

REFeree REPORT

Economics E-Journal, Ms. No. 1223

The Simple Analytics of Helicopter Money: Why it Works - Always

A. SUMMARY

In this paper, the author argues that helicopter money – a permanent increase in the monetary base – can always boost aggregate demand. Therefore, liquidity traps, periods of persistently low inflation, and demand-driven secular stagnations can be undone via monetary policy that permanently increases the monetary base.

The author establishes this result by analyzing consumption behavior in a Blanchard-Yaari perpetual youth model where households face a constant probability of death. The author solves for optimal consumption as a function of household wealth, which is the sum of current assets and human capital (the present discounted value of future labor income less taxes). By substituting the government's intertemporal budget constraint into the household's intertemporal budget constraint, the author shows how consumption depends on the money supply.

Using this expression, the author argues that an increase in the money supply always raises desired consumption holding constant the path of interest rates, income, government spending, and the price level. In particular, the author argues that desired consumption is still increasing with money supply even in a liquidity trap where the nominal rate is stuck at zero. The author argues that the results presented obtain in the case of a representative agent model when birth rate is set to zero.

B. EVALUATION

The chief contribution of this paper is to argue that a permanent expansion in the money supply will always boost aggregate demand. Therefore, any conditions of deficient demand represent a mistake by monetary policy. Importantly, the conclusions in this paper appear to stand in contrast to the findings in Eggertsson and Woodford (2003) – hereafter EW - who argue that expansions of the monetary base, holding constant the central bank's interest rate rule, will have no effect at the zero lower bound.

In contrast to EW, the author does not specify an interest rate rule for monetary policy away from the zero lower bound and does not specify how the price level is determined. The partial equilibrium analysis conducted in this paper may account for the different conclusions reached from EW. In particular, a deeper discussion of how the author's results compare to the irrelevance proposition on quantitative easing in EW would be helpful.

It seems possible that, by holding the path of nominal rates and inflation constant, the author is making implicit assumptions about the conduct of

future monetary policy, and, therefore, the conclusions derived in this paper are in line with the analysis of EW. While partial equilibrium analysis is defensible if one is only concerned about the effect of money creation on desired consumption, it may be more problematic for relating these results to the broader literature.

In addition to holding nominal rates and inflation constant in the analysis, the author is not clear about why the zero lower bound would bind in his model. In the EW model, households are satiated in money at the zero lower bound – further increases in money have no utility value. The Cobb-Douglas preference specification adopted in this paper rules out satiation in money (see equation 14). Thus, the implications for money creation at the zero lower bound are not clear.

Finally, in contrast to the literature, the author assumes that the transversality condition for the government's intertemporal budget constraint only applies to government debt. In, for example, Leeper (1991) and EW, the transversality condition applies to total government liabilities (monetary base plus government debt). This assumption by the author is justified on the basis that money issued by the state cannot be exchanged for any real good or service. However, households hold money under the assumption that it retains value for purchasing goods or services even into the future. Greater discussion of this assumption and its importance for the results in this paper would be helpful.

C. REFERENCES

Eggertsson, Gauti B. and Michael Woodford, 2003. "Zero Lower Bound on Interest Rates and Optimal Monetary Policy." *Brookings Papers on Economic Activity*, Vol. 1: 139-233.

Leeper, Eric, 1991. "Equilibria Under 'Active' or 'Passive' Monetary and Fiscal Policies." *Journal of Monetary Economics*, 27(1): 129-147.