

# Negative Interest Rate Policy by European Central Bank - A case Study

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## ABSTRACT

The European Central Bank 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. Something unusual and never heard before is this negative interest rate policy. It has lot of expectations and also brings forward a lot of fear along with it. With the entire Euro zone EC's measure is being seen as a gamble. Everyone is watching what impact will this policy? Will it bring bolster the economy and it will move forward or will it hit hard and push it back to uncertainty? Negative interest rate was present in Nordic countries having minimal effect on expected results. What can happen to Europe and is this policy the best that ECB had?

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*We think it's a significant package. Are we finished? The answer is no.*

: Mario Draghi (President of the European Central Bank)

*There's a little bit more than expected. Draghi's pulled a couple of rabbits out of the hat, which seems to have pleased people.*

: Grant Lewis (Economist, Aiwa Capital Markets in London)

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On June 4, 2014 ECB became the first major central bank in the world to take one of its rates negative. It is an attempt to bring to get credits flowing into the troubled economies. At the same time the central bank has reduced its main interest 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 will be used to lend only to those companies which are not in financial sector, and also it cannot be spent on mortgages. The Euro economy's outlook had already brought the EB under strong criticism. There was

immense pressure on Draghi in recent times to make availability of cheaper credit for households and business in order to boost growth in the 18 member Euro zone.

### Why Did ECB cut the rates?

The ECB's only objective for its creation was to control inflation in the 18-member Euro zone, which is a lot unlike that of United States Federal Reserve which has the power to generate jobs. Though ECB is only allowed to control rising or falling prices, it can also make sure other economic factors like employment or growth

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does not affect the inflation adversely. The biggest instrument for ECB in this aspect is to control the rates. The main rate here is the 'refinancing rate'. This rate is about how much the ECB can charge for its loan and it also determines how much banks 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 is the deposit rate, this 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 rates. ( See Figure 1)

The ECB found that the banks and other financial institutions in Europe have been showing reluctance to lend cash into 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 flourishing. Currently, in April 2014 the figures were abysmally low against one per cent in March 2014. The ECB found that the stress countries were facing difficulty in their recovery because of credit constraints. Post sovereign crisis the banks had shown very little interest in lending therefore this is little investments and growth in wages.

### **Euro zone economy in 2013 final quarter**

The household financing and financial investment remained unchanged over the quarter at 0.3 per cent and 1.6 per cent respectively in the last quarter of 2013. In the past one year the household gross disposable income is 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 annual basis (minus 1.8 per cent, from minus 0.1 per cent). See Figure 2.

There had been sharp decrease in the outstanding amount of debt securities issued by euro area residents 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**

They could have initiated the quantitative easing (QE) instrument or a bond buying program. What happens here is that the central bank buys up assets i.e. mostly government bonds. This is an effort to boost up money supply. The financial institutions who sell the products are expected to respond to the capital boost from ECB by increasing lending throughout the geography. The

quantitative easing have another result that is it increases the demand for sovereign debt, this pushes its price higher and brings yield down, and therefore it becomes easier for governments to borrow. Though lending is a sign of stronger economy but unfortunately in Europe loans to small and medium size businesses are falling for the last few quarters. Now there is no common Euro zone bond existing today and if ECB buys the sovereign assets of one country then the risk is same for the entire region. Moreover the European Union has put a ban on ECB of providing any 'monetary financing'. This means there is virtually no scope for launching quantitative easing program. The economy in the Euro zone has been suffering from slow inflation and low economic growth. In the first quarter of 2014 the economy grew by just point two per cent. The inflation rose by 0.7 year-on-year, although this was an uptick 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 that is 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 mitigate the risk of deflation. Though this picture looks rosy but again there is no such program existing in ECB mainly because no common Euro zone bond is present.

Another Option the ECB had was that to allow the commercial banks to parcel together loans on their books into asset backed securities and 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 cashes and start lending to the market. The cut on the rates, can devalue the Euro against dollar. The advantage of weaker single currency is the costlier currency makes the export in Euro zone more expensive, thus inhibiting the economic growth in the region.

## Negative Interest Rates

Now the term negative interest means exactly what it says. In normal practice banks earn interest on money they put in the central bank reserve. In this particular condition, these banks will be charged by the central bank by the central bank for keeping money out there. ECB has a positive hope on their thought that the banks will stop accumulating money and will start lending more to consumers or to business or among them thus in turn it will boost the economy ( See Figure 4). If we look directly on this process it will be like if now I get a positive five percent annual interest rate on my deposit account, I put in \$100 and get out \$105 a year later.

When I get 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 one-year 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 gone for negative interest rate. In July 2009, The Riksbank, Sweden's central bank and the world's oldest central bank has cut the interest rates to minus 0.25 per cent. Not only they introduced negative interest rates but also started a program of quantities easing or printing money. The motive of The Riksbank was very much clear; they wanted to penalize banks for holding reserve deposits. The deputy governor of the Riksbank Lars Svensson announced that they will devalue the currency and peg the exchange rate. He is known as person who strongly targeted inflation. His policy was upward sloping short term price levels which were coupled with small long inflations targets. 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 liquidity trap and tackled them. The Swedish central bank undertook this policy in 2009 and it is for us to what lies in store for 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 the currency was pushed further higher. This was so because the investors started looking for safe-havens outside the already crisis hit Euro zone. The Danish market was flooded with foreign money. The negative deposit rates did not cause 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 which way it may turn**

The ECB in its press release states 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 goes on adding that since euro area inflation is expected to remain considerably below 2 per cent for a prolonged period, the ECB's Governing Council has judged that it needs to lower interest rates. The ECB has three main interest rates on which it can act: 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 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 its 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 on 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 do sit on pile excess liquid assets, thus Gesell's theory do holds good. With financial ruins, several defaults taking place one after another the attitude needs some change. Perhaps this is exactly what Draghi and his men had in mind. If a question comes: "what is best way to fight economic downturn and move away from stagnancy?" Economic downturns results from going down of demands of services and commodities. The immediate solution that we think about 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 them. The European Central Bank announced several measures to inject life into the Euro zone's 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). Something unusual and never heard before is this negative interest rate policy. It has lot f expectations and also brings forward a lot of fear along with it. Interesting 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 it can think about to bolster the economy.

The biggest concern that can come 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. They may try to do so not by explicitly charging a negative interest rate, but by paying no interest and charging a fee for account maintenance. On the other hand, if the interest rate is only slightly negative, banks may just eat the loss in order to avoid alienating customers. If they do that, however, it will cut into bank profitability. If the banks opt for the latter it is going to have not much impact on people. But, if they pass it on to the consumer side a fear of severe withdrawal cannot be ruled out. This is one of the big reasons that the E.C.B. has moved so reluctantly toward a negative interest rate and the Fed, Bank of Japan and Bank of England haven't gone that direction. People keep money in banks with the idea that the amount will increase with the interest in earns over a period of time. But, if they are asked to pay for it, someone will always be there who may pull himself or herself 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 is n the thought that from now on, these bank will reduce accumulating money in ECB's depository and will start rolling them thus making the economy move forward. But here lies a catch, 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 that it is safer for these banks to lend money in the market than keeping them safe. We have seen Sweden and Denmark not getting much benefit in 2009 and 2012 by introducing negative interest rates. Moreover, it seems that the central banks have intervended the natural economic cycle of ups and downs. In my opinion what can happen out here is that the stock markets can go haywire in to another bubble burst. On the whole a stimulated downturn can

take place worldwide. Interestingly, this must be noted that Denmark didn't 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 before the banks started to repay the money borrowed from the ECB in the long-term refinancing operations. That 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 will provide 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 can 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 may 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 option may not be attractive any more as the banks will be asked to pay for parking cash. So, the safer option

will be to be to buy bills and bonds issued by ECB.

The worst which can happen out here is that the fate can be worse than death. Prices can go up relentlessly, salaries may lose purchasing power. This is because Mario Draghi spoke about bringing back inflation rates close to 2 per cent. The conditions may hurt people who struggle for food, the cost of living may go up enormously. The idea of pushing more liquid money to the economy can do harm by lowering the value of Euro. Let us take an example, a bank say Credit Suisse lends money to Boeing Corporation for a lucrative project. What Boeing does is that it pays the money to shareholders, but they deposit the money in the banks including Credit Suisse. Now, the money is circulated back where it has started. Credit Suisse, now what they do is deposits it into the ECB. 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 them never moves out of the bank. Now the question is

how a bank can reduce its deposit in the central bank? The banks can buy government bonds or treasury bills from the ECB or Federal. Now when they buy these they pay ECB. Will the ECB deposit these Euros in commercial banks? The answer is no. So, this is one such solution of what the banks can do to avoid the penalty levied for parking cash in ECB. One distant ugly fear which is doing the round is that setting up of parallel economy or banking system. Europe has enough number tax-havens and the number of rich people is also not less. There can be a situation when few of them start their own banking system either individually or joining hands together. What can happen is such financial institutions lending money at zero percent interest or at positive rate or may even at negative rate but lower than what the commercial banks offer. Perhaps this may fancy the idea that one day such people become too strong and may take control of the economy.

## Appendix

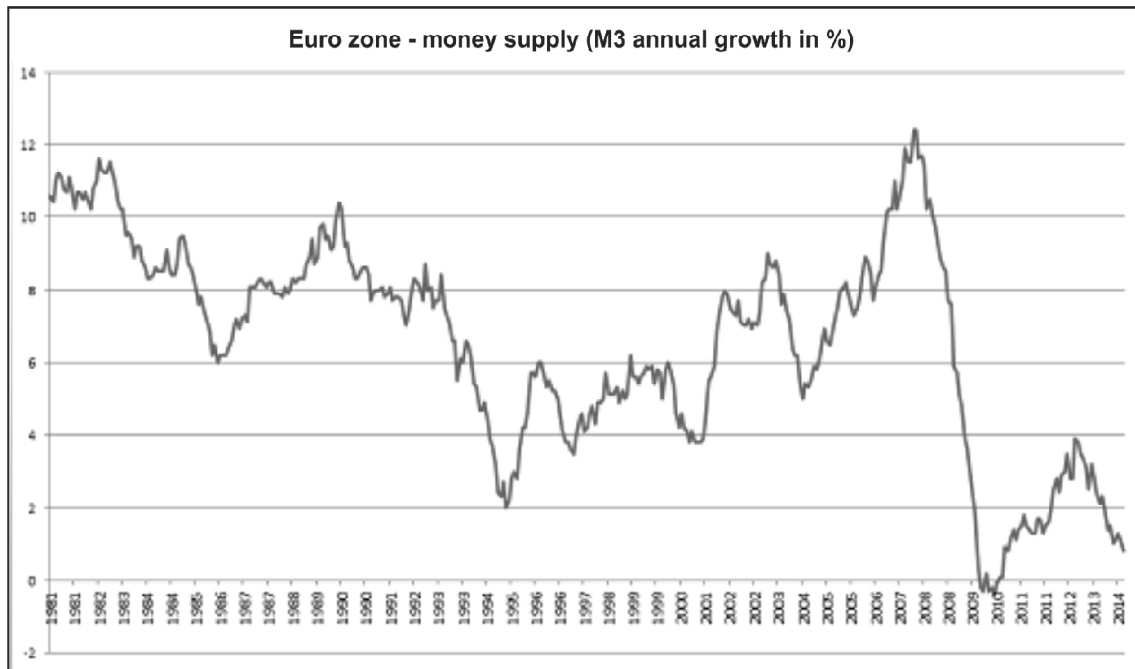


Figure - 1

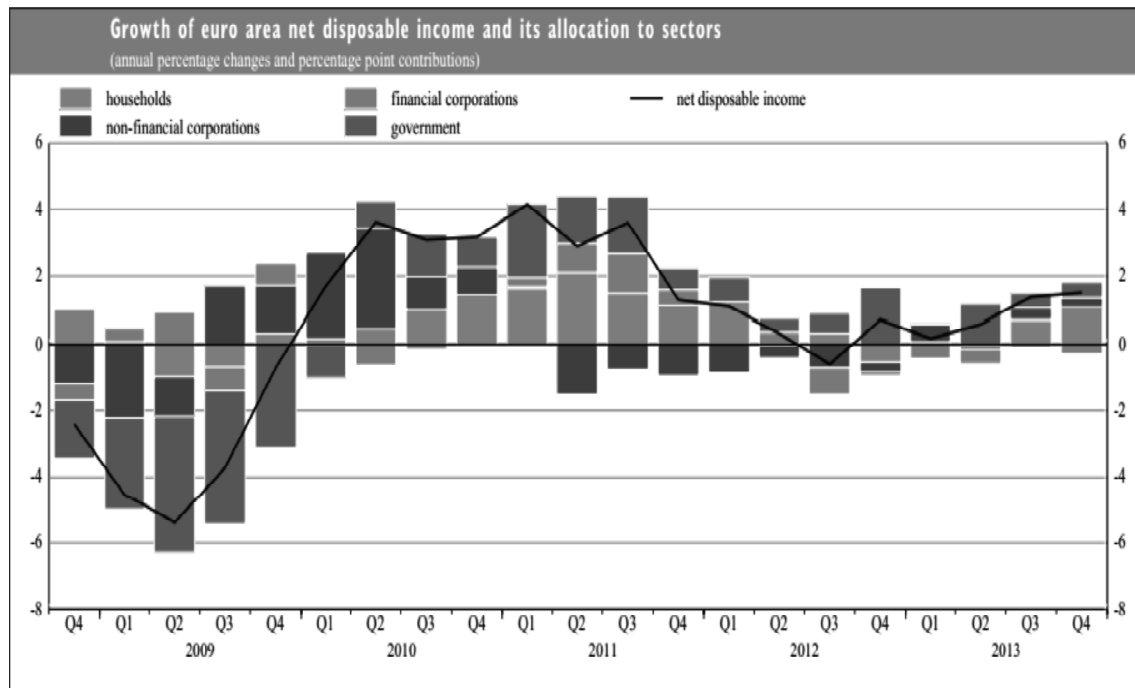
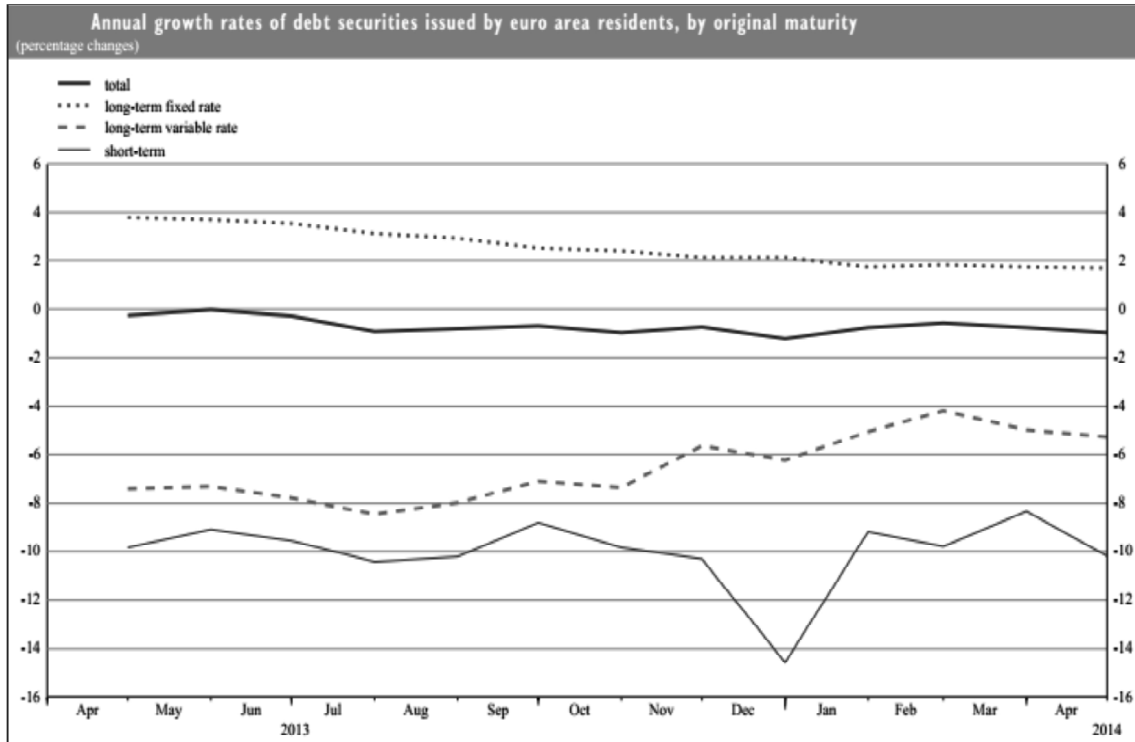
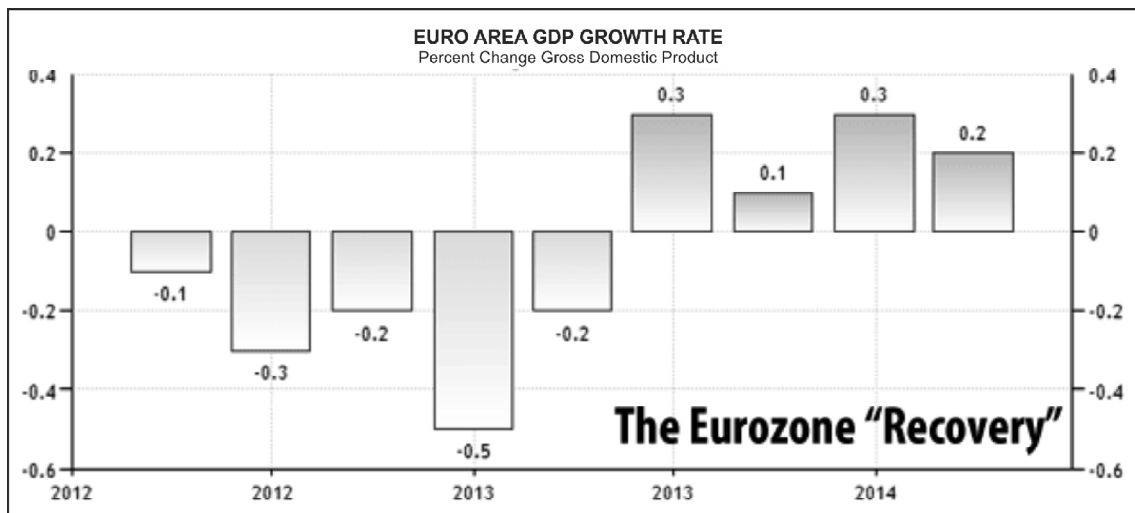


Figure - 2



Source : ECB securities issues statistics

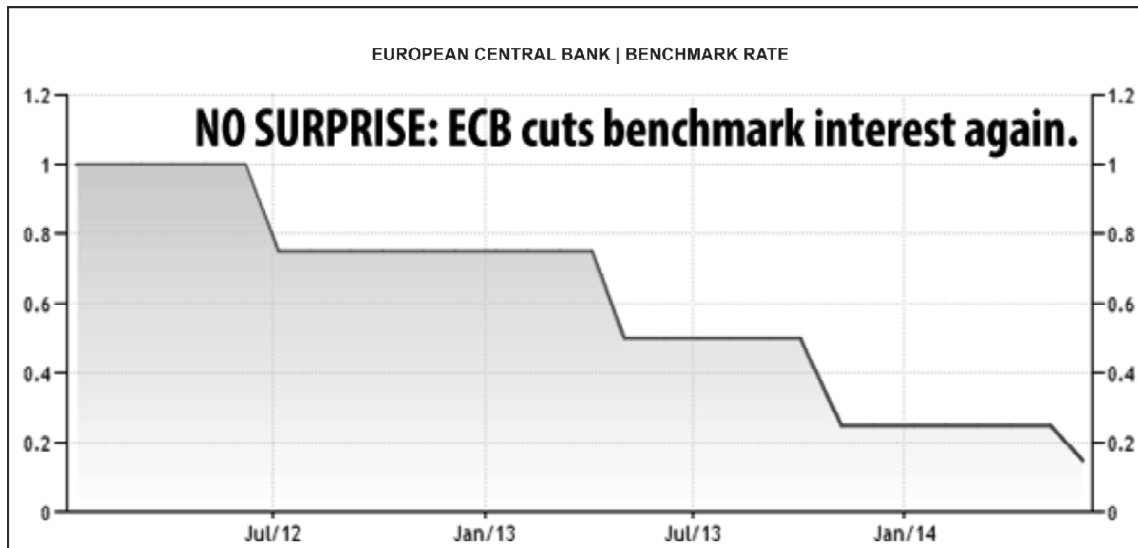
Figure - 3



SOURCE : WWW.TRADINGECONOMICS.COM | EUROSTAT

Figure - 4





SOURCE : WWW.TRADINGECONOMICS.COM | EUROPEAN CENTRAL BANK

Figure - 5

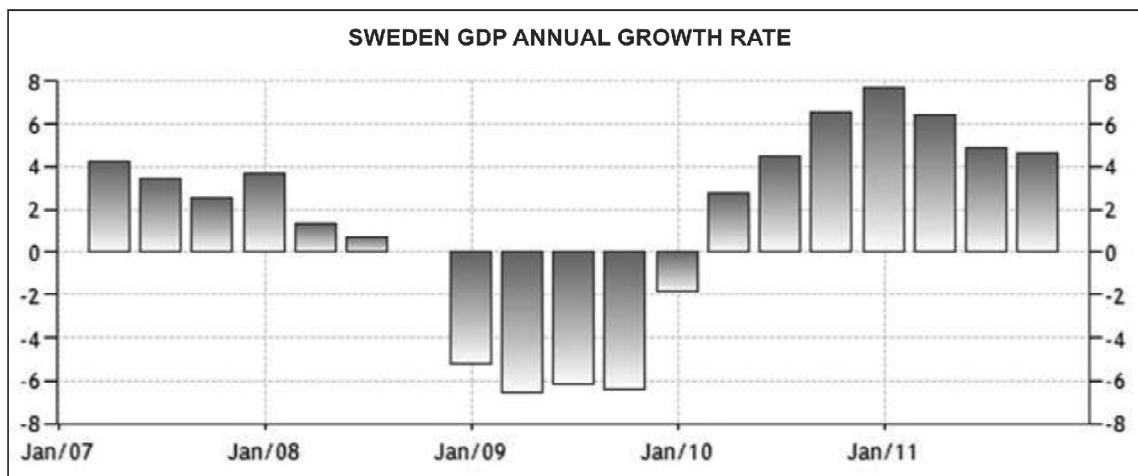


Figure - 6

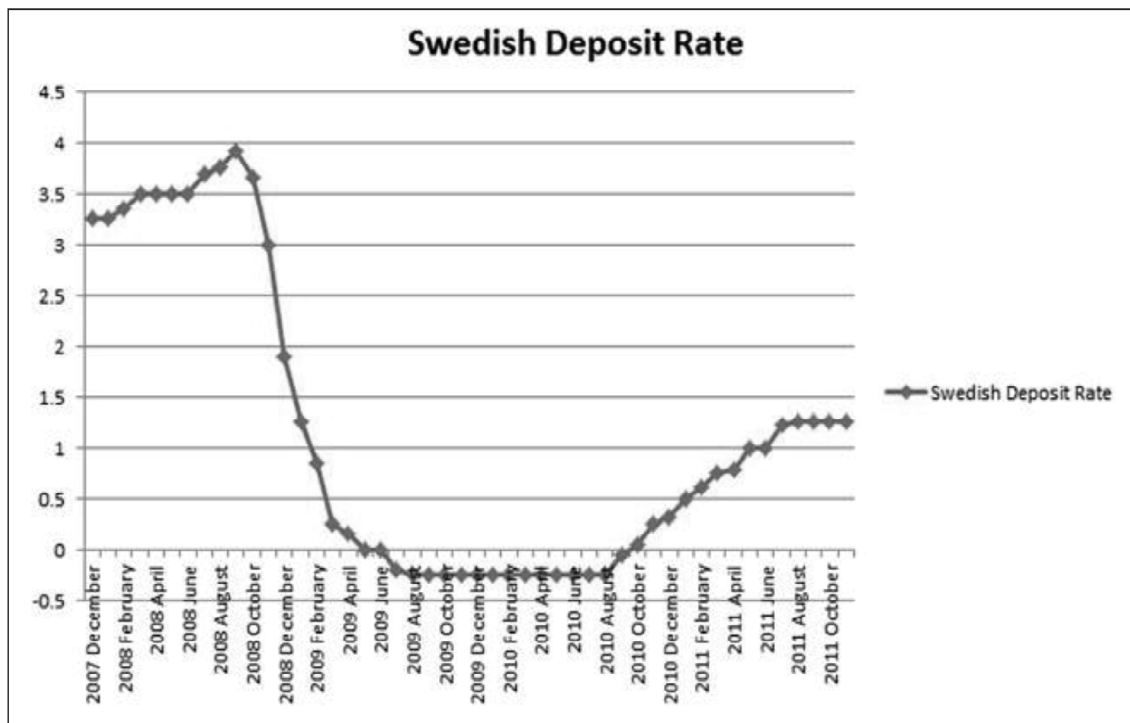


Figure - 7

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