

## **Investment, Liquidity Traps and Real Interest Rates: A Comparison between Japan and the U.K.**

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### **Extended Abstract**

The Japanese and U.K. economies have experienced similar problems in restoring growth after a period of financial repression and liquidity trap (Japan since the end of 1998 and early 1999, while the U.K. between the end of 2008 and the end of 2021). Although there has been a great deal written about these economic episodes (see, for example, Bernanke, 2002; Krugman, 1998; and Uedo, 2012), there is still little agreement about how to get the economies growing again. In some recent papers, for example, there seem to be directly opposing views as to the role of the rate of interest and its relationship with investment.

One view is that interest rates are high when investment is high - because as investment increases, presumably for given rates of savings, the rate of interest must rise (George, 2023). On the other hand, the more traditional view is that as interest rates fall, investment increases (Hicks, 1937) - as the cost of borrowing declines- and so when interest rates are low, investment should be high. This, of course, assumes that business expectations are ignored and the marginal efficiency of capital remains unchanged. This has led to QE and negative real interest rates in both Japan and the U.K., although at least as far as the U.K. is concerned, according to the Bank of England, QE, apart from the initial tranche, has been largely ineffective at stimulating output.

In this paper, we attempt to test empirically the two hypothesised relationships between real interest rates and investment for both Japan and the U.K. when the economies are in a liquidity trap situation. We will use the real 10-year government bond yields for Japan, the U.S. and the U.K. and gross fixed capital formation for Japan and the U.K. One potential innovative aspect of this test is to use the U.S. real interest rate as a world interest rate. In this case, if the capital markets are, in fact, global, we may find that the interest rate differential between the U.S. and the U.K. and the U.S. and Japan has some explanatory power. We may also include measures of economic policy uncertainty as controls in our investment equations to serve as a rough test of Keynes's idea about expectations.

Moreover, as Keynes believed that volatile private investment was a primary cause of recessions, a second adjacent hypothesis - is that there is a relationship between real interest rates and the business cycle. On the one hand, Kalecki (1971) argued that interest rates are driven by the cycle, in that they rise in a boom and decline in recessions. On the other hand, if yield-curve inversion is a good predictor of recessions due to the effect that short-term interest rate increases have on real variables like consumption and investment and, thus, on long-term interest rates (see George, 2023), then real interest rates may drive the cycle. We plan to investigate the strength and direction of causality between real interest rates and investment in the case of Japan and the U.K. in liquidity trap conditions.

## References

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