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BEST 1ST YEAR ESSAY

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Policy Options at Low Interest Rates

(1,998 words)

The Global Picture

Despite facing early challenges such as the ‘stagflation’ of the 1970s, by the end of the 20th century economists had reached a consensus on the core principles of monetary policy. Accordingly, when the financial fallout from the 2007 U.S. housing bust spread around the world due to bank overleveraging and complex securitization (Tomann and Stöppel, 2016), central banks responded to the ensuing ‘Great Recession’ by setting policy interest rates low, where they have largely stayed (figure 1).

8 years later, prospects are mediocre. Global growth forecasts have been revised down from 2015 estimates (figure 2) amidst a climate of uncertainty. Though some indicators are promising, such as recovering household wealth and improvements in unemployment rates, wage growth is stubbornly low and investment lies below pre-crisis levels in the Eurozone and Japan (RBA, 2016b). Headline inflation is projected to remain low in advanced economies throughout 2016, with forecasts of 0.4% for Europe, 0.8% for the U.S. and -0.2% for Japan (IMF, 2016). Declining oil prices play a part in this trend, but even core inflation figures which exclude energy and food price fluctuations are below the typical 2% target of central banks (figure 3).
What policies are possible to drive growth and achieve inflation targets when rates are already low? This essay will examine the transmission channels and limits of conventional monetary policy before exploring the range of available policy options following its exhaustion.

The Traditional Transmission Mechanism
Monetary policy affects the overall economy and price level through a number of channels, depicted in figure 4. As changes in policy rates flow onto other market rates, the intertemporal decisions of agents to save or invest are impacted through the interest rate channel. Lower rates reduce the incentive to save and raise investment spending by lowering borrowing costs, particularly affecting rate sensitive sectors such as dwelling construction (Kent, 2015). Low policy rates can also lead to currency depreciation as investors move to currencies with a higher yield. This exchange rate channel raises export demand and lowers the competitiveness of imports, increasing aggregate output. The price of equities is impacted through the asset price channel, as low rates flatten the yield curve of bonds and increase demand for stocks. The resultant rise in wealth leads to a higher level of household consumption (Mishkin, 1995). Finally, low rates increase the supply of credit through the credit channel as low rates raise the supply of loanable funds and lead to balance sheet improvements that reduce the cost of obtaining credit (Ireland, 2005).
Regardless of these expansionary affects, lowered interest rates were not enough to combat the Great Recession. In such a severe crisis, the transmission mechanism is disrupted as widespread uncertainty leads to a high liquidity premium in investors, reducing the potency of monetary policy measures (Tomann and Stöppel, 2016). The next step was to implement more unconventional policies, the experiences from which are useful in informing us of the options available at low rates.

**Monetary Policy at the Lower Bound**

Unconventional monetary policies available at low rates include quantitative easing, forward guidance and negative interest rates. Quantitative easing refers to a process in which a central bank creates new reserves to purchase long term securities, boosting asset prices and lowering yields as investors replace bonds bought by the central bank with new assets via the ‘portfolio balance channel’ (Bernanke, 2012). The policy has been utilized post-crisis in the U.S, England, Japan and Europe, with the U.S. also undertaking ‘credit easing’ by purchasing large quantities of mortgage backed securities to provide liquidity to the distressed housing market.

*Figure 4 (ECB, 2016)*
Quantitative easing has performed well, with the U.S observing an improved stock market and lower borrowing costs for firms and households (figures 5 and 6) in its wake. The first two rounds of asset purchases raised GDP by an estimated 3% and inflation by 1% (Joyce et al., 2012), as well as potentially reducing unemployment by 1.5% (The Economist, 2012). More recent European endeavours into large scale asset purchases have arguably been successful as well, contributing 0.2 basis points to Eurozone economic growth in 2015 and causing a 20, 30 and 60 basis point reduction in German, French and Spanish sovereign bond yields respectively (Heam et al., 2015). Though these indicators are promising, quantitative easing has raised a number of concerns, such as the divestment from bonds to riskier assets (Santor and Suchanek, 2016), new credit creating unsustainable asset bubbles in emerging markets (Stiglitz, 2011) as well as doubts regarding its long term sustainability (World Bank Group, 2016).

As figure 4 demonstrates, market expectations also play a significant role in monetary policy transmission. By clearly communicating policy directions with conditional statements and pledges, central banks can give certainty to investors in a process known as ‘forward guidance’. Decreasing the perceived chance of a sudden policy rate rise, forward guidance lowers long term interest rates by reducing their embedded risk premium and flattening the yield curve (Poloz, 2015). The credibility of such guidance is the key to its success. In spite of the Federal Reserve indicating early in the crisis that policy would remain accommodating for some time, the expectation of a nearby tightening remained. It was not until their 2011
announcement that conditions would necessitate low rates until mid 2013 that market expectations updated rapidly, with the expected date of tightening among forecasters shifting much further into the future (figure 7). The result was a 10 basis point drop in two-year treasury yields and a 20 basis point drop in longer-term yields, along with a drop in longer-term interest rates of between 3 and 9 basis points following further announcements (Williams, 2014). As long as commitments are explicit, forward guidance is another useful tool at low rates, particularly as quantitative easing can strengthen its credibility (Santor and Suchanek, 2016).

Following the crisis, the ‘rules’ sometimes used to estimate policy rates based on deviations from inflation targets and potential output\(^1\) called for rates to go negative (Joyce et al., 2012). Traditionally this has not been thought possible due to the existence of a ‘zero lower bound’: since at a rate below zero cash would have a higher return than deposits or bonds, it was predicted that setting rates lower than zero would lead to a surge in demand for cash (Hicks, 1937). However, this hypothesis ignores cash’s substantial storage and transportation costs. Negative rates have recently been employed in the Eurozone, Denmark, Switzerland and Sweden (figure 8), with the ECB concluding that their \(-0.2\%\) deposit rate did not severely

\[ r = p + \frac{1}{2}y + \frac{1}{2}(p - 2) + 2, \]  

the basic Taylor rule where \( r = \) federal funds rate, \( p = \) rate of inflation and \( y = \) output gap (Taylor, 1993)

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1. For instance
impact the functioning of money markets (Cœuré, 2015). The transmission of these negative rates to the market appears to have been successful, with one-month government bond yields lowered to -0.9% and -0.7% in Switzerland and Denmark respectively (Rognlie, 2015). Though the results imply the zero lower bound may not be the constraint it was once considered, this does not mean rates can be set infinitely low. The true lower bound could be between -0.25% and -1.0%, with the impairment of the transmission mechanism beyond such a point causing the costs to outweigh stimulatory benefits (Santor and Suchanek, 2016).

**Fiscal Policy and Structural Reform**

Though the results of these policies demonstrate that further monetary measures can be effective at low rates, they appear to have been insufficient to reach growth and inflation targets (figure 2 and 3). This serves as an indication as to the limits of what monetary policy can achieve. Monetary policy can influence short term outcomes, such as inflation and unemployment, but it is not a panacea. Productivity, competitiveness and educational performance are just a few of the key determinants of long run growth that central banks have only limited ability to affect (Kashkari, 2016). Advanced economies face challenges that monetary adjustments alone will not fix. Productivity growth appears concerningly low in the U.S, with the post-crisis average annualized growth rate of 1.3% the lowest in 30 years (Torry, 2016). Youth unemployment figures in the Eurozone are similarly troubling, at 20% they are double that of the U.S (Trading Economics, 2016). Governments may need to play a more decisive role in the recovery through expansionary fiscal policy. Investments in infrastructure hold promise, with the potential to raise output by up to 3% and increase
productive capacity (OECD, 2015). Higher government expenditure could complement the low policy rates of central banks, as market expectations of GDP growth are more strongly impacted by fiscal policy when rates are low and the fiscal multiplier cannot be reduced by crowding out (Carvalho et al., 2012). However, though increased spending has the potential to be beneficial, it would need to be responsible. The average government debt to GDP ratio for advanced economies is currently around 100% (figure 9), the ageing populations of many advanced economies implying a budgetary strain that is likely to worsen.

![Figure 9 (World Bank Group, 2016)](image)

Though a country such as Germany (who can issue ten year bonds with yields at just 0.3%) may be well advised to invest in their deteriorating infrastructure (The Economist, 2016), countries with significant debt levels will need a credible plan for deficit reduction. The need to drive aggregate demand and investment must be balanced with the need to establish fiscal space in preparation for the next crisis. A focus on revenue measures such as estate taxes, indirect taxes and base broadening, as well as limiting expenditure on costly subsidies, tax exemptions and pensions, could provide a more growth friendly path to fiscal consolidation (OECD, 2015). More broadly, structural reforms ought to be pursued, particularly in Europe where reform progress has been stalled for some time. Improving labour market flexibility would help lower youth unemployment levels by reducing the risk in hiring a young employee, and measures to incentivize innovation, foster competition and improve the functioning of the services market will also promote growth in the Eurozone (Cœuré, 2016).
Though the U.S. does not suffer from the same labour market rigidities as Europe, policies to improve education, promote entrepreneurship and drive capital investment could reverse the recent trend of lagging productivity growth (Yellen, 2015).

**Conclusion**

Though conventional monetary policy can create momentum during a recession through a number of transmission channels, in a harsh downturn conventional measures may be inadequate. As policy rates approach zero, quantitative easing and forward guidance can provide further stimulus and recent evidence has shown they can be successful in driving down longer term interest rates and providing impetus to growth. We have also seen evidence that policy interest rates are not necessarily bounded by zero, with negative rates successfully transmitted in European markets. Despite the success of these policies, lagging growth and inflation figures indicate the government has an important role to play. Fiscal policy has the potential to drive growth and remains a potent tool for stimulating demand, though debt levels constrain its feasibility. The implementation of structural reforms could also work to enhance productivity, the most decisive factor for long run economic prospects. A pragmatic combination of responsible fiscal policy and unconventional monetary policy provides an array of potential options to combat deflation and encourage growth when policy rates are already set low.
Bibliography


