The Bank of Japan and its fight against deflation

Key Takeaways:

- The Bank of Japan has been fighting deflation and low growth rates since the 1990s.
- It was the first central bank to implement quantitative easing, a program it is still implementing today - although with significant changes.
- The Bank of Japan has been aggressively buying not only government bonds, but also stocks and ETFs, shoring up their prices.
- Last year, the monetary authority set out a new target, yield-curve control, with the explicit goal of achieving a steeper yield curve.
- The program allows for more monetary-policy flexibility, and it has been implemented during times in which the economy has been displaying strong growth rates.

Just recently (December of 2017) revised data have shown that the Japanese economy expanded 2.5% (annual rate) during the third quarter of 2017. The figure surprised analysts, given that the first estimates that had been released were around one percentage point lower. Led by exports (growing 6%), and aided by monetary and fiscal stimuli, Japan is enjoying its longest stretch of economic growth since 1994. However, private consumption fell during Q3 (at an annual rate of 1.8%), evidence that the country's battle against deflation – and thus stagnant wages – is still a pending matter.

The Bank of Japan has been on a quest to boost inflation and growth in the country since the early 1990s, after an asset-price bubble that burst in early 1992 sent the country on a path that came to be known as The Lost Decade. Although growth started to recover in 1995, it would not last for long. Things took a turn for the worse in 1997: a perfect storm comprising currency crises in Asia, weak banks, tight fiscal policy, and an increased consumption tax sent the economy into recession. A banking crisis also erupted. Starting in Q4 of 1997, real GDP year-on-year growth would be negative for six straight quarters. Measured in yen, the GDP of the fourth quarter of 1997 would not be surpassed until the second quarter of 2016. On top of this, a deflationary spiral broke out and, in the year 2000, the tech bubble in the U.S. burst, adding more problems for the export-led Japanese economy.

In March of 1998 the government announced that JPY 1.8 trillion would be injected into 21 banks. Another JPY 7.5 trillion for 15 banks were announced a year after. This helped restore bank stability and helped to put an end to the recession. But deflation and low rates of growth would persist.

Aggressive monetary-policy approach: 2001-2006 and 2010-present

The Bank of Japan (BOJ) was the first to implement a quantitative-easing (QE) program. It started in March of 2001, even though the central bank had been keeping short-term interest rates at near-zero levels since 1999. The BOJ injected excess liquidity into the banking system to encourage private lending, aiming to put an end to falling prices and kick-start a period of sustainable economic growth. It did so by purchasing government bonds (including long-term ones) and other assets. Short-term interest rates were kept close to zero. But the main target for the BOJ became its current account balance, that is, the level of deposits that financial institutions had with the BOJ (current account deposits at the Bank, i.e., reserves). The reserve target started at JPY 5 trillion, but it quickly climbed to JPY 30-35 trillion in January of 2004.

GDP growth started displaying signs of recovery in 2002, with exports playing a key part. The core CPI kept pointing to deflation, however. Only in 2005 inflation increased, thanks in part to a tight labor market. Under these conditions the central bank decided to end the QE program in 2006. The monetary base had swelled from 13% to 22% of GDP. The BOJ went back to targeting short-term interest rates (at zero). And then, in July of that year, interest rates were raised (and once more

in February of 2007, reaching 0.5%). Yet the Bank was explicit about what it considered to be price stability: prices growing annually between zero and two percent, with a median of one percent.

The second phase of the program was launched in October of 2010, under the name of Comprehensive Monetary Easing, after the Great Recession's effects started to affect Japan (e.g., via the appreciation of the yen, deemed a safe currency, which hurt exports). The BOJ set an inflation goal, lowered short-term interest rates to virtually zero, and started an ambitious asset-purchase program, which included a wide array of securities. The latter started with an annual goal of JPY 35 trillion, but had increased eight-fold (JPY 101 trillion) by 2013. The Bank set out to lower long-term rates. Unlike the first QE program, this time the BOJ was more focused on increasing its balance sheet, rather than current account balances.

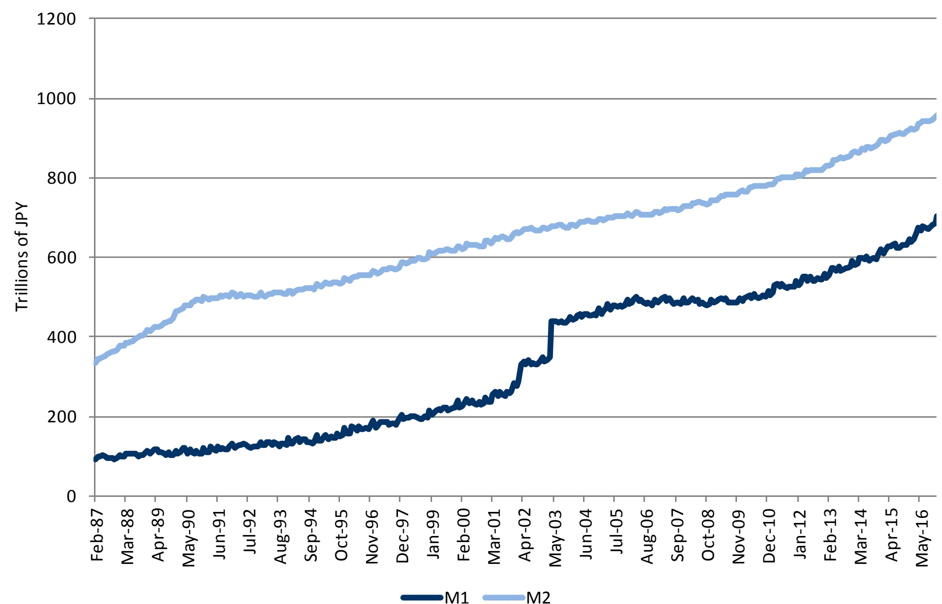
In 2016, the BOJ was purchasing JPY 80 trillion worth of Japanese government bonds (JGBs) annually, plus other assets (including ETFs and corporate bonds). Additionally, it was setting negative interest rates for current-account deposits – it charged banks a fee, the effect of which can be seen in the chart for JGB10 yields. The JPY 80 trillion in government-bond purchases provided a well-defined objective for the BOJ. The risk of course was that a fixed target left little room for adjustment along the way. Irrespective of this, the main problem was that, despite the monetary stimulus, the economy remained stagnated, with GDP and prices growing below what the bank wanted. Falling consumer prices were hurting firms, which were seeing declining revenues, which in turn hurt investment and wage growth. This prompted a revision of the way in which policy was being conducted.

Figure 1

THE BANK OF JAPAN HAS EXPANDED MONEY SUPPLY RELENTLESSLY

Monthly data (not seasonally adjusted) from February of 2007 to February of 2017.

Source: Innealta Capital using data from the Federal Reserve Bank of St. Louis.



Changing course: yield-curve control

In September of 2016 the BOJ decided to change tack, sharply shifting from QQE with a Negative Interest Rate (in place since January of 2016) to QQE with Yield-Curve Control. Under the new plan – publicly blessed by the government ¬– the BOJ stated it would keep the amount of JGB purchases, although the explicit target of JPY 80 billion was dropped. Instead, it would now target two key rates, and not just one: those of excess cash deposits by financial institutions (short-term rates) and those of ten-year JGBs (long-term rates). Basically, the central bank would now try to control the shape of the yield curve. The plan was to reduce borrowing costs more efficiently and help financial institutions – like commercial banks, which always welcome a steeper curve.

Short-term rates are to be kept at -0.1% according to the plan. Regarding long-term rates, the BOJ would purchase enough bonds to keep interest rates around zero, as they were at the time the new program was announced. The use of the words around zero was interpreted as intentionally ambiguous, allowing the bank some discretion (e.g., negative rates if the economy went south). Moreover, having the rate as a target instead of the amount purchased immediately gave the central bank the possibility of scaling back its bond-buying program in the future. Analysts were growing worried about the large amounts of money being pumped into the economy, considering them potentially unsustainable in the long term (the Bank could be draining too much liquidity from the markets, given that it already owns 40% of the JGB market).

Assessment and critique

Many analysts believe that the removal of an explicit goal for asset purchases will lead to "stealth tapering" by the BOJ, taking advantage of the possibility given by the new framework of buying fewer bonds. Fears of another "taper tantrum," like

the one the U.S. witnessed in 2013, would constitute a powerful reason for the Bank not to want investors to believe this will happen. On the one hand the Bank has reaffirmed its commitment to positive inflation and has stated it will continue with its monetary-easing policies; on the other, there are only so many bonds out there that the Bank can purchase. The Governor of the BOJ has admitted that the pace of purchases has slowed down in 2017 (from JPY 80 trillion to JPY 60 trillion per year).

Figure 2

THE BANK OF JAPAN HAS FOUGHT TO KEEP LONG-TERM RATES LOW YET POSITIVE UNDER YCC

Monthly data from September of 2012 to September of 2017.

Source: Innealta Capital using data from the Federal Reserve Bank of St. Louis.

Reducing the size of the balance sheet has an upside for the Bank, for it protects it from big losses should those assets fall in value. The problem could come in the form of a stronger yen. Another benefit of YCC comes in the form of a stronger financial industry, which is good for economic-growth prospects: pension funds and commercial banks will do better under a steeper yield curve. Additionally, the Bank will now have more room to thrust short-term rates into (farther) negative territory.

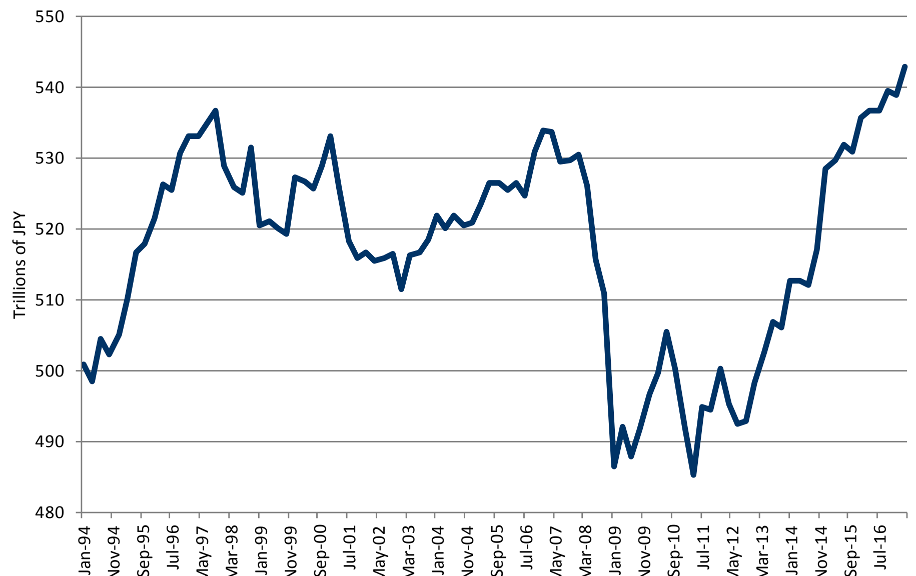
The main problem of this policy is probably the rigidity associated with a fixed yield curve. The latter is used as a proxy for important economic forecasts, such as potential growth and inflation. Important information could be lost if the levels of distortion become important. These are unchartered waters, and no other central bank is trying to do something similar. Fine-tuning will be hard: markets may fluctuate and will not necessarily map directly the level of assets purchased by the Bank to the yield curve. YCC also becomes more difficult if foreign forces put upward pressure on local yields, something that may start to happen as other central banks start to cut back on their loose monetary policies. A BOJ board member admitted in November that the Bank could end up raising interest rates before inflation hits 2%, strong proof that the Bank is considering other options, as well. Overall, the Bank seems to have been able to manage the yield curve, yet inflation remains a challenge.

Figure 3

GDP IS GROWING AGAIN, A WINNING STREAK UNSEEN SINCE THE MID-1990S

Quarterly data (seasonally adjusted) from January of 1994 to April of 2017.

Source: Innealta Capital using data from the Federal Reserve Bank of St. Louis.



Conclusion

With the Fed already having announced a slow-paced reduction in its balance sheet, eyes have turned to the European Central Bank (ECB) and the BOJ for signs regarding the end of their own quantitative-easing programs. As the Fed and the ECB start to rein in their QE measures, yields will start to rise, making it all the more difficult for the BOJ to keep long-term rates around zero percent. Yet if it does not, the markets will doubt the Bank's resolve to defend its own target, which in turn may push yields up faster. The BOJ has been by far the loosest when it comes to pumping out money: its balance-sheet assets reached 96.2% of GDP in November of 2017 –compared to 40% for the ECB and 23% for the Federal Reserve–, and so far it has given no explicit signals to the markets that it plans to halt its asset purchases. What's more, it has aggressively bought stocks and ETFs like no other central bank has. For example, as of October it owned approximately 75% of the country's ETFs (it had none before 2010), helping the assets managed by ETFs achieve an almost ten-fold increase in value since this shopping spree began. This month (December 11th, 2017) the Nikkei 225 Stock Average closed at its highest since 1992. Given growth rates posted by the economy in recent quarters, it can definitely be argued that quantitative easing – aided by an expansionary fiscal policy – is working. However, it is also reasonable to suppose that the level at which the Bank is buying assets will decrease sooner than later, with the Bank forced to implement its loose policies in some other way. The Bank seems to have internalized the fact that it will take some time before prices start growing at rates of 1% or 2% per year. We can expect it to keep fighting deflation, albeit by other slightly different means – just as it has for more than 20 years.

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