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Could the Fed Take Rates Negative?

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Following a period of extreme turmoil in the wake of the Covid-19 pandemic, the Federal Reserve's (Fed) swift response has alleviated liquidity challenges but now what? Within this hypothetical outlook, we briefly touch upon the additional untapped policy tools that remain for the Fed to draw upon and focus our analysis on the circumstances that might cause the Fed to implement negative interest rate policy (NIRP). In doing so, we draw on lessons learned from the European and Japanese experiences with negative rates. We believe there is value in recognizing the chain of events and observations that would lead the Fed to take it under more serious consideration. The Federal Open Market Committee (FOMC) have stated that they are satisfied with their existing toolkit of forward guidance and quantitative easing (QE), while believing that negative rates are not currently attractive in the US. We take these remarks at face value, but we could envision a downside scenario, which would greatly increase the likelihood of NIRP in the US, characterized by the following:

- **US Dollar strengthening** which increases the cost of US goods and services sold abroad, hurting exports and American multinational companies.
- **Real yields rising** increasing the real cost of debt and tightening financial conditions.
- **A disinflationary environment** likely corresponding to **protracted economic stagnation** in which demand has collapsed.

What Policy Tools Remain Available to the Fed?

Since January, confirmed Covid-19 cases in the US are approaching 2 million and deaths have surpassed 100,000. Subsequent shutdowns have caused high unemployment and a sharp recession. To combat the economic effects and market dislocations, the Fed has instituted a barrage of monetary policy measures, in addition to the \$3 trillion of fiscal stimulus enacted to date. While short-term dislocations have eased, the longer-term outlook is murkier given the heightened cyclical uncertainties on the road to recovery and in the context of a secular slowdown in trend growth implying lower rates for longer.

To date, the Fed has cut the Fed Funds Rate by 150 basis points (bps) to closing in on zero, instituted a dozen liquidity and lending programs, and implemented open-ended QE measures, buying everything from Treasuries to fallen angel corporate credit and expanding their balance sheet from \$4 trillion in mid-March to over \$7 trillion today. Relative to the other major central banks, the Fed has done a lot in a short amount of time (Figure 1).

Figure 1
Monetary Policy Measures Implemented by Major Central Banks

| Monetary Policy Tool | Federal Reserve | European Central Bank | Bank of England | Bank on Japan |
|-------------------------------|-----------------|-----------------------|-----------------|---------------|
| QE — Sovereign Debt | • | • | • | • |
| QE — Investment Grade Bonds | • | • | • | • |
| QE — High Yield Bonds | • | | | |
| QE — Equity | | | | • |
| Negative Interest Rate Policy | | • | | • |
| Yield Curve Control | | | | • |

Source: State Street Global Advisors.

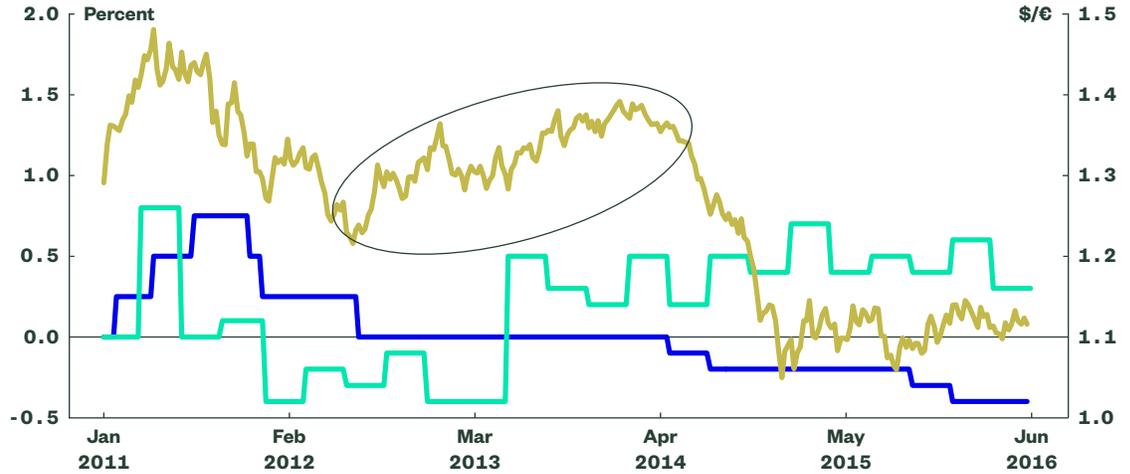
Only the Bank of Japan (BOJ) has been more active in its monetary policy in the past few years, having implemented in January 2016 both NIRP and yield curve control (YCC), whereby sovereign yields at certain maturities are capped through government bond purchases. The European Central Bank (ECB) took rates negative earlier in June 2014. Looking back, there are some important lessons to be learned from the ECB's and BOJ's experiences with NIRP as to what conditions would pressure a central bank to decrease rates below zero.

ECB Experience: Negative Rates Supported Recovery and Loosened Financial Conditions

On the heels of the European sovereign debt crisis, the ECB cut their deposit rate to zero in July 2012 and soon thereafter signaled readiness to implement negative rates. The Eurozone faced economic stagnation with seven out of eight quarters from mid-2011 to mid-2013 of zero or negative growth. Once at zero, financial conditions tightened, hurting the recovery, with the euro strengthening almost 15% and real yields rising going into 2014. The downward move in inflation expectations, already well below the ECB's 2% target, caused real yields to rise while nominal yields held steady.

Figure 2
Euro Strengthens versus USD

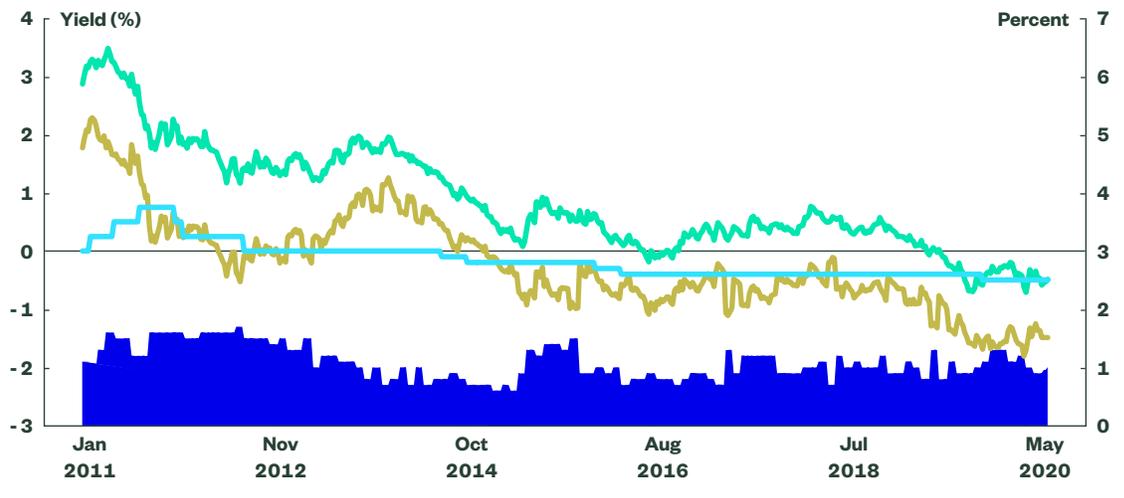
- ECB Deposit Rate (%)
- Eurozone GDP (%QoQ)
- EUR-USD (RHS)



Source: Bloomberg as of June 1, 2020.

Figure 3
Real Yields Rise Continually in Lead Up to NIRP

- Expected Inflation (RHS)
- 10yr Nominal Yield
- 10yr Real Yield
- ECB Deposit Rate (%)



Source: Bloomberg as of June 1, 2020.

Once implemented in June 2014, negative rates accelerated the reversals in these trends, as the euro duly depreciated over 30% and real yields declined quickly.

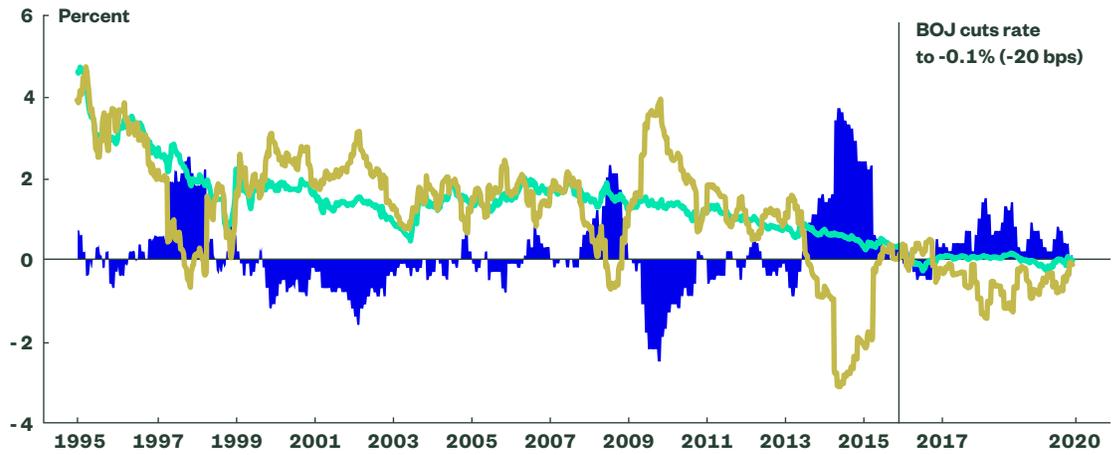
BOJ Experience: NIRP Lowered Real Rates After “Two-Decade-Long Battle With the Zero Lower Bound”

Japan has faced longer term secular issues largely driven by demographic trends that have led to multiple decades of anemic growth and low inflation/deflation. Since 1995, quarter-over-quarter real GDP growth has averaged 0.2% and year-over-year CPI inflation has averaged 0.17%. To overcome persistent deflationary periods, the BOJ embarked on what Governor Kuroda called a “two-decade-long battle with the zero lower bound on the short-term policy rate.” As Kuroda articulated in a 2017 speech, with the policy rate and inflation expectations at zero, what the BOJ needed prior to 2016 was to reduce real interest rates “well below the natural rate of interest,” which itself was likely near zero. Japan struggled in this pursuit for decades; the dip in real yields in 2014 was driven by a rise in their consumption tax, which raised inflation temporarily.

Figure 4

BOJ Unable to Lower and Maintain Real Yields Below Zero Until After NIRP in 2016

- Expected Inflation
- JP 10yr Nominal Yield
- JP 10yr Real Yield



Source: Bloomberg as of June 1, 2020.

The BOJ's stimulative monetary policies in the form of negative rates and YCC in January 2016 have helped flatten the yield curve and keep real yields below zero for an extended, multi-year period for the first time since at least 1990.

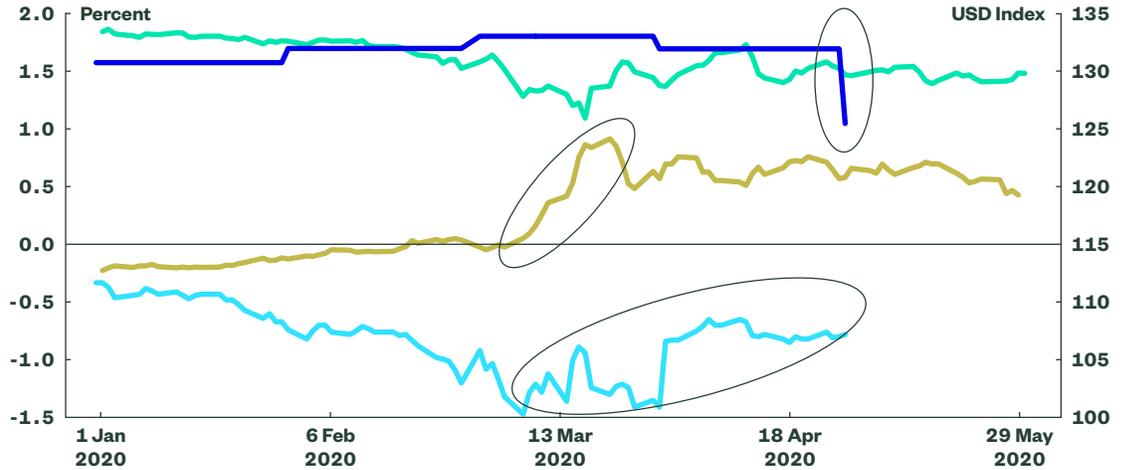
What Circumstances Could Cause the Fed to Take Rates Negative?

Although the US faces different circumstances than the Eurozone or Japan, the same trends in indicators that preceded NIRP in Europe and Japan are happening in the US to an extent. We believe that on a long-term structural basis, falling labor productivity and declining labor force growth have driven potential GDP growth rates below 2%. Nonetheless, there is currently little pressure on the Fed to move below zero. While the dollar has strengthened 5% year-to-date, this is small compared to the euro's appreciation leading up to 2014. Real yields are negative and lower than where they started the year.

Looking forward, we believe the downside scenario that would make NIRP most likely is that the US is hit with follow-on waves of infection and shutdowns, and both realized and expected inflation continue to trend downward. With nominal rates close to zero, a large move lower in inflation would necessarily cause the real cost of credit to rise. Any USD strength would compound the issue. The Fed's current toolkit of QE and forward guidance would be of little help under these circumstances, as was the case for the ECB leading up to June 2014. With first quarter US GDP growth of -5% and second quarter expected to be significantly worse (consensus estimate -20% to -40%), there are echoes of former ECB President Draghi's comment just before taking rates negative in 2014 that his biggest fear is protracted stagnation. The Fed, which has been more aggressive and proactive in its response to the crisis than most other central banks, might view the stimulative effects of NIRP as worthwhile if faced with the prospect of a deep, U-shaped recession.

Figure 5
Some Tightening in Financial Conditions Since Early March Plus Declining Inflation, but Little Short-term Pressure to Take Rates Negative

■ PCE Core (% YoY)
 ■ US 5yr Forward Breakeven
 ■ USD Trade-Weighted Index (RHS)
 ■ US 10yr Real Yield



Source: Bloomberg as of June 1, 2020.

Our view is that negative rates in the US are unlikely in the near term. On May 29, Fed Chair Jay Powell cited the following as reasons why NIRP is not under serious consideration in the US: mixed evidence of its effectiveness, interference with credit intermediation and incompatibility with money markets in the US, which are orders of magnitude larger than those in Europe and Japan and would be challenged by negative rates.

Importantly, NIRP can fundamentally undermine the basics of banking, given the significant role that deposit spreads have on bank profitability and organic capital generation capabilities. A prolonged period of depressed price-to-book ratios could entrench a higher cost of equity capital for US banks, which could in turn evolve into a systemic disincentive for balance sheet and loan growth. The larger a central bank's starting balance sheet, all else equal, the larger the tax on that country's banking system as a result of having to pay a negative rate on a larger stock of reserves. A 2019 NBER analysis found that NIRP is actually mildly contractionary increasing the size of the steady state balance sheet to 38% of GDP and holding other parameters fixed. As of May 31, the Fed's balance sheet was 32.7% of US GDP, up from 19% as of the end of February.

Our base case is that we are past the worst of the crisis. Given significant uncertainty moving forward, however, investors would be wise to monitor carefully the indicators related to economic recovery, realized and expected inflation, real yields, and movements in the US dollar, as well as communications from Fed officials.

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