## Cristina Camastra Matr. 067972 "IL QUANTITATIVE EASING DELLA BCE"

The object of my work is "The BCE's Quantitative Easing" discussed through three chapters.

In the first part I will talk about quantitative easing: what it is, when and how it is used. Quantitative easing is one of the ways that take place to the creation of money by the central bank and its injection, with open market operations, in the financial and economic system.

The Central Bank may resort to quantitative easing for the rescue of a credit institution, to eliminate from the market and from the banks the so-called "junk bonds" that are toxic assets with a high degree of risk or low-paid, to provide liquidity to the system when the banks do not lend and households and businesses suffer a credit crunch. Injecting liquidity, interest rates are then pushed to drop thereby encouraging people and businesses to borrow and spend on new investments. Quantitative Easing's programs are rare events that happen only during severe financial stress and economic crisis' times.

I explained two main types of econometric study of the impact of QE on bond yields. Both studies, however, are based on questionable assumptions. They have some weaknesses: first, you can indicate the possible impact of an initiative of generic Quantitative Easing, but not the impact of a specific program of QE. Second, and in a more weighted way, it is assumed that the relationships that drive the prices of the securities under normal circumstances are not changed by the economic and financial crisis that leads to the use of Quantitative Easing programs on a large scale.

There are three important cases in which this policy was adopted, in moments and situations different from each other: in the US, Japan and the United Kingdom. I compared these three cases with the European situation with the help of data and graphics from Eurostat, which is the European Union's statistical office.

In the United States three programs of Quantitative Easing were subsequently launched in the period between 2008 and 2012, the last one, the Q3 has earned the popular nickname of "QE-infinity", in December 2012 in fact, the FOMC announced an increase in the quantity of purchases without a time limit.

The impact of QE in the US does not seem to have been broad nor permanent, skeptics argue that despite the quantitative easing, European rates are already very low so European banks still prefer not to lend.

The American experience has a lot to teach. According to recent researches as those of Joseph Gagnon, former vice chairman of the Board of Governors of the Federal Reserve System, the operations of the Fed reduced the level of real interest rates in the long term, and the exchange rate of the dollar. US growth is strong today, despite the fiscal policy in 2011 is neutral or restrictive. The fact that interest rates in the long term were always lower than the rate of growth has helped to reduce the debts of firms and households without slowing investment and consumption.

In Japan the policy of QE has been used to counter the deflation that hit the Japanese country at the turn of the nineties and two thousand years. The central bank of Japan hoped thereby to push through the country from a situation of deflation to inflation, counting not to exceed the optimum level of 2% inflation. The amount of the purchases was so broad that it planned to having to double the supply of money. This policy goes by the name of Abenomics, a neologism composed from the English economics and from the surname of the Japanese Prime Minister, Shinzo Abe. This program would lead to an increase of 1.5% of public expenditure, reaching 11.5% in the public deficit.

In the immediate term, the benefits of the Japanese economy were indisputable, but after this first jump, the Nikkei index, which contains the titles of the 225 companies listed on the TSE (the Tokyo Stock Exchange), has experienced a sudden bearish period between May and July 2013 but remains positive compared to the price reached in April 2013.

More or less in the same period, the Bank of England, after a long period of economic recession, even after some initial reluctance to engage in credit easing or QE, has announced plans for the purchase of securities and in January and in March 2009 decided to start a QE program.

Summing up the evidence on the impact of QE on interest rates on government bonds, some event studies (based on time series) provide that initial big purchase programs (USA and UK QE1) did reduce rates of government bonds, even if the estimates of the effect size differ. Econometric researches tend to find smaller effects. This may be because there is a strong initial response to announcements of programs that QE then winds of time, an effect that can be detected through econometrics but that event studies do not emphasize. The econometric models estimated on historical data and used to infer the impact of QE effects estimate more than models based on data contemporaries. This might suggest that stock prices are less sensitive to the policies in times of economic and financial crisis, in which case estimates based on historical data should be treated with some caution.

Unlike the Fed and the BoJ, the European Union, and in particular the euro area, through its monetary and economic institutions, has kept interest rates relatively higher. He also entered into the system less liquidity and has not implemented those expansionary policies that the particular economic situation of crisis would instead require such as the issuance of bonds by the European Central Bank to finance productive investment, or a program to buy debt sovereign Member States in difficulty. Moreover, the EU has done nothing in terms of policies on the demand side, on the contrary has introduced a series of rules, through intergovernmental agreements at Community level, more stringent austerity, budget and public spending. As a result of these policies, the results were as follows: higher

unemployment and lower economic growth (or stagnation) in Europe, almost the opposite of the economic and employment growth recorded in Japan and the United States.

The most frequent criticisms concern the fact that QE could be lead to a devaluation of the euro. This means that goods exported by European countries will cost less thus leading to an increase in the level of exports, but at the same time the euro will have a lower purchasing power: some goods may cost more, for example, the oil whose price is in dollars and then in front of a devaluation its cost for us euro zone countries will increase due to the increase in the exchange rate euro-dollar. Consumption, particularly in countries that import many goods, may be affected, especially if the increase in inflation will not be matched by an increase in employment. Furthermore, the ECB does not provide for the purchase exclusively from financial institutions, but rather by the governments of individual Member States, only 20% of the risk will be borne by the ECB, while the rest borne by the central banks.

The fact that the governments of the individual member states to participate directly leads us to what is the core of the opposition of Germany, or the so-called "moral hazard". The Bundesbank's president explained his opposition to the hypothesis that the ECB follows the Fed on the road of QE because in the US there is a central state that issues sovereign bonds that are then evaluated low risk rate while in Europe we do not have one central state. The European Central Bank is the only central bank in the world responsible for monetary policy, inflation and currency of 19 nations with a different credit from each other, the crux of the matter is once again the credibility of the monetary union in the absence of a political union, and in particular the legality of a tax-free co-responsibility of democratic control.

In the second part of my work I explained how the ECB arrived to the Quantitative Easing program. This passage took place through various and long steps, the European Union has been accused of having arrived too late and badly to this policy because, according to critics, now inflation expectations have already lowered the yields on government bonds. In normal circumstances, the principal policy instrument of the ECB refinancing operations, direct loans to banks against eligible collateral to two deadlines . On October 2008, the spread hit a historical high of 198 basis points, reflecting the strong increase in perceived risk. The ECB responded to this last level spreads, on October 2008, with his first measure of QE: The ECB announced it would give as much as required by the banks at a fixed rate, as banks provided collateral, extending also a list of eligible collateral.

Given the persistence of the credit crunch and the depletion of conventional monetary policy (lowering interest rates to zero, negative interest rate for deposits with the ECB itself), was regarded with increasing consensus the decision of a real quantitative easing in the euro area.

On 22 January 2015, after the first annual meeting of the Commission, was announced the launch of full Quantitative Easing. The Draghi's program provides purchases 60 billion per month, with a horizon not temporally conditioned, but anchored to the achievement of economic results, expressed in terms of an actual rate of inflation, it will take more than four years to implement a program similar to the Fed one, the result will be an increase in the monetary base, with the goal of generating an increase in the level of nominal income, that is, in part, inflation and the GDP in real terms.

Based on how things went historically in other countries, you can assume different effects that would have the Quantitative Easing in Europe thanks to the increased availability of money, the interest rates that European countries provide for their titles to those who purchases are expected to decline, thus helping to create less new debt in the concerned countries. Moreover, when the central bank buys government bonds, collects the interest on these bonds and then its profits increase more than proportionally, this is because the costs remain at the same level while revenues grow. Banks that have greater liquidity may make loans more easily at interest rates lower. European governments could then afford to spend more money, increasing public spending on various activities related to the short term, such as for policies to encourage and stimulate employment and consumption, and the medium to long term, for example, by investing money in building infrastructure such as roads, railways and technologies for the improvement of telecommunications.

The third chapter is about the comment of various institutes as the European Central Bank, the Bank of Italy and the Institute of International Finance and criticism on the newspapers both from journalist and politicians, in fact in the aftermath of the announcement of the launch of the Draghi's "bazooka" various newspapers, both national and foreign, have been deployed for or against the choice to follow this policy.

For the part in favor of this program I mentioned for example Christine Lagarde, the director general of the International Monetary Fund, who said that the actions of the ECB will help to raise inflation expectations and reduce the risk of a prolonged period of low inflation, but it is central that are supported by extensive and timely policy actions. Indeed reforms are needed by the United States, primarily Italy and France, a legislative package of the European Commission to open the EU internal market.

Draghi also asked that any and necessary structural reforms are implemented quickly and efficiently. Monetary policy helps to support economic activity, but it is crucial that structural reforms are implemented quickly, in a credible and effective: this will not only increase in the future sustainable growth of the euro zone, but will also serve to increase investment. For the president of the ECB therefore speed is essential and above all it is essential that reforms, in the future, are implemented as part of a "true economic union", the governments of the euro area countries need to redouble their reform efforts to create a "genuine" economic union. Following the official launch of the Quantitative Easing, Draghi underlines: "When the lack of reforms leads to lasting divergences within the monetary

union, you come to the spectrum of the output of a country, and for this will eventually suffer all member countries ».

For the Institute of International Finance the access to finance for small and medium enterprises, that in Europe are traditionally quite dependent on banks which constitute their main source of funding, requires the expansion of funding sources, including in particular the equity financing. With QE banks would be better prepared to offer credit for small and medium enterprises that have been able to raise new equity capital through the most diverse forms of financing. More generally, adequate access to both the debt to equity financing would help to enable small and medium-sized enterprises to increase their potential and become more involved in research and development.

An argument reported by various newspapers especially foreigners regards the duration of the operation. This, as announced, will take very long time to implement and will surely lead early on the government bond yields of even lower levels than current ones.

The Economist in the aftermath of the announcement of the launch of the QE program in Europe says "better late than never", as Europe who often looks to the new continent to tap into new trends and strategies innovative, in this case there has been thinking maybe more than they should on the possibility of a program based on the model used to QE by the Fed, which at this point looks like a real last resort, the latest idea that after the failure of policies austerity should try to save the euro area's economy from stagflation.

Summing up, after an explanation of the concept of quantitative easing, what it is, how it operates and in which cases it is used, in the first part I examined the three great examples of the United States, Japan and the United Kingdom, to highlight the successes and failures and to compare these three cases to the European experience. After dealing with the experiences of these, I reported about the opinions of leading scholars such as new taylorians and the keynesian Krugman, and then I explained what constitutes the ECB's Quantitative Easing that has been called the "bazooka".

In the last part, instead I discussed the opinions of commentators and politicians who in turn are supporting or in disagreement with this operation.

Since last January, and from now on in the months that follow, and then again in the following years, we are and we will be waiting to see what will be the outcomes and effects of this European Quantitative Easing. Will be criticisms turn out prophetic or perhaps maybe the supporters of this program will be able to boast of having scored the shot that will help Europe to face and rather even win this crisis? Because the focus it is and remains as out of the crisis, it is imperative that this be exceeded even as regards youth's employment.

In old Europe there is an air of distrust and general resignation, all this makes you lose the aspiration to that forward momentum that is the stimulus we need to react and counter this crisis we are talking about constantly and that oppresses us for years now.