Negative Interest Rate Policy by ECB: A Case Study

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Abstract:

The European Central Bank (ECB) announced several measures to inject life into the Euro zone stagnant economy. One such measure is the decision to cut the deposit rate for the region's commercial banks from zero to minus 0.1 per cent. This is something unusual and has never been heard before. Although the measure brings expectations, it also brings much fear along with it. With the entire Eurozone in economic trouble, ECB's measure is being seen as a gamble. Everyone is watching what the impact of this policy will be? Will it bolster the economy and move it forward or will it hit hard and push it back towards uncertainty? Negative interest rate was present in Nordic countries a few decades ago with minimal effect on expected results. What will happen to Europe, and this policy weather is the best that ECB needs to be consider is for us to see?

Keywords: European Central Bank, Negative interest rate, Euro zone economy

Introduction

On June 4, 2014 ECB became the first major central bank in the world to make one of its rates negative. It was an attempt to get credits flowing into the troubled economies. At the same time, the central bank reduced its main interest rate to a new record low of 0.15 per cent, from 0.25 per cent previously. ECB also announced a €400bn (£325bn) liquid funding for the banks with a condition that this amount would be lent only to those companies which were not in the financial sector, and also added that it could not be spent on mortgages. The Euro economy's outlook had already brought the ECB under strong criticism. There was also immense pressure on Draghi in recent times to make available cheaper credit for households and business to boost growth in the 18 member Eurozone.

Why Did ECB cut the intrest rates?

The ECB is unlike the United States Federal Reserve which has the power to generate jobs. The ECB was created with only one objective which was to control inflation in the 18-member Euro zone, Though ECB is only allowed to control rising or falling prices, it can also make sure other economic factors like employment or growth do not affect the inflation rate adversely. The biggest instrument for ECB in this aspect is to control the intrest rates. The main rate here is the 'refinancing rate'. This rate is about how much the ECB can charge for it its loan. ECB also determines how much banks can charge among themselves for loans. The rates for saving accounts and those that are paid on mortgages have links to this. The other interest rate which ECB has control over is the deposit rate, which is what the central bank pays to other banks for holding their deposits overnight. With such a limited scope of area for action, ECB was expected to cut the rate (See Figure 1).

The ECB found that the banks and other financial institutions in Europe have been showing reluctance to lend money to business in the recent past. The Annual growth in M3, the general measure of cash in economy, was hovering around one per cent in the past few quarters. This figure was above 12 per cent in 2007, when the economy was reflourishing.

Currently, in April 2014, the figures were abysmally low against one per cent in March 2014. The ECB found that the stressed countries were facing difficulty in their recovery because of credit constraints. Post sovereign crisis, the banks had shown very little interest in lending, therefore, there was little investment and growth in wages.

Euro zone economy in 2013 final quarter

The household financing and financial investment remained unchanged at 0.3 per cent and 1.6 per cent respectively in the last quarter of 2013. In the past one year, thr household gross disposable income was moving around just one per cent. The annual growth rate of household financing was unchanged at 0.3 per cent from the previous quarter, and that of financial investment was unchanged at 1.6 per cent. Household net worth increased at an unchanged annual rate of 0.5 per cent. The annual growth rate of household gross disposable income increased to 1.5 per cent in the fourth quarter of 2013 (third quarter: one per cent). The annual growth rate of household consumption expenditure increased to 1.2 per cent in the fourth quarter, from one per cent in the third quarter while that of household gross saving increased to 3.7 per cent from 1.7 per cent. The household gross saving rate was 13.1 per cent in the fourth quarter of 2013, compared to 13.0 per cent in the fourth quarter of 2012. The annual growth rate of gross fixed capital formation of households was one per cent in the fourth quarter (third quarter 2013, 1.4 per cent). Euro area gross fixed capital formation was unchanged on an annual basis, after decreasing in the 2013 third quarter. The gross capital formation declined on and annual basis (minus 1.8 per cent, from minus 0.1 per cent (See Figure 2).

There had been a sharp decrease in the outstanding amount of debt securities issued by euro area residents. this decreased from point seven per cent in March 2014 to minus one per cent in April. For the outstanding amount of quoted shares issued by euro area residents, the annual growth rate was 2.2 per cent in April 2014, compared with 2.0 per cent in March (See Figure 3).

Other options with ECB

ECB could have initiated the quantitative easing (QE) instrument or a bond buying program. What happens here is that the central bank buys up assets for example. mostly government bonds which is an effort to boost up money supply. The financial institutions who sell these products are expected to respond to the capital boost from ECB by increasing lending throughout the geograpical areas. The quantitative easing has another effect. it increases the demand for sovereign debt, which pushes its price higher and brings its yield down, and therefore it becomes easier for governments to borrow. Though lending is a sign of stronger economy, unfortunately in Europe loans to small and medium size businesses have been falling for the last few quarters. Since no common Euro zone bond exists today, and if ECB buys the sovereign assets of one country, then its risk is the same for the entire region. Moreover the European Union has put a ban on ECB to provide any 'monetary financing'. This means there is virtually no scope for launching a quantitative easing program.

The economy in the Euro zone has also been suffering from slow inflation rates and low economic growth. In the first quarter of 2014, the economy grew by just point two per cent. The inflation rate has rise by 0.7 year-on-year, although this was an uptick then from March 2014 figure, which was 52-month low of point five per cent. Now, if the ECB works like the United States' Federal Reserve by chasing the sovereign debts, there would have been some chance of boosting the figures. This would have pushed lending to corporate as well as households. Thus there would have been inspiration for spending and the risk of deflation mitigated. Though this picture looks rosy, there is no such program existing in ECB mainly because no common Euro zone bond is present.

Another option the ECB had was to allow the commercial banks to parcel together all the loans on their books into asset-backed securities and to sell these to ECB. The ECB buying such instruments would have freed up capital for these financial institutions. But, it should be remembered that the 2008 global economic crisis was catalyzed by rampant trading of these types of instruments. Moreover, Euro zone has a diversified member's economy, assessing the risk and prices of such securities would have been very difficult. The ECB had the final option to cut the deposit rate in pays to the banks to store money with it. The deposit rate was already standing at zero. This negative rate may prompt the banks to stop piling up cash and start lending to the market. The cut on the rates, could also devalue the Euro against dollar. The advantage of the weaker single currency is the costlier currency which makes the export in Euro zone more expensive, thus inhibiting the economic growth in the region.

Negative Interest Rates

The term negative interest means exactly which is what says. In normal practice, banks earn interest on money they put in the central bank reserve. With this particular condition, these banks will be charged by the central bank for keeping money out there. ECB has a positive hope that the banks

will stop accumulating money and will start lending more to consumers, busineses or among banks which in turn will boost the economy (See Figure 4). If we look directly at this process it will be like if now I get a positive five percent annual interest rate on my deposit account, fo example I put in \$100 and get out \$105 a year later. with a negative five percent interest rate, I put in \$100 and get out just over \$95 one year later. The same holds for bonds. I issue a oneyear zero-coupon bond with a minus five percent interest rate and a year later I repay my creditors just \$95 for every \$100 borrowed through bond issuance. It looks simple, but the question is, will it work and give the desired result. There are several unpredictable consequences. Central banks have no problem whatsoever paying negative interest rates on deposits (reserves) held by banks with them (See Figure 5). Neither is it any more difficult to charge a negative interest rate on collateralized borrowing by commercial banks from the central bank than it is to charge a positive interest rate. The biggest possibility is that the commercial banks may pass the costs they incur for ECB deposits to its customers.

Past Instances of Negative Interest Rates

This is not the first time a central bank has opted for negative interest rate. In July 2009, the Riksbank, Sweden's central bank and the world's oldest central bank cut the interest rates to minus 0.25 per cent. Not only they introduce negative interest rates, butt the also started a program of quantitative easing or printing money. The motive of Riksbank was very clear; they wanted to penalize banks for holding reserve deposits. The deputy governor of the Riksbank Lars Svennson announced that they would devalue the currency and peg the exchange rate. He was known as a person who strongly targeted inflation. His policy was to upward slop short term price levels which were coupled with lower long inflation targets. The moment the short term price levels were achieved the pegs were abandoned. This is one such typical case where a country went after inflation and the liquidity trap and tried to tackle them. The Swedish central bank undertook this policy in 2009, and it is for us to deside what lies in store for the 18 member strong Eurozone. In 2012, Denmark aiming to cap the unwanted rise in this currency brought the interest rates to negative. What happened was that currency was pushed higher. This achived because the investors started looking for safe-havens outside the already crisis hit Euro zone as a result The Danish market was flooded with foreign money. The negative deposit rates did not cause a financial meltdown. The central bank of Denmark issued several warnings. Also, there were no significant changes in the rates charged by the banks for loans. (See Figure 6 and 7)

ECB's Gamble

The ECB in its press release stated that "The European Central Bank's mandate is to ensure price stability by aiming for an inflation rate of below but close to 2 per cent over the medium term." Like most central banks, the ECB influences inflation by setting interest rates. If the central bank wants to act against too high inflation, it generally increases interest rates, making it more expensive to borrow and more attractive to save. By contrast, if it wants to counter too low inflation, it reduces

interest rates. It went on, adding that since Euro area inflation was expected to remain considerably below 2 per cent for a prolonged period, the ECB's Governing Council judged that it needed to lower interest rates. The ECB has three main interest rates on which it can act namely: the marginal lending facility for overnight lending to banks, the main refinancing operations and the deposit facility. The main refinancing rate is the rate at which banks can regularly borrow from the ECB while the deposit rate is the rate which banks receive for funds parked at the central bank. All three rates have been lowered. It also informs that this policy is not going to have any direct impact on savings and only the banks which deposit money at the ECB have to pay. In a market economy, the return on savings is determined by supply and demand. For example, low long-term interest rates are the result of low growth and an insufficient return on capital. The ECB's interest rate decisions will in fact benefit savers in the end because they support growth and thus create a climate in which interest rates can gradually return to higher levels. It also adds that as a central bank, ECB's main business is to make it more or less attractive for households and businesses to save or borrow, but this is not done in the spirit of punishment or reward. By reducing interest rates and thus making it less attractive for people to save and more attractive to borrow, the central bank encourages people to spend money or invest. If, on the other hand, a central bank increases interest rates, the incentive shifts towards more saving and less spending in the aggregate, which can help cool an economy suffering from high inflation.

Silvio Gesell, the great German economist argued for tax on holding money. He stressed the theory of "tax on holding money". His idea was that in hard economic conditions hoarding money is a tendency instead of lending it. Today banks sit on pile got excess liquid assets, thus Gesell's theory holds good. With financial ruins and, several defaults taking place one after another this attitude needs some change. Perhaps this is exactly what Draghi and his men had in mind. If a question of: "what is best way to fight economic downturn and move away from stagnancy?" is asked, Economic downturns result from going down of demands of services and commodities. The immediate solution is that the central bank will come forward and cut the rates. The lowered interest rates will immediately influence consumers and businesses to borrow and spend. The ECB announced several measures to inject life into the Euro zone's stagnant economy. One such measure was the decision to cut the deposit rate for the region's commercial banks from zero to minus 0.1 per cent. This was something unusual and never heard of before negative interest rate policy. It brought expectation but it also resulted in fear as well. Interestingly in Europe, ECB has reduced the interest rates as much as it can in recent times. Now, it seems that the 'negative interest rate' is the best solution to bolster the economy.

The biggest concern that can result is that the fear of withdrawal. With interest rates going negative, the banks will be left with options to either pass these negative interest rates on to consumers, or at least try to do so. They may not explicitly charge a negative interest rate, but they may stop paying interest and start charging a fee for account maintenance. On

the other hand, if the interest rate is only slightly negative, banks may just eat the loss to avoid alienating customers. If they do that, however, it will cut into bank profitability. If the banks opt for the latter it is not going to have much impact on customers. But, if they pass it on to the consumer, a fear of severe withdrawal cannot be ruled out. This is one of the big reasons that the ECB has moved so reluctantly toward a negative interest rate and the Fed, Bank of Japan and Bank of England have not gone in that direction. People keep money in banks with the idea that the amount will increase with the interest it earns over a period of time. But, if they are asked to pay for it, someone will always be there who may withdraw himself or services out of the banking system.

Studies suggest that major banks in the Euro zone collectively deposit \$1.0 trillion with the ECB every 24 hours. If this is cut, the banks will definitely end up paying the ECB to hold their funds. The ECB considers that from now on, these banks will reduce accumulating money in ECB's depository and will start rolling them thus making the economy move forward. But catch is, if the EU banks feel that preserving their capital is their most important job, they will still do the same in spite of being asked to pay the penalty. The economy in Europe is too weak and is safer for these banks to lend money in the market rather than keeping it safe. Sweden and Denmark did not get much benefit in 2009 and 2012 by introducing negative interest rates. Moreover, it seems that the central banks have intervened the natural economic cycle of ups and downs. In my opinion what can happen is that the stock markets could go haywire and another bubble might burst. On the whole, a stimulated downturn could take place worldwide. Interestingly, it should be noted that Denmark did not cut rates below zero to boost the economy, but rather to safe-guard the currency peg to the Euro. The excess liquidity in the Euro-zone financial system has recently fallen to €100 billion from a peak of €800 billion. This effectively means that the maximum benefit of a negative interest rate would only be €100 billion, not nearly enough to really boost bank lending and growth and bring down inflation. The addition of extra funds would provide here stronger incentive to increase lending to corporations and households, rather than paying the ECB to deposit the extra cash. Yet, the issue remains with the currency Euro. The shared currency is partly to blame for getting the ECB into this easing mess to start with, even though Draghi & Co. consistently have said the exchange rate is not a policy target. Nevertheless, the strong Euro has hurt inflation and these easing gymnastics could also be seen as a way to drive down the currency.

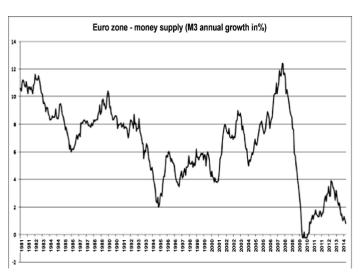
Basel Committee on Bank Supervision in its BASEL III accord speaks about Liquidity Coverage Ratio. Its aim is to have 30-day liquidity coverage ratio designed to ensure short-term resilience to liquidity disruptions. For that stock of high quality liquid asset for the bank must be greater than the Net Cash Outflows over the next 30 calendar days. The stresses might take place on occasions like run off of a proportion of retail deposits, partial loss of unsecured wholesale funding capacity or unscheduled draws on committed but unused credit and liquidity facilities. High quality assets are defined by BASEL as those which have low credit and market risk or have ease of valuation. These may include cash, central

bank reserves or Central Bank bonds not assigned a zero per cent risk weight. Now, central bank deposit options might not be attractive any more as the banks will be asked to pay for parking cash. So, the safer option would be to buy bills and bonds issued by ECB.

The worst which can happen is that the fate could worse than death. Prices could go up relentlessly, and salaries might lose purchasing power. This is because Mario Draghi spoke about bringing back inflation rates close to 2 per cent. The conditions might hurt customers who struggle for food, and the cost of living might go up enormously. The idea of pushing more liquid money to the economy could do harm by lowering the value of Euro. for example, Credit Suisse lending money to Boeing Corporation for a lucrative project. Boeing the money to shareholders, but they deposit the money in the banks including Credit Suisse. The money is then circulated back where it started. Credit Suisse then deposits the money into the ECB. As They cannot avoid the negative deposit rate. Cash circulation takes place in a loop and this loop cannot be completed without the banking system. The money is transferred from one party to another, but never moves out of the bank. Now, the question is how a bank could reduce its deposit in the central bank? The banks could buy government bonds or treasury bills from the ECB or Federal. when banks buy these they pay ECB. Will the ECB deposit these Euros in commercial banks? The answer is no. So, this is one solution of what the banks could do to avoid the penalty levied for parking cash in ECB. One distant ugly fear is that a parallel economy or banking system. Europe has enough tax-havens and the number of rich people is also not less. There could be a situation when few rich start their own banking system either individually or joining together. What could happen is that such financial institutions lend money at zero percent interest or at positive rate or might even at negative rates but lower than what the commercial banks offer. Perhaps this might fancy the idea that one day such people might become too strong and take control of the economy.

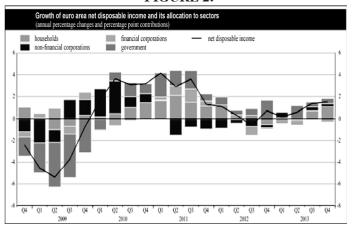
Appendix

FIGURE 1:



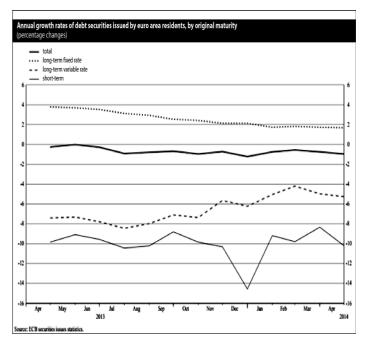
Source: European Central Bank

FIGURE 2:



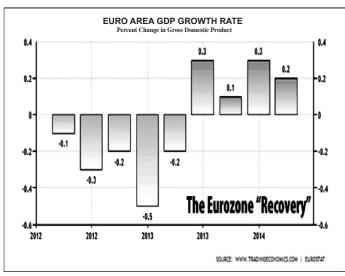
Source: European Central Bank

FIGURE 3:



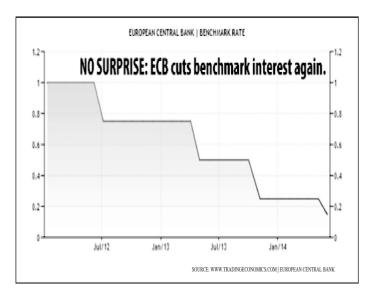
Source: European Central Bank

FIGURE 4:



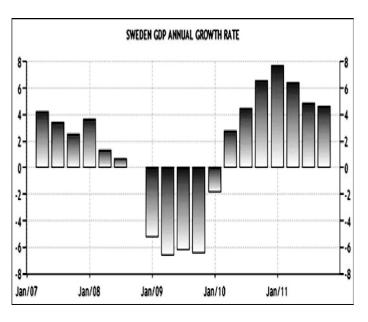
Source: www.tradingeconomics.com

FIGURE 5:



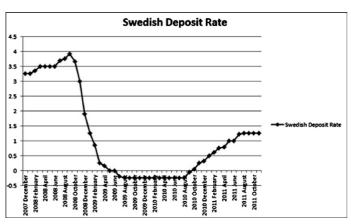
Source: www.tradingeconomics.com

FIGURE 6:



Source: www.tradingeconomics.com

FIGURE 7:



Source: www.tradingeconomics.com

List of questions for discussion:

- 1. What will happen if the policy fails?
- 2. Is there any chance that other countries can also implement negative interest rates?
- 3. What other issues could crop up for the negative interest rate policy?
- 4. There are far many possible ways other than negative interest rate policies. Discuss
- 5. What is the difference between sub-prime crisis in US and Euro crisis?

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