Don't Be So Negative

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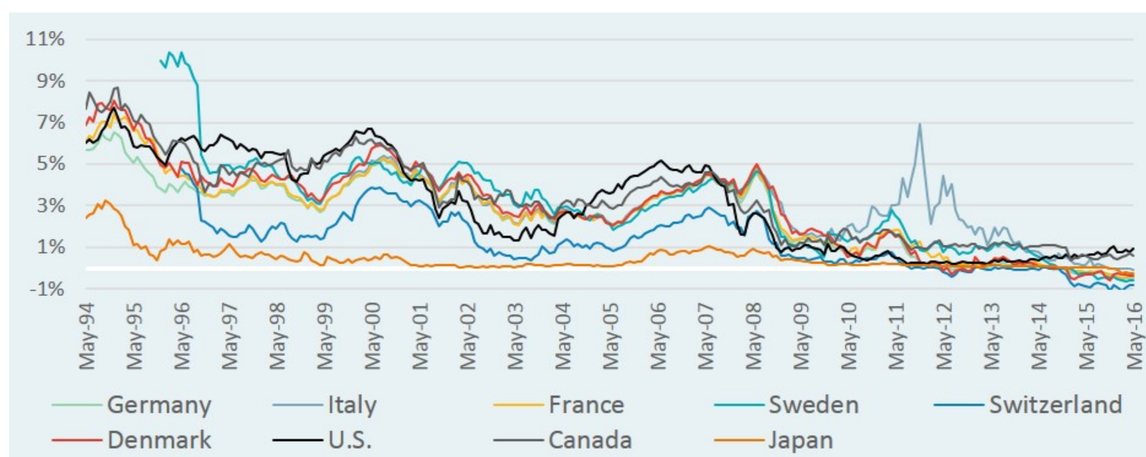
Following the financial crisis of 2008, slow global growth and low inflation have prompted a number of central banks to implement a negative interest rate policy (NIRP). We believe the overall market sentiment towards NIRP has been overly pessimistic and investors should be careful not to make assumptions about its effect. However, we do believe certain criticisms of NIRP are warranted, and we will continue to watch with caution. This paper will examine the creation of negative interest rates, the goals and unintended consequences, and the results we have seen thus far.

Uncharted territory

Until recently, negative interest rates on excess deposits have never been used as a monetary easing tool. It has generally been thought that nominal interest rates could not fall below zero because investors would prefer the option to hold cash instead. For large financial institutions that have been directly impacted by negative interest rates this has proven not to be the case because the cost of physically storing cash has exceeded the cost of negative deposit rates. A lower bound on interest rates likely still exists at the point where the cost of deposits is greater than the storage costs of cash, but we are not yet in that situation.

Negative deposit rates have further depressed global sovereign yields that were already at historic lows. Exhibit A shows the long-term history of 2-year sovereign yields in certain countries and highlights the unprecedented low interest rate environment many of them are experiencing.

EXHIBIT A - 2 YEAR SOVEREIGN YIELDS



Source: Bloomberg, 5/31/16

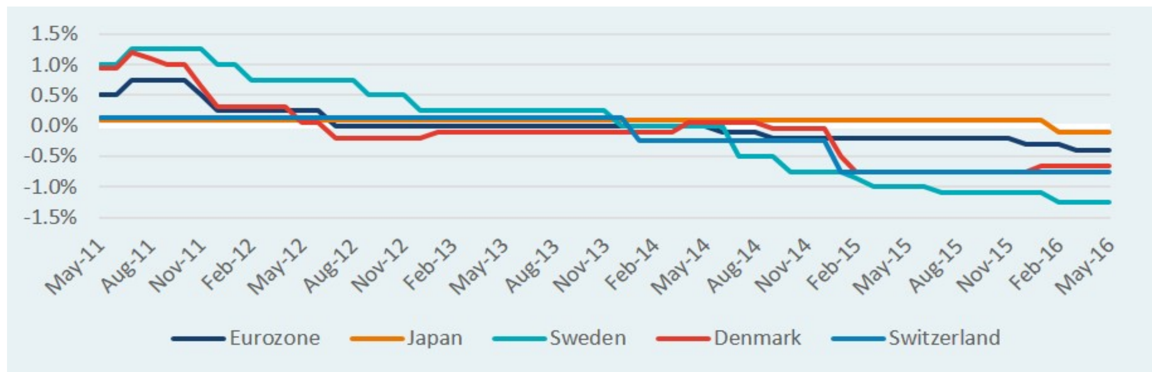
The creation of negative interest rates

The global financial crisis greatly damaged many economies, paving the way for an era of prolonged monetary easing including quantitative easing (QE) and eventually NIRP. Traditional expansionary monetary policy relies on the central bank's ability to fight recession by lowering short-term interest rates. Lower interest rates flow through the economy by encouraging spending and investment. As short-term interest rates approached zero, however, the global economic recovery remained subdued. Towards the end of 2008 central banks recognized a need for further easing so they began a program that became collectively known as QE, which involved large scale purchases of assets in order to increase liquidity in the financial system.

A shortcoming of QE is that it created a liquidity trap. Banks absorbed the money being pumped into the economy as excess reserve balances instead of creating loans due to an increase in the demand for cash and a low appetite for risk. Near zero short-term interest rates and a flattening yield curve worsened the liquidity trap by lowering the opportunity cost of holding cash. This undesirable side effect of QE also helps explain the low inflation environment; if the demand for money is proportionally greater than the increase in the money supply, the price level must fall. Central banks can increase the money supply, but they cannot force banks to lend or people to borrow.

The shortcomings of QE and zero interest rate policy led the ECB to implement NIRP as a monetary stimulus tool in June 2014 amid sluggish economic growth and low inflation. Japan followed the Eurozone as the second major economy into negative territory in January 2016. Smaller countries such as Sweden, Denmark, and Switzerland have also carried out NIRP. Negative interest rates are implemented by charging financial institutions a fee on excess deposits held at the central bank. Exhibit B shows the excess deposit rates over the past five years for countries with negative interest rates.

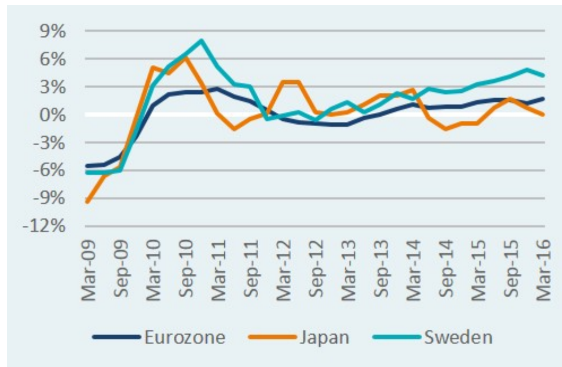
EXHIBIT B - RATES ON EXCESS DEPOSITS



Source: Bloomberg, 5/31/16

One of the main objectives for central banks using NIRP as a stimulus measure is to return inflation to target levels and spur economic growth. The theory behind this policy is that negative rates will encourage banks to make new loans causing more money to be spent and inflation to rise. Exhibits C and D show the real GDP growth and inflation rates for the Eurozone, Japan, and Sweden, the three countries using negative rates as a monetary easing policy. After the financial crisis, economic growth has not picked up like we would expect in a recovery period following a recession, and disinflation has become a concern.

EXHIBIT C - REAL GDP GROWTH



Source: Bloomberg, 3/31/16

EXHIBIT D - INFLATION

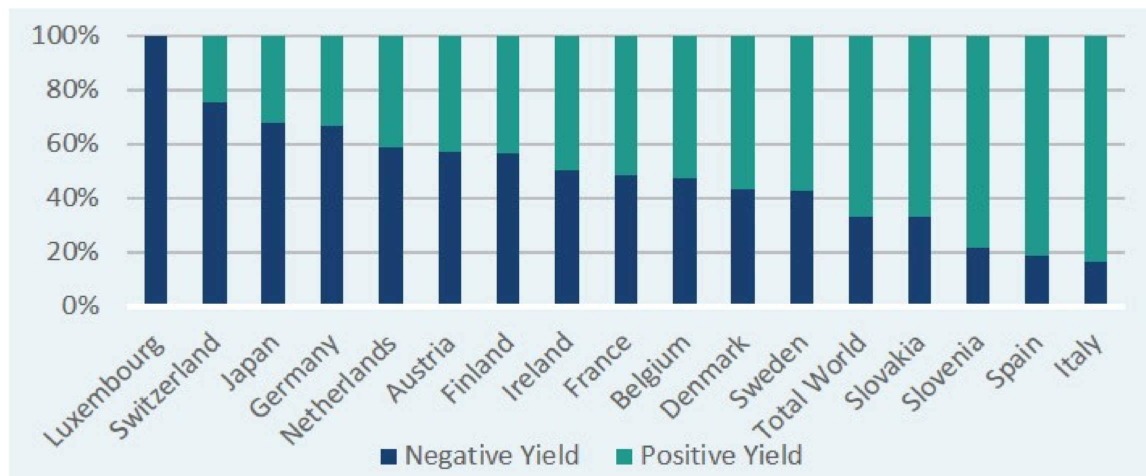
Source: Bloomberg, 4/30/16

A secondary objective of implementing NIRP, which is unstated by central banks, may be to stimulate growth and inflation through currency depreciation. Lowering the nominal interest rate decreases the demand for the currency causing it to lose value. A lower currency value boosts exports by making them cheaper for other countries to purchase. This may also have a positive effect on inflation as the price levels of imports rise. However, the effectiveness of this channel is limited due to the numerous factors affecting exchange rates.

In a monetary environment characterized by QE and negative deposit rates, demand for developed government debt in Europe and Japan has remained high and governments have been able to issue bonds at a negative yield. A negative yield on debt means an investor will pay such a

high premium for a bond, they will lock in a negative total return if the bond is held to maturity and coupon payments are reinvested at the current yield. However, certain tactical investors holding these bonds are betting interest rates will go even lower and the price will rise, resulting in a capital gain if the bond is sold. Based on the Bloomberg Global Developed Sovereign Bond Index, the amount of debt outstanding with a yield below zero is almost $8 trillion. Exhibit E shows the percentage of negative yielding sovereign debt in several European countries, Japan, and the total world.

EXHIBIT E - PERCENTAGE OF NEGATIVE YIELDING SOVEREIGN DEBT ($)



Source: Bloomberg Global Developed Sovereign Bond Index, 5/31/16

Why are people so negative?

One of the most widespread critiques of NIRP is the adverse effect it may have on banking profitability. The main source of profit for a bank comes from its net interest margin, the spread between the interest received on assets and the interest paid on liabilities. As interest rates decline and the yield curve flattens, net interest margins fall, along with profitability. Net interest margins have also been negatively impacted by banks being unwilling to pass on the costs of negative deposits rates to clients, thus far. Should banks start charging for deposits, triggering the withdrawal of money in massive quantities, there is a very small chance, however unlikely, that physical cash hoarding will become an issue. The net lending margin for Eurozone banks on loans to households and non-financial corporations is shown in Exhibit F below.

EXHIBIT F - EURO AREA BANKS NET LENDING MARGIN FOR HOUSEHOLDS AND NON-FINANCIAL CORPORATIONS

Source: ECB, 3/31/16

Note: Net lending margin was calculated by taking the difference between the volume weighted rates of loans outstanding and the volume weighted rates of deposits outstanding

Commercial banks' declining net interest margin is counterproductive to the central bank's goal of increasing lending for two reasons: it lowers overall profitability, which reduces banks' appetite for credit risk, and decreases the opportunity cost of holding reserves. In an effort to protect banks, the ECB announced it will implement another targeted longer-term refinancing operation in June 2016. The program will pay financial institutions to borrow money from the central bank and lend to the economy.

Excessive risk taking may be an additional side effect of NIRP. Investors are looking for assets with higher returns to replace shorter-term government debt with negative yields. This desire for yield may move investors further out on the yield curve, exposing portfolios to greater interest rate risk. Investors have also turned towards historically risky assets classes such as emerging markets in search of higher returns. An estimated $36.8 billion of foreign inflows were invested in emerging market equity and fixed income in March 2016, the largest monthly inflow in almost two years.

Loose monetary policy abroad, contrasted by a gradual tightening cycle from the Fed has affected U.S. markets by subsequently strengthening the dollar. Generally, countries with higher interest rates attract foreign investment, which increases the demand for and value of the currency. A stronger dollar hurts U.S. multinational corporations that generate a large portion of sales abroad because revenues are worth less in dollar terms. Currency losses have contributed to the current corporate earnings recession in the U.S. The effect of the stronger dollar on corporate earnings may influence the Fed's willingness to hike rates over the concern of policy divergence.

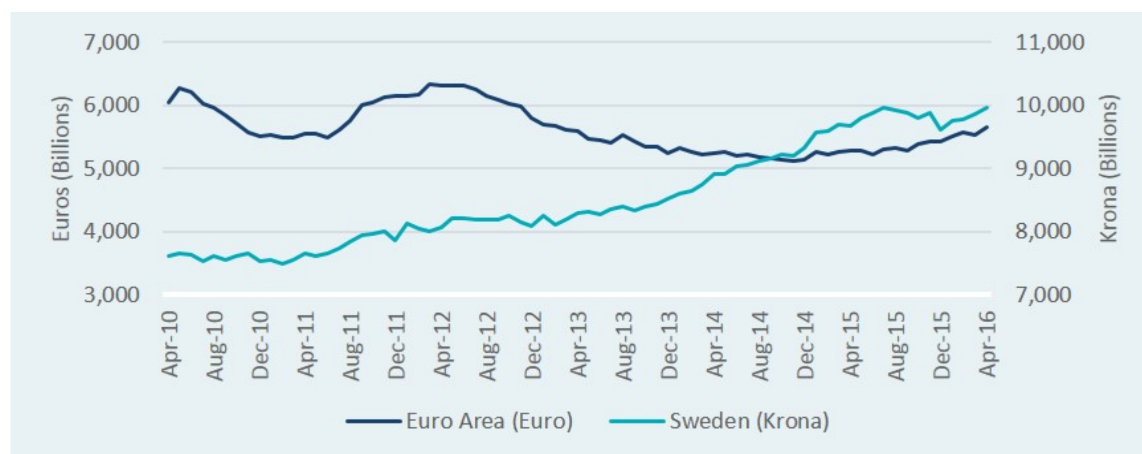
What we have seen so far

Negative interest rates as a tool of monetary policy have been in existence the longest in the Eurozone and Sweden. Over the past year and a half, NIRP has produced dramatically different short term results between the two economies. It is of course important to note that it is difficult to make a final conclusion on NIRP over such a short period of time, and these short term moves are at best indications of possible long term results.

Since implementing negative rates, Sweden has become one of the fastest growing economies in the developed world, while growth and inflation in the Eurozone are still low. In Sweden, the economy may be overheating. Annualized year-over-year real GDP was 4.2% in the first quarter of 2016, and real estate prices are up nearly 20% since rates fell below zero. Ultra-low interest rates likely fueled demand for mortgages and may be contributing to a real estate bubble.

The Eurozone has seen a much more muted response. A key goal of negative interest rates is to boost lending by financial institutions, which is shown in Exhibit G. Even with NIRP and a nearly €1 trillion increase in the money supply caused by QE, the Eurozone has not experienced a significant increase in lending. It is important to note the complex relationships that exist within economies – if changes in the economy coincide with NIRP we cannot claim with certainty that NIRP was the cause.

EXHIBIT G - TOTAL LOANS OUTSTANDING



Source: ECB, Statistics Sweden, 4/30/16

Instead of increasing lending, the majority of liquidity created by QE is parked at the central bank. In fact, excess reserves held by banks at the ECB have increased more than five times since June 2014, even though they are being charged to do so. From this perspective, negative interest rates so far have not broken the liquidity trap created by QE, and therefore, may not be the most effective mechanism for targeting inflation. However, the economy normally reacts to monetary policy with a lag and it takes time to fully understand its true impact.

Conclusion

Lack of economic recovery and low inflation following the global financial crisis despite already loose monetary policy, caused several central banks to implement a negative interest rate policy (NIRP). Possible negative side effects of NIRP, and its perceived inability to sustainably spark meaningful growth and effectively boost inflation have led a majority of investors and the media to draw preemptive conclusions. Although the criticism of NIRP is not completely unjustified we believe it has been sensationalized, and investors should not be pushed into action at this time. In the meantime we consider the following questions to be especially important to U.S.-based institutional investors:

1. How much will negative interest rates abroad affect the Fed's willingness and ability to tighten monetary policy?
2. Will relatively higher interest rates continue to put upward pressure on the U.S. dollar and provide a headwind for multinational U.S. corporations?
3. Will low and negative yields continue to dampen the long-term investment outlook for international sovereign debt?

Notes & Disclosures

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