## Financial Institutions and Markets: Yield Curve Article Summaries

RAJ PATIL: CS18BTECH11039

[2022-02-10 Thu 18:10]

## 1 Bond yields reliably predict recessions

A yield curve is a line that plots yields (interest rates) of bonds with differing maturity dates. The slope of the yield curve gives an idea of future interest rate changes and economic activity.

The article argues that an inverted yield is a good predictor of future recessions (can predict recessions several quarters before). This thought is supported by the graph presented on the first page of the article which shows that whenever the interest rates for long-term bonds (10 year in this case) fell below that of short-term bonds (2-year in this case), a recession was observed shortly after (see the year 1991, 2001 and 2008).

The following are some implications of an inverted yield curve:

- future short-term rates are expected to be lower than present ones, principally due to the central bank chooses to cut rates when responding to economic weakness.
- markets may think they need less compensation for holding long-term bonds in the future, which might be reflecting expectations that inflation will fall, or because the demand for long term bonds increases when investors try to safe-guard their positions by investing in them in short term financial storms.

Lastly, this indicates the shift in central banks intentions of monetary tightening to monetary easing which is what happens during the transition from a boom to a recession.

However, sometimes the signals from a yield curve may be distorted due to unusual purchases of the concerned country's bonds by foreign central banks and pensions.

Still, the yield curve is an important indicator of recession as central bankers generally worry more about high inflation than about rising unemployment.

All these enforce the importance of the yield curve as a predictor of recession.

## 2 The Bank of Japan unveils new monetary tools

Japan has been facing the issue of negative inflation for long now and the Bank of Japan has been taking measures to tackle it. Haruhiko Kuroda (governer of Bank of Japan) has been trying to raise inflation to 2% by buying assets of sufficient scale and scope.

Still having not achieved his target, Mr. Kuroda intends to keep expanding the money supply until inflation rises above 2%, however long it may take. At the same time, vowing to keep long-term interest rates (10-year+ government bonds) at about zero in the close future.

Japan faces this issue due to the majority of the population expecting inflation to be not rise in the close future (low inflation expectations) i.e. they are backward looking. The Bank of Japan intends to offset this by raising the inflation expectations of the people that follow the central banks targets.

These easing efforts have, however, also flattened the yield curves. If there is little difference between short and long term interest rates, it hurts the income banks can earn from the conventional business of borrowing short and lending long.

The goal of japan is to keep the long-term interest rates pinned to 0 so as to unflatten the yield curve.

## 3 The global bond-market sell-off tests Japan's ability to keep yields down

After Trump won the 2016 elections, the US economy was suddenly expected to thrive. This caused investors to sell-off their foreign investments and buy USD denominated instruments instead.

This consequently lead to a falling demand for the Japanese bond market. Falling demands result in higher interest rates for the bonds and hence lower inflation. This is against the goals of the Japanese government and the Bank of Japan as extremely low inflation (sometimes negative) has been affecting their economy by forcing the people's expectations for inflation to lower than what they should be.

This can be observed in the ten-year bond yield rising above 0% for the first time in 2 months in the year 2016 (see graph on second page).

Keeping bond yields down is an important part of fighting against extreme deflation. Deflation is bad as people tend to hold on to their cash rather than buying things and this reduces the overall cashflow in the country leaving the economy unstimulated: this is not good for economic growth. If consumers don't spend, businesses don't invest and the economy stagnates.

Mr. Kuroda (governer of bank of Japan) blames the lack of inflation on falling oil-prices and a slowdown in emerging markets. This is worsened by the fact that wages have remained the same despite requests to businesses to increase them.

Lastly, Mr. Kuroda can print money but not people: their mentality is difficult to change. The population is ageing and shrinking - deaths are more than births - this will lead to a collapse of the future labor force. Simultaneously, public debt has arisen to 246% of the GDP, highest of any other country (as of Nov 2016).

Japan has a very long way to go before it can really eradicate this problem of deflation.