Japan's Liquidity Trap

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1 Introduction

When an economy is suffering a recession, and the attempts of conventional monetary policy to stimulate aggregate demand become futile, this economy is said to have fallen into the dreaded "liquidity trap." In such a trap, monetary policy proves ineffective due to the fact that the nominal interest rate has reached its lower bound of zero. The second largest economy in the world is said to have been caught in this liquidity trap since the early 1990's. A broad spectrum of thinking exists on the causes of, and possible escapes from, the Japanese liquidity trap.

2 What is a Liquidity Trap?

When the forecasts of a central bank indicate recession and low levels of inflation, the correct response is to use monetary policy to lower the nominal interest rate. Such a policy should reduce the *real* interest rate, increasing investment and thus, aggregate demand. However, when the nominal interest rate is low to begin with, the central bank may not have much room to drop the interest rate further.

The key to the liquidity trap lies in the fact that the nominal interest rate is subject to a lower bound at, or slightly above, zero. Any lower rate would imply that lenders might pay a borrower to borrow – an obviously nonsensical idea. With interest rates close to zero, monetary policy is rendered powerless, and the economy finds itself caught in a liquidity trap where the real interest rate required to equate savings with investment is negative. A liquidity trap, combined with low inflation or even deflation, can send the economy on a downward spiral into a prolonged recession.

3 The Japanese Liquidity Trap

Japan's recent experience moves the theoretical warnings of a liquidity trap into the realm of reality. Since the early 1990's the Japanese economy has been suffering conditions that seem to resemble those of a liquidity trap. The collapse of the bubble economy in the early 1990's ended a two-decade era of highly impressive economic growth in Japan. From the 1960's through the 1980's the Japanese economy achieved one of the highest economic growth rates in the world; however, by 1990 this encouraging growth slowed radically. Growth in Japan over the last decade has been slower than growth in other major industrial nations, and it has been several decades since any major industrial country has experienced interest rates as low as those seen in Japan at the end of the 1990's.

This period, characterized by floor level interest rates, the Bank of Japan's inability to stimulate aggregate demand through expansionary monetary policy, and consistent performance below capacity, has been named "Japan's Liquidity Trap." Two interesting questions emerge from the recent Japanese experience: how did Japan arrive in the liquidity trap, and how might it escape?

4 How did Japan get Trapped?

Proponents of the liquidity trap theory have made a good case that Japan is indeed caught in this trap, but have difficulty explaining exactly why they have fallen victim to this economic ill. The chief explanations focus largely on demographic trends. Liquidity trap theory claims that a trap may arise when current productive capacity is actually greater than future capacity. Japan's demographic trends of a declining birth rate combined with a lack of immigration certainly indicate why Japan's future capacity might be low relative to current capacity. Demography also affects investment demand: the expected future reduction in the labour force decreases the expected return on investments. Other explanations of the trap point to capital market inefficiencies and institutional peculiarities within Japan.

5 Escaping from the Liquidity Trap

There has been no shortage of advice offered to the Japanese government on how to get out of the trap. The escape strategies fall into three broad categories: structural reform, fiscal expansion and, most interestingly, alternative monetary policy. Since Japan's problem is one of demand rather than supply, helpful structural reform must induce people to spend more. To the extent that some economic agents may be credit-constrained, structural reform of the financial sector might be helpful in increasing investment. Such a reform might also raise expectations of future income, resulting in higher spending today.

Another recovery strategy that has been widely put forward since the time of Keynes is that of expansionary fiscal policy; the basic idea being that government purchases of goods and services, although partially offset by the reduction in private consumption expenditures, could increase aggregate demand and thus output. While this policy option seems to be supported in theory, it has proven unsuccessful in the Japanese case. The Japanese government did in fact pour extensive spending into various public works projects in an attempt to stimulate its sluggish economy, with little to show other than hefty fiscal deficit. Rather than put an end to stagnation, Japan's expansive fiscal policy has only led to huge national debt.

Perhaps the most interesting, and arguably promising, strategy for recovery is that of unconventional monetary policy. Paul Krugman and Lars E.O. Svensson put forward an interesting plan to lift the Japanese economy out of the liquidity trap. This strategy centers on the notion that the surest way out of the liquidity slump is to increase inflationary expectations. Since the real interest rate is the difference between the nominal interest rate and expected inflation, even if the nominal interest rate is holding constant at zero, the central bank can further reduce the real interest rate *if* it can create private-sector inflation expectations. The only way the central bank can create inflationary expectations is by making an explicit commitment to a higher future price level. Conventional monetary policy is ineffective in alleviating the liquidity trap because private actors tend to believe that the central bank is committed to price stability as a long-run goal, and so they view the actions of the central bank as temporary. This proposed *un*conventional monetary policy hinges on the central bank's ability to make a credible promise that it will indeed permit inflation to occur and thus achieve the sought-after negative real interest rate that will produce sufficient aggregate demand and lift the economy from recession.

Many object to this eccentric policy prescription. Some protest on the grounds that expected inflation would be ineffective because it would simply lead the Japanese to deposit their savings abroad. Krugman counters that any capital export by Japan would necessarily be complimented by an increased current account surplus (since capital account and current account must sum to zero), thus helping to close the savings-investment gap. Another common objection is that pushing the real interest rate below zero would result in a weakened Yen. Krugman agrees, noting that this is true for any interest rate reduction, and the number zero should be no special case. The most reasonable concern lies in the fact that the beliefs of the private sector are not easy to affect.

6 Conclusion

Japan has proven to be an interesting first case study of the textbook theories of the liquidity trap. While the advice for recovery is plentiful, consensus on the best way out is sparse. A dynamic analysis of the liquidity trap illustrates one last point: it is a temporary phenomenon. Even if the Japanese economy ignores all counsel on policy options, in the long run the Japanese economy will find its way out of the trap. However, Keynes would not look kindly upon this long run thinking.

References

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