not included in changes of GDP) or undergo capital flight (Werner, Bernado and Ryan-Collins, 2013). While the borrowing cost may be beneficial for some, the transmission in stock market is more doubtful: it was reported that in 2013 40% of the stock market is owned by the wealthiest 5% of households, whilst most households benefited little

Chart 2 Distribution of total gilt holdings as at the end of 2008^(a)



(a) Data are not seasonally adjusted.
 (b) Non-financial corporations and local government.
 (c) Includes Bank of England holdings.

Figure 6: Distribution of total gilts (BOE quarterly bulletin)

⁵ While some pension funds and insurance companies even find portfolio rebalancing not so pleasant as they struggle to find good enough substitute for gilts with different maturities and are forced into exposure with securities with higher risk.

from the stock market boom, the round of QE in 2013 was estimated to have made each of the richest 5% households 128,000 pounds better off (Dyson, 2012). BOE estimated the QE contributed to 1.5%-2% of GDP growth, in other words, 23-28 bn of extra spending in the economy after 375 bn spending on QE. Some have likened the ineffectiveness to that of 'trickle-down' theory, suggesting the scheme widens the wealth gap and even if inflation reaches promising level it would be led by the wealthy bidding up the price (Muellbauer, 2014).

III. Helicopter Money

First raised by Milton Friedman in 1969, 'Helicopter Money' had received little attention until Mr Bernanke in 2003 expressed his similar views on Japan's 'lost decade' of lasting deflation before it again receded from the public attention. Currently, this once imaginable tool is facing ever serious examination as other tools' efficacy diminishes. To put briefly, Helicopter Money involves direct monetization of government debt by the central bank creating fiat money.

This has two major implications: 1) The increase of monetary base in the economy will be unrepayable, in other words, the money injection into the economy will be irreversible and permanent and will not incur a deficit on the government's balance sheet, which also means the public does not need to be expecting in tax hike in the future (Reichlin, Turner and Woodford, 2019). 2) Its efficacy might greatly vary given that declines in aggregate demand have different underlying causes. For instance, the offer of Helicopter Money during periods when households income does not fall in proportion to households spending is likely to be unpleasantly inflationary. The possible difference in Helicopter Money's effects leads to the importance of government's distributive effects. As a vivid analogy, Helicopter Money can be implemented through various means, from tax cuts, direct handout to writing off public debt etc., but its effectiveness eventually depends on the government's policy choice.

Lastly, it's worth stressing some of the differences between Helicopter Money and other monetary tools to compare the likely different impacts. Firstly, unlike any other measures, Helicopter Money can be viewed as a fusion of fiscal and monetary policy, it eliminates government's budget constraint under fiscal policy and in the meantime equips the efficiency and flexibility that monetary tools lack (time lag of transmission and a uniform demographic impact). Secondly, it differs from all other measures in directly impacting the total quantity of money in the economy. All monetary policies is more or less involved in influencing the 'price of money' by changing the quantity of money in circulation: conventional measure does this by changing the policy rate at the central bank; even a negative dual interest rate is not so much different, it is just going to be counted as government's liabilities in the case of central bank making a loss, which still maintains the overall quantity of money in the economy. Even QE, which increases the monetary base in the whole economy in a very similar manner, involves selling assets back to the economy to offset some of the previous injections during periods of upturn (Breedon, Chadha and Waters, 2012). As a result, Helicopter Money is a tool should be extremely cautiously wielded by the government. Especially when being deployed as last resort,

governments should be acutely aware of the irreversibility of HM, otherwise they may be confronted with runaway inflation and the need to issue new gilts or central bank re-issue gilts to the public, which poses an even higher cost for the government.

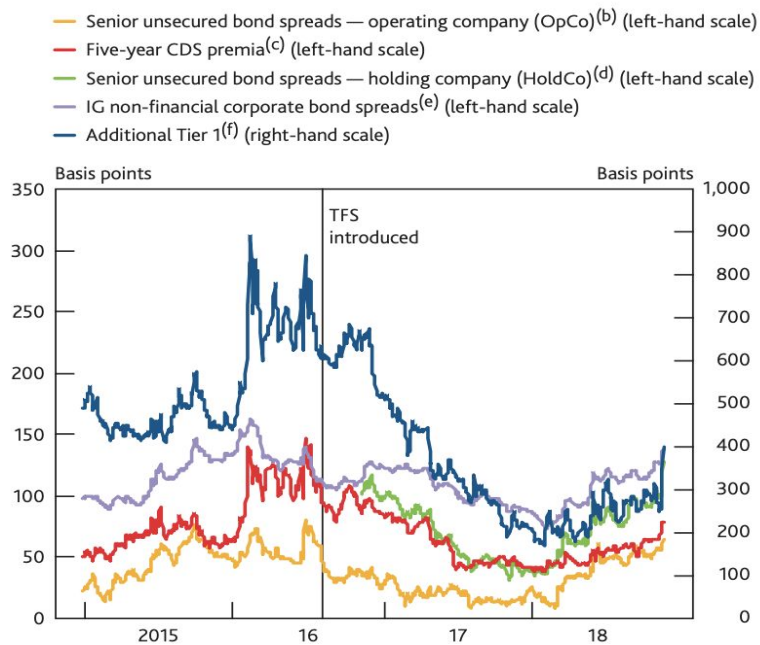
IV. Conclusion

Threatening as it may seem, recessionary pressures in a low-rate environment can well be overcome with monetary extensions and more ‘radical’ measures of Helicopter Money. However, despite providing seemingly endless ammunition to central bankers and politicians, all aforementioned unconventional tools revolve around substantial risks of mismanagement and unforeseeable bankfires as previously laid out: dual-rate may impose more deficits on the government’s balance sheet; QE may suffer from a time lag of effective transmission and an uneven demographic impact; Helicopter Money’s irreversibility if mismanaged poses an even costlier route to recover. None of the tools is risk-free, when deflationary pressure of coronavirus recedes, lifting economies that have long been mired in a low-rate environment will be an increasingly crucial problem to solve.

Word count: 1727

Appendix One:

Chart 5 UK banks' indicative long-term funding spreads^(a)



Sources: Bloomberg Finance L.P., IHS Markit and Bank calculations.

- (a) UK banks are Barclays, HSBC, Lloyds Banking Group and Royal Bank of Scotland.
- (b) Constant maturity unweighted average of secondary market spreads to mid-swaps for the major UK lenders' five-year euro-denominated senior unsecured bonds issued by the operating company or a suitable proxy when unavailable.
- (c) Unweighted average of five-year euro-denominated senior CDS premia for the major UK lenders.
- (d) Constant maturity unweighted average of secondary market spreads to mid-swaps for the major UK lenders' five-year euro-denominated senior unsecured bonds issued by the holding company or a suitable proxy when unavailable.
- (e) Option-adjusted spreads. Refers to non-financial euro-denominated investment-grade corporate bonds issued in Eurobond or euro member domestic markets.
- (f) Simple average of secondary market spreads over government bonds.

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