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ARE BANKS TOO PESSIMISTIC ABOUT THE ECONOMY? A PUBLIC AND PRIVATE APPROACH

Abstract

The volatility in monetary and real economy creates instability in banking sector, more yet, within the global market where they develop their financial activities. The savings as resources to commercial bank activities has had lower returns and, not less important, higher instability provoked by several reasons: imperfect market competition, public debt financing, higher risk, and also a deregulated sector. This reality, convince us for a public and private approach in order to reduce these problems, and also to suggest a perfect market competition as a way to get the Pareto efficiency in private financing market, where we need higher number of banks, but not less and big banks through the mergers and acquisitions (M&A). Then, we must consider the financial services as a public good, where savings must be protected through regulation, as is the case of the European Supervision Mechanism (ESM), and also avoiding an imperfect market competition promoted by financial innovation and capital mobility, which have been implied interest rates close to zero. This reality creates a negative financial externality provoking less confidence in the financial system for both: *savings* and *borrowers*.

Keywords: Growth rates, crises, regulation and crowding out effect

JEL: D14, E51, G21, H44

1. Introduction

The banks are essentials as counterparties to the Central Bank, when they buy or sell government securities, and also have an important role as source of financing the real economy, mainly in bank-based systems where the interest rates imply a big effect on economic growth by the amount of investment. The financial crises around the world do not save the advanced economies. Lower labour cost in emerging economies and new possibilities offered by global market, decreases the economic dynamic in advanced economies, even with lower price to capital promoted by the financial markets. However, the difficulties with sustainability of social systems and the public deficits and debt have been accelerated their financial problems. The banks as main intermediaries, to buy and to sell government securities, has been reduced the liquidity to finance the firms, provoking also lower returns to the families, even in developed economies with more inflation control. Considering the regulation as positive, namely through the supervision by the Stress Test, in order to minimize the risk of financial activity, this rule reduces the financial activity particularly the capacity of money supply by the commercial bank. The result has been mergers and acquisition where the market movement in leadership and governance reduces the confidence, and then, cannot be the better solution for the stability of the financial sector. Furthermore, the savings as the main resource of commercial bank stability are essentially local, and the business opportunities, are each more global. Then, we can conclude that perfect market competition must be the answer to reach Pareto efficiency in banking sector, in order to increase the growth rates and create new jobs, that is, higher number of banks, and not less and big banks. This reason is reinforced if we consider a decreasing role of the banks in market financing and an increasing in government financing, changing their main economic function. However, the banking sector as money supplier (public goods) is closer to Central Banks than to non-banking sector. That is, the first two institutions more than revenues, as is the case of non-banking sectors, needs to guaranty the financing sustainability of the economies. Then, in order to reduce the instability of this complex, interdependent and global market, the financial regulation must be considered all financial activities, as implicitly is suggested by Ben Bernanke (2010).

2. A New Context of Macroeconomic Policy

The economic and financial globalization create a new economic and monetary context offering new opportunities to new economies such as the Central and East European Countries and also the bigger emerging economies as Brasil, Russia, India and China that has been registered bigger growth rates during the last years. But the developed economies registered problems both, in real economy with low and even negative growth rates and, also, in financial economy with financial crises deepening their economic problems. Lower inflation and interest rates are not enough to promote their economic development, in order to sustain the welfare state which is pressured by new migrations.

2.1 Lower Economic Growth Rates

If we compare the evolution of growth rates between 2009 and 2014 we can see very low values, as we can confirm through the table 1. In 2009, the generality of the countries registered negative growth rates, being a recession time even in the US economy with -2.8; -4.4 and -5.5 in EU and Japan, respectively.

Table nº 1: Growth Rates, 2009-2014

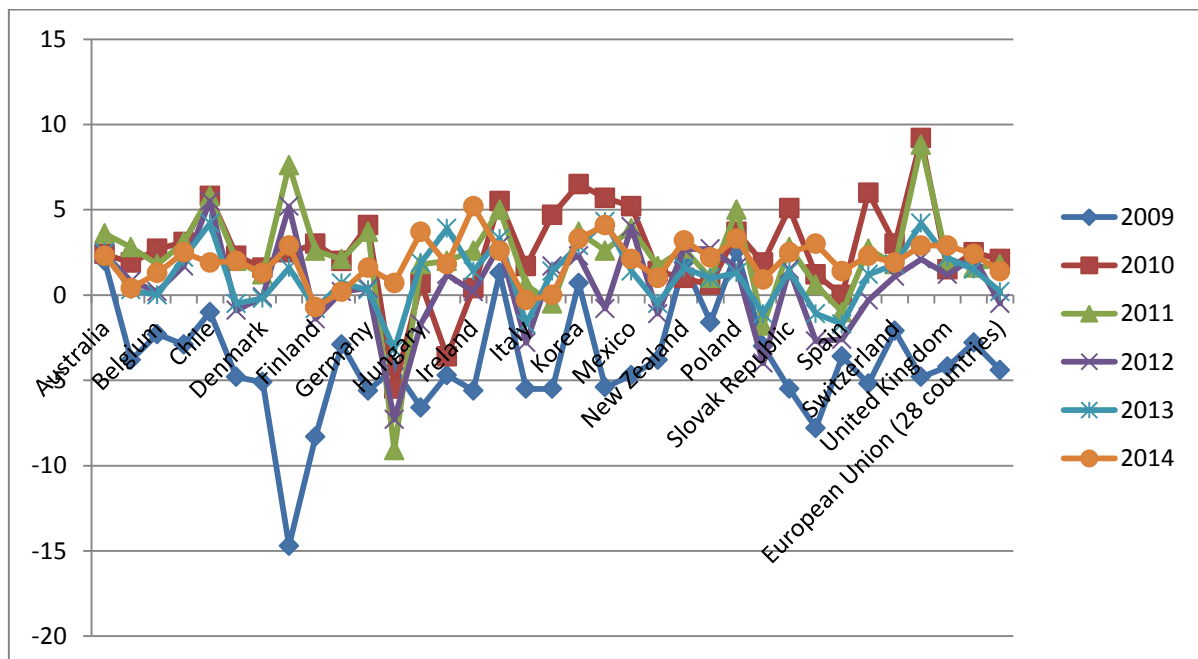
	2009	2010	2011	2012	2013	2014
<u>Australia</u>	2	2,4	3,6	2,4	2,5	2,3
<u>Austria</u>	-3,8	1,9	2,8	0,8	0,3	0,4
<u>Belgium</u>	-2,3	2,7	1,8	0,2	0	1,3
<u>Canada</u>	-2,9	3,1	3,1	1,7	2,2	2,5
<u>Chile</u>	-1	5,8	5,8	5,5	4,2	1,9
<u>Czech Republic</u>	-4,8	2,3	2	-0,9	-0,5	2
<u>Denmark</u>	-5,1	1,6	1,2	-0,1	-0,2	1,3
<u>Estonia</u>	-14,7	2,5	7,6	5,2	1,6	2,9
<u>Finland</u>	-8,3	3	2,6	-1,4	-0,8	-0,7
<u>France</u>	-2,9	2	2,1	0,2	0,7	0,2
<u>Germany</u>	-5,6	4,1	3,7	0,4	0,3	1,6
<u>Greece</u>	-4,3	-5,5	-9,1	-7,3	-3,2	0,7
<u>Hungary</u>	-6,6	0,7	1,8	-1,7	1,9	3,7
<u>Iceland</u>	-4,7	-3,6	2	1,2	3,9	1,8
<u>Ireland</u>	-5,6	0,4	2,6	0,2	1,4	5,2
<u>Israel</u>	1,3	5,5	5	2,9	3,3	2,6
<u>Italy</u>	-5,5	1,7	0,6	-2,8	-1,7	-0,3
<u>Japan</u>	-5,5	4,7	-0,5	1,7	1,4	0

<u>Korea</u>	0,7	6,5	3,7	2,3	2,9	3,3
<u>Luxembourg</u>	-5,4	5,7	2,6	-0,8	4,3	4,1
<u>Mexico</u>	-4,7	5,2	3,9	4	1,4	2,1
<u>Netherlands</u>	-3,8	1,4	1,7	-1,1	-0,5	1
<u>New Zealand</u>	1,9	1	2,7	2,7	1,6	3,2
<u>Norway</u>	-1,6	0,6	1	2,7	1	2,2
<u>Poland</u>	2,6	3,7	5	1,6	1,3	3,3
<u>Portugal</u>	-3	1,9	-1,8	-4	-1,1	0,9
<u>Slovak Republic</u>	-5,5	5,1	2,8	1,5	1,4	2,5
<u>Slovenia</u>	-7,8	1,2	0,6	-2,7	-1,1	3
<u>Spain</u>	-3,6	0	-1	-2,6	-1,7	1,4
<u>Sweden</u>	-5,2	6	2,7	-0,3	1,2	2,3
<u>Switzerland</u>	-2,1	3	1,8	1,1	1,8	1,9
<u>Turkey</u>	-4,8	9,2	8,8	2,1	4,2	2,9
<u>United Kingdom</u>	-4,2	1,5	2	1,2	2,2	2,9
<u>United States</u>	-2,8	2,5	1,6	2,2	1,5	2,4
<u>European Union (28 countries)</u>	-4,4	2,1	1,8	-0,5	0,2	1,4

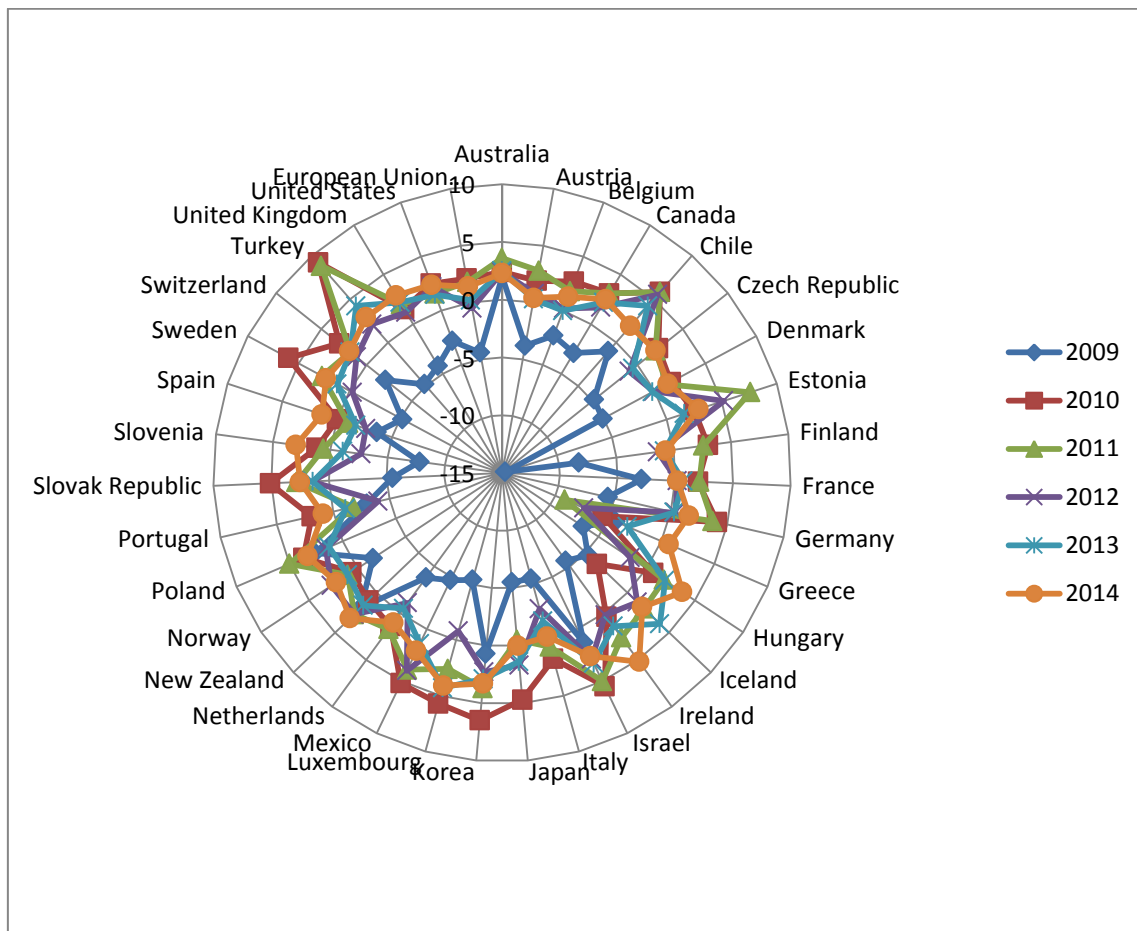
Source: OECD, 2016

Comparing the values registered in 2014, the situation is much better, however Japan has a stagnation with zero growth rates, but comparing with the values of 2009, the situation looks better: The EU28 register 1.4 and the US with 2.4.

Graft nº 1: Growth Rates, 2009-2014



Graft nº 2: Growth Rates, 2009-2014



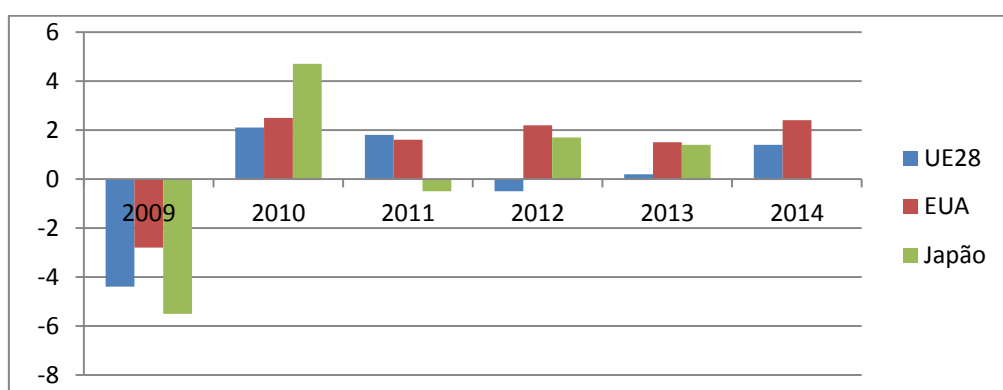
2.2 Growth Rates in US, EU28 and Japan

If we compare the growth rates in the main developed economies we can see also the lower values in all of them, from 2009 to 2014. The table 2 shows us the volatility in all these economies during this period of analysis, where we can see the higher value in 2010, with 2.1; 2.5 and 4.7 in EU28, US and Japan, respectively. The table 2 shows us also that the worst year was 2009, with -4.4; -2.8 and -5.5, respectively.

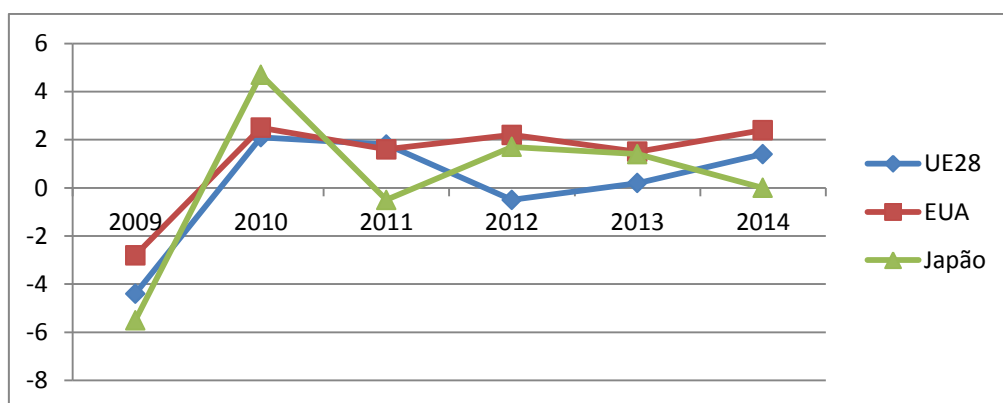
Table nº 2: Growth Rates EU₂₈, US and Japan (2009-2014)

	2009	2010	2011	2012	2013	2014
EU ₂₈	-4,4	2,1	1,8	-0,5	0,2	1,4
US	-2,8	2,5	1,6	2,2	1,5	2,4
Japan	-5,5	4,7	-0,5	1,7	1,4	0

Graft nº 3: Growth Rates, EU₂₈, US and Japan 2009-2014



Graft nº 4: Growth Rates, EU₂₈, US and Japan 2009-2014



Through the graft 3 and 4, we have a better way to compare the evolution of the growth rates between main economies like the US, EU28 and Japan. The US register the better values in economic growth, only in 2011 the EU28 registered better value than US with 1.8; and US and Japan register only 1.5 and -0.5, respectively. If we consider some emerging economies, as is the case of China, the values is much higher registering 14.2% and 7%, in 2014 and 2105, respectively.

We ca conclude that the economic growth rates registered negative values during the last years, particularly in 2009, with negative values in the generality of the OECD countries, namely Japan, EU28, UK, US and Switzerland with -5.5, -4.4, -4.2, -2.8 and -2.1, respectively. More recently, in 2014, the growth rates are yet low, and some of them negatives as are the cases of Finland and Italy with -0.4 and -0.3, respectively

3. The World Trade and IMF Currency (SDR Basket)

The development of trade is a way to economic growth creating jobs by increasing the opportunities for trade and investment with the rest of the world. The global economy enlarge the partner of the international trade and create new opportunities to trade and investment for all: advanced economies, emerging economies and developing economies. The challenges are stronger for all of them including the advanced economies that need to management the economy with less advantageous in real side, as labor costs; and the emerging economies with more restriction in financial side; the financial market less developed.

3.1 Trade in Goods and Commercial Services

The European Union is in prime position within global trade, being the biggest player. It is considered an attractive market to the business with 500 million consumers with power purchasing for quality goods (€25 000 GDP per head), with transparent rules and regulations; being considered the most open market in the world as a single market, and also, to developing countries. It is itself the biggest export market for around 80 countries, and imports more from developing countries than the USA, Canada, Japan and China put together). EU28 account for 16% of world imports and exports (European Commission, 2014).

Table 3: Trade in goods and commercial services 2013 (€ billions)

Country or region	Imports	Exports	Trade Balance
EU	2188	2415	Positive
United States	2079	1688	Negative
China	1716	1817	Positive
Japan	750	648	Negative
South Korea	468	506	Positive

Source: Eurostat, WTO

If we consider the world GDP, the industrialized countries represents more than 64% where EU, US and Japan are the biggest players with 27.4%, 25.8% and 6.8%,

respectively (EEAG Report, 2016). In the same source we also can see that, China is classified as new industrialized country and represents 15.4% of the world GDP followed by India and Russia, with only 3.1% and 2.8, respectively.

3.2 The Evolution of the IMF Currency (SDR Basket) %

The world position of the main economies, as showed the table 3, is an important indicator to the IMF currency: the Special Drawing Right (SDR). If we consider the evolution of the IMF currency between 2010 and 2016, we can see some adjustment in all traditional currencies as dollar, euro, pounds sterling and Japanese Yen. The last adjustment, in 2016, includes a new currency in the basket: The Chinese Renminbi with more than 10% of the SDR basket, as shows the table 4.

Table 4: The Evolution of the IMF Currency (SDR Basket) %

<u>2005</u>	<u>2010</u>	<u>Δ</u>	<u>2016</u>	
44.0	41.9	-2.1	41.73	dollar
34.0	37.4	3.4	30.93	euro
11.0	11.3	0.3	8.09	pounds Sterling
11.0	9.4	-1.6	8.33	Japanese Yen
			10.92	Chinese Renminbi

Source: ECB, 2011:17 and IMF, April 6, 2016: 2

4. Lower Inflation and Higher Unemployment Rates

The ECB has the price stability as main goal. The EEC, 2016 refer as objective of monetary policy: “To maintain price stability is the primary objective of the Eurosystem and of the single monetary policy for which it is responsible. This is laid down in the Treaty on the Functioning of the European Union, Article 127 (1).”

However, the economic situation needs more from the monetary authorities in order to get better results in monetary and also in real side of the economy. In this sense, the ECB add the following: "Without prejudice to the objective of price stability", the

Eurosystem shall also "support the general economic policies in the Union with a view to contributing to the achievement of the objectives of the Union". These include inter alia "full employment" and "balanced economic growth".

Then, balanced economic growth and full employment are also added as goals of the eurosystem, but it is emphasized that: "The Treaty makes clear that ensuring price stability is the most important contribution that monetary policy can make to achieve a favourable economic environment and a high level of employment." The **benefits of price stability** are referred as substantial maintaining stable prices on a sustained basis is a crucial pre-condition for increasing economic welfare benefiting the economy as a whole (families and firms) and the growth potential of an economy that is positively correlated with price stability. Then, make sense that the **natural role of monetary policy** in the economy is to maintain price stability. The economic results in real side (economic growth and unemployment rates) must be complemented by the monetary side which affects the real activity, only in the shorter term. But ultimately, it can only influence the price level in the economy, allowing an inflation control, as shows the graft 5 in the euro zone.

Graft n° 5: Inflation Rate (HICP) Euro Zone, 2000-2016



Source: Eurostat

However, the difficulties in real side pressure something more from the monetary side, considering that the Eurosystem should also take into account the broader economic goals of the Union, namely, avoiding generating excessive fluctuations in output and employment if this is in line with the pursuit of its primary objective. The better way to improve the real side of an economy is by using their right channels, commonly called as transmission mechanisms. The banks are the better way to improve the real side allowing lower cost of the capital factor to the economies. The international competition in labour factor has its disadvantages to more developed economies, and then, the cost of capital factor is one where the monetary authorities can work actively using the transmission mechanisms.

5. LRPC, Crowding Out Effect or Both?

The goal of price stability has been more a goal than a reality. If we look to the graph 5, that shows the evolution of inflation (HICP, in euro area) between 2000 and 2016, there is stability until the crisis, after that, the values are much more instable diverging from 4% to -0.5%, between 2008 and 2010. Today the values of inflation are lower than the reference value close to 2% that is, reaching only 0.6% and 0.0%, in 2014 and 2015, respectively. On the contrary, the values of unemployment are very high registering in euro zone 11.6% and 10.9%, in 2014 and 2015, respectively (EEAG, 2016).

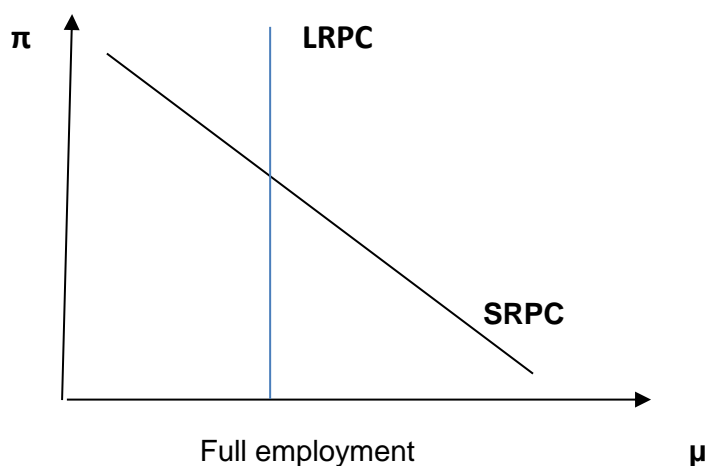
The US shows relatively more stability, with values diverging from 1.6% and to 0.1% to CPI inflation; and from 6.2 % to 5.3% to unemployment rate, between 2014 and 2015, respectively. The Japanese economy looks better, mainly in unemployment rate with 3.6% and 3.4%, in 2014 and 2015, respectively; and inflation change from 2.7% to 0.8%. The negative short run correlation between inflation and unemployment, known as Phillip`s Curve, is yet a reality, particularly within the euro zone, but it is important to consider also the Long Run Phillip Curve (LRPC).

5.1 The Long-Run Phillips Curve (LRPC)

As Luca Benati (2015) refer, the long-run Phillips curve describes the alternative combinations of inflation and the unemployment rate that an economy can achieve in equilibrium, playing a central role in monetary policy. But, if LRPC is vertical there is no

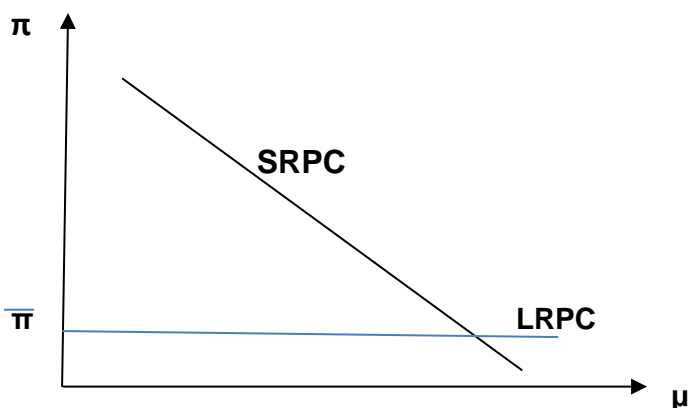
long-run trade-off between the two variables, and then the central bank must only keep low and stable inflation. This is true until financial crisis. The Luca Benati (2015) proves a vertical slope for the LRPC in several economies including US, Euro area and UK, using data from 60's to 90's years. Considering a more recent data we can see a relatively stable and lower inflation and, a permanent higher unemployment rates which is driving the monetary authorities as ECB. However, a balanced economic growth and full employment are also as relevant goals, that is, including also the real side of the economy. If the Phillips Curve is vertical in the long-run that means, that there is full employment at any level of inflation, as shows the graft nº 6.

Graft 6: LRPC



The inflation has been stable close to 2%, on the other hand, the unemployment rate also stabilize, but at higher values, around 10%, that is, the unemployment rate stays free and the inflation rate has been is controlled by the ECB. We conclude that the LRPC is not as a vertical curve, but as a horizontal curve, as shows the graft 7.

Graft 7: LRPC within European Context



The inflation rate is constant, in the long run, at any level of unemployment rate. However, the capital, as essential to monetary side, has been registering higher mobility and also lower prices (interest rates) with the financial globalization. The oil, as basic component to the real economy, also has been decreasing its prices significantly. Both these factors contribute to a better control of inflation rate, namely registering values lower than 2%, as it occurs nowadays. Additionally, the real side reduces its pressure over the prices due to the wages stability, provoked by the high level of the unemployment rates. However the values of the interest rate have been pressured by the public debt, provoking the *crowding out effect*.

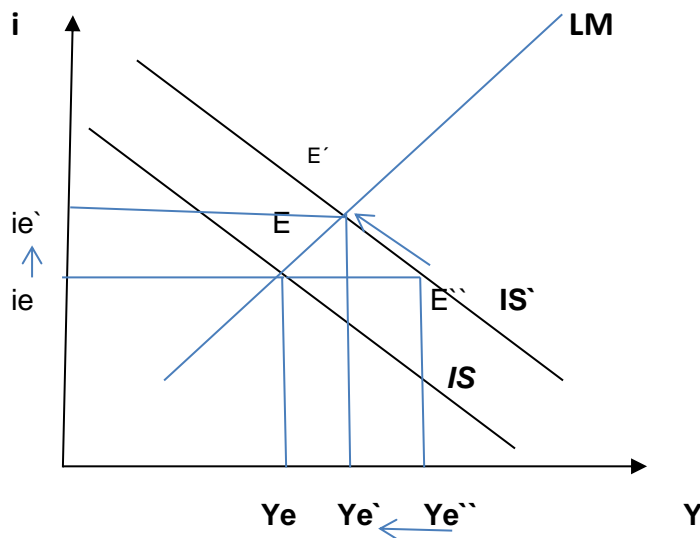
5.2 The Crowding Out Effect

The crowding out effect increases the interest rates and reduces the economic growth. The economies with persistent budget deficit captivate a share of liquidity available in the economy that traditionally is applied essentially by firms through the bank loans, that is, the banks make loans to firms using the savings of the families, it is being also the main channel of transmission mechanism of the monetary policy of the Central Bank which control the interest rate reference. The public financing can be done by Federal Funds, in short run, or by 10 year Treasury securities, in long run.

This source of financing can be international but the main liquidity comes from domestic economy, through the commercial banks being the main source of financing in the euro area, where the financial system is bank-based, and not market-based as is the case of the US and Japan. Another relevant point is when the value of the interest rate, as returns 10 years Treasury securities, is lower than inflation rate which implies the investors are accepting a negative real rate of return, as refers Rosengren (2016), which means the Fisher equation also becomes to stay aside in this new context. But, within a recession time the values of inflation also decrease, recompensing the investors with positive real interest rates.

Then, there is the crowding out effect: the public investment pressures the interest rates and reduces the private investment, and then, the economic growth, as we can see through the graft 8.

Graft 8: The Effects of Financing the Public Expenditures



The First effect: $\Delta^+ G \Rightarrow \uparrow Y \Rightarrow IS'$

The Second effect that means the crowding out effect: $\Delta^+ G \Rightarrow \uparrow i \Rightarrow \downarrow I \Rightarrow \downarrow Y \Rightarrow IS''$

$\Delta^+ G \Rightarrow \left\{ \begin{array}{l} \uparrow i \\ \downarrow Y, \text{ that is from } Y_{e''} \text{ to } Y_{e'} \end{array} \right.$

This *crowding out effect* is a contribution to explain lower growth rates in the developed economies, in the short run, but we need to add their long run consequences: the public indebtedness. This reality is referred in recent literature about public debt and economic growth in advanced economies, as is the case of the Ugo Panizza and Andrea Presbitero (2013).

To a better understanding of the consequences of the public debt in advanced economies, we must see the table 3, where we show the dimension of the public debt (as % of GDP) in these economies.

It is also relevant to say that the main economies such as US, EA and Japan, register very high values in public debt (as % of GDP): 109.8, 100.6 and 214.3, respectively, as shows the table 5.

Table nº 5: General Government Debt (%GDP), 2012

	<u>Gross debt</u>	<u>Net debt</u>	<u>Difference</u>
Australia	29.3	7.9	21.4
Austria	83.1	47.9	35.2
Belgium	103.2	82.5	20.6
Canada	85.8	34.9	51.0
Denmark	61.0	7.3	53.7
Finland	62.3	-51.4	113.7
France	105.1	66.4	38.7
Germany	87.6	50.3	37.3
Greece	181.3	145.7	35.6
Iceland	124.7	48.7	76.0
Ireland	123.2	79.9	43.3
Italy	127.0	98.1	28.9
Japan	214.3	134.3	80.0
Luxembourg	29.8	-40.8	70.7
Netherlands	82.5	42.6	39.9
New Zealand	51.3	14.7	36.6
Norway	44.7	-165.3	210.0
Portugal	125.6	82.5	43.0
Spain	93.8	58.0	35.7
Sweden	48.6	-19.9	68.5
Switzerland	39.5	-3.1	42.6
United Kingdom	105.3	73.0	32.3
United States	109.8	86.5	23.3
Euro area	100.6	63.3	37.4
Total OECD	108.7	69.6	39.1

Source: OECD estimates in Ugo Panizza and Andrea Presnitero, 2013.

6. Financial Systems, Crises and Regulations

The economic growth demand liquidity to the transaction, payments and reserves. The following equation resumes all these money functions: $L = kY - hi$, where L is the money demand; Y income with a positive correlation and i is the interest rate with a negative correlation, explained by an decrease in investment as the answer to an increasing movement in the interest rate. The banks are the financial firms that trade currencies in order to finance the economy as a whole by paying a passive interest rate to families as main savers and by active interest rate payed by non-financial enterprises.

This relevant role of the banks as financial intermediaries to any other sector implies a special attention in all economies; Being the financial system bank based or market based, means that a system where the predominant is the alternative financing by the market. The main economies have different systems, the US and Japan both have predominantly *market-based*, and the European Union is predominantly *bank-based*.

The economic integration improves the world transactions and increases financial dynamics as a whole where banks are non-replaceable directly or indirectly. The financial innovation improves the financial business allowing the more openness of the banks (enlarging to several financial services) and also higher risks. Then the financial crisis into the developed economies is a less monetary crisis, but a more bank crisis and also debt crisis. This last one crisis is very interrelated, particularly in Euro area, due to the banks being the main holders of the domestic public debt. Nowadays, with financial globalization there are several international financial institutions that take active part in this financing.

All these reasons also explain the interdependence of the economies in real and financial point of view. If the problem is global, so needs to be the answer. Thorsten Beck, Elena Carletti and Itay Goldstein (2016) underlined changes in the nature of financial intermediation over the past decade, with it being more market-based, more interconnected and global. Then, we can argue that the supervision must also be global which implies financial reform efforts, on the national, European and global level, ranging from capital requirements over activity restrictions to new bank resolution frameworks. It is also a sector that creates substantial externalities from the

failure of an individual institution, and then, requires more attention from the monetary authorities as main supervisor in domestic market. In order to minimize the repercussions of bank failure for the overall financial system and, consequently, to the real economy, reducing the growth rate and disturbing the confidence in the financial market, is necessary to avoid disturbances by imposing some requirements.

Additionally it is important to refer that the economic development, the mobility of the people and the higher taxes in advanced economies, reduces the possibility of increasing their savings. Being this the main financial resource to commercial banks, that means the amount of deposits have been decreasing creating difficulty to supply money before diminishing also the sustainability of the financial system. By the on the other hand, the banks are taking new business with more risks to the returns of their loans (savings of the families).

In this context, Tressel and Zhang (2016) suggest that more important that definition of financial stability is the design and goals of macroprudential policies. They conclude that measures that increase the cost of bank capital are effective in slowing down credit growth and house price appreciation. Add that to the changes in lending standards related to non-price factors - as LTV's, collateral requirements and maturity, and it has an impact on the credit growth and house price appreciation, but it is more moderate. Then, capital buffers or liquidity ratios to bank sector (also referred as balance sheet characteristics) as Basel III requires, will be effective in slowing down credit growth in the mortgage credit reducing, and the banking sector activity.

6.1 From the Global Volatility to the Local Stability

Today, there is global volatility in several economic indicators as we showed in the first point of this work such as growth rates, inflation and interest rates, being them also affected by the public indebtedness. But not less important, are the increasing opportunities that financial market found in global markets, mainly within bigger emerging economies as is the case of China and India. The enterprises make their investments in this market, at first, to get labour at lower cost, improving their returns and the capacity to self-financing in new market, and also, in research and development. Then, the advanced economies which have lost a lot of employers in

domestic market, reduce the economic activity as a whole. The result is also lower growth rates and lower revenues to public budget and less financial business to the banks. On the other side, with development of the financial market in advanced economies the financing tends to be predominantly market-based.

In this sense, the banks decreased their investment in real economy and increased their risk and volatility in their resources. Several new financial services, namely using the credit card and electronic currency offers increasing returns to the banking sector and then, it is necessary a personal service closer to clients as an identification: a national and international guarantee for their mobility and transactions. Not less important, there is a need to local people save their money not only as reserves to their future, in short, but also in a long-run perspective. This reality, offers the banks an opportunity and guarantee to local business that are indispensable within a context of a modern and global society.

During the last decades, there are financial flows toward emerging economies whose context was capital controls as undesirable because they distort the international allocation of capital and then, hinder long-run growth. But free capital mobility does not avoid severe financial or exchange-rate crises or both and as an answer, provokes to take a look at capital controls also as an appropriate instrument for macroeconomic stabilization (IMF, 2011). Before that, the International Monetary Fund has a position against restrictions on international transactions. Fernández, Rebucci and Uribe (2015), conclude that “In recent years, policymakers have adopted more eclectic positions with respect to the use of capital-account restriction for stabilization process.”

However, Goetz, Laeven and Levine (2016) conclude that, they cannot reject the null hypothesis that the geographic expansion of a bank holding company activity has no effect on loan quality, arguing that, the geographic expansion lowers bank risk by enabling the bank to diversify their exposure to idiosyncratic local market risk. But, we can say that, it is more guaranteed to the passive side than to the active side of the bank that means the geographic expansion will be safer for the banks more by the deposits side than by the loans, where the distance of the core also matters.

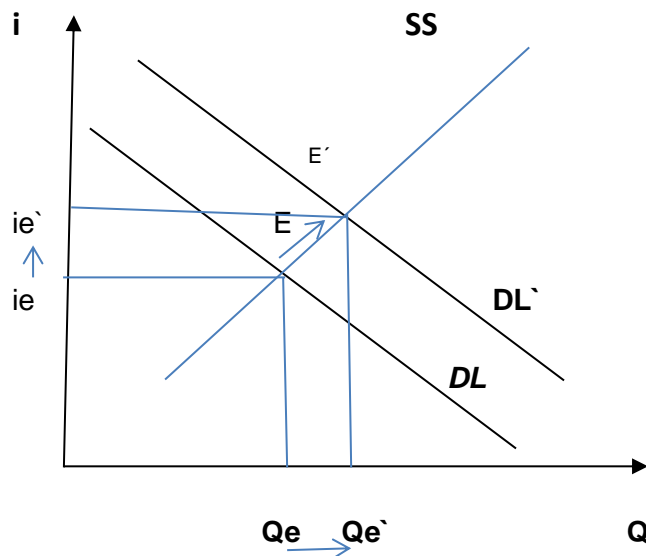
6.2 Perfect Market Competition as Source of Efficiency in Bank Services

The banking sector is indispensable to the real economy and even to bigger enterprises that find financing in financial market, but this reality is only a characteristic of advanced economies and also with their intermediation namely allowing bigger and lower investors accesses to the financial markets. Also important, the openness to the international market implies large and deeper financial services to less developed economies.

The capital mobility increases the interdependence between financial institutions, namely by interbank market, and can spread positive and negative externalities which is one of the important source of market failures. Both justify a government intervention in order to construct a more efficient market. The intervention has positive effects on market accessibility to the financial services and also in terms of the price of money (interest rates). But the market forces also play an important role, being the European Union a good example. However, there are several non-bank financial enterprises, with implications at domestic and international levels that leads to more negative externalities to the bank systems, namely pressuring the prices of their securities in the capital markets.

First it is important to clarify the market composition of the financial system and its main role, and then, make sense of an adequate regulation for all, and not only for the banking sector. The Basel III with new roles to liquidity and capital requirements can be hard for some of them and can provoke an excessive concentration of the banking system which will not be compatible with a goal of market efficiency also in financial services benefitting the wellbeing of the investors and savings as a whole in the market. The savings offer liquidity and the investors demand liquidity to their short and long-run investments. It is a microeconomic equilibrium as we can see through the graft 9.

Graft 9: Microeconomic Equilibrium in Financial Services



SS- Supply Savings

DL- Demand Loans

i- Interest rate

Q- the amount of liquidity available in the market

In the short run the amount of liquidity is the same, but then the price will rise and face an increase in their demand to more investment. An increase in demand for loans by the firms provokes rise in prices of the liquidity, changing the price from ie to ie' , That is the banks which management these financial services will find this equilibrium in the market.

If there is bank concentration, the bank have lost their main role in the economy as the intermediaries of the liquidity, and the bigger banks will create more pressure over the Central Bank in order to manipulate the quantity of liquidity offered to the market and also its price (interest Rates). In this case the supply side of liquidity can be more money creation than issuance of the currency by Central Bank. The Central Bank must be the issuer and regulator of commercial banks that work in the distribution of the liquidity, mainly by applying the savings in loans to the enterprises that make their investments in real economy, and create more and new jobs by Research and Development, and not mainly by financial innovation that disturbs the macroeconomic equilibrium as we explained in the graft 8, namely through the effect crowding out, where the liquidity goes to the public sector crowding out the private investments in

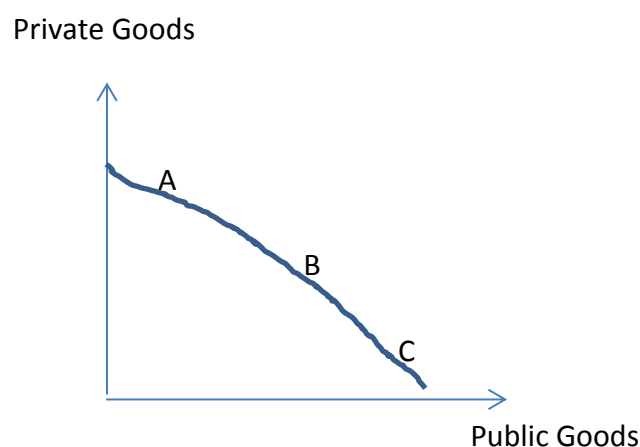
real economy. Both provoke bank concentration in order to have access to public financing, manipulating the political system in order to guarantee their application in public sector. By this way, scarce the liquidity to investments and avoid getting some risk as any other enterprises. If the result is a concentration of the banks in the advanced economies there is no place to the competition and the recession will be more normal than exceptional. We conclude that perfect competition is also necessary in the financial sector and the international regulation, and it makes sense due to the globalization of the financial services and also at domestic level due to the positive and negative externalities of these kinds of services.

6.3 Pareto Frontier and Efficiency in Financial Services

Woldesenbet (2006) emphasize that “One of the major issues in public economics deals with the allocation of society’s resources between the private sector and the public sector”. He also adds that in public economy, it is also important to choose the allocation of resources between productive investment type activity and distributional activity.

The government as an economic agent, and also as a regulator for the functions of economic activity, has as main goal which is the maximization of wellbeing by offering public services. Then, the economy will offer private goods through the market and also public goods through the government, as we can see in the graft 10.

Graft nº 10: Production Possibilities: Private/Public Goods



There are several contractual options. In *point A* we have more private goods and in *point C* we have more public goods, but all them are efficient points, since they are in the Pareto frontier. However, if the economy operates outside with the Pareto frontier the economic result is inefficient.

We can consider the money supply available from the banks, as a private good, and the money supply issuance by the Central Bank, as a public good. That means, the private investments will be done until the marginal utility is equal to the price ($MgU = P$) meaning that means that investment must have an equal return to interest rate, so the growth rate cannot be lower than the interest rate. In this case, we suppose that the government only makes redistribution (change income from one individual to another). But in reality the government can also make productive investment on public enterprises and improves the economic growth, but however the public services can be used until the marginal utility is equal to zero ($MgU=0$). These reasons justify the argument that the public goods are less efficient than the private goods, which have the price fixed by the market. But, if there is public investment, the issuance by the Central Bank cannot provokes inflation and intensify the economic development.

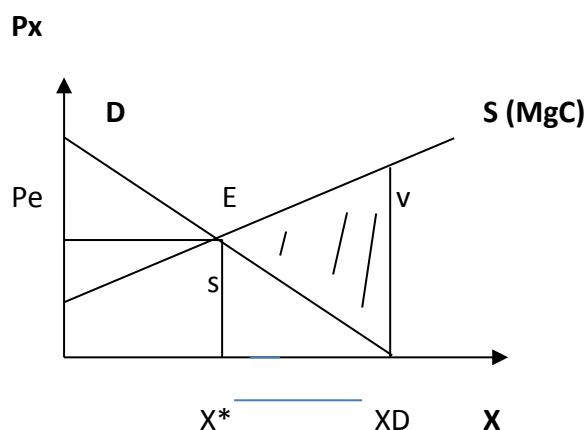
In a context of low inflation rate allowed by real side with lower prices in natural (oil) and labour resources in world as a whole and also with lower capital cost by capital mobility, the result is better in order to control inflation, but it does not promotes the economic growth and full employment. The SRPC Phillips curve comes as a reality? May be, but the LRPC not, as we show before through the graft 7.

Another question is: Does it make sense the government gets their finance from the banks or has the market lost their role of issuance by monetary authorities? Within euro zone, yes but, there are several European economic policies to attenuate these restrictions. The result is the persistent budget deficit the public interventions has with private financing, and then, less liquidity to private investment by increasing the interest rate and reducing the capacity to invest in amount and in price. In short run the banks have less risk, but in the long run also less returns, due to the investment in the private sector which contributes to the increase in the economic dynamic. In the actual context, the indebtedness of the governments, as showed in the table 3, is not a

favourable situation for the returns in the long run for the banks, and it is worst in short and long run growth rate (affected negatively by the crowding out effect). The banks with less return have difficulties in the market and the solution is more regulation in order to reduce the negative externalities of the banking sector and also mergers and acquisition, losing the market efficiency and the economy operate in any point inside the Pareto frontier, as shows the graft 10.

A solution is to put the things in the right way, with less public financing for the banks and more regulation in protecting the savings of the families and the role of the bank as an intermediary and as a channel of transmission mechanism of the monetary policy. If there is a better management of the public accounts and also a better management of the monetary policy, the liquidity available in the economy will increase and the international rules and domestic rules are less necessary, giving the market the micro and macroeconomic equilibrium to the economy, which helps the banks as financial institutions and also can invest and create jobs, as well as the real economy as a whole. The actual long run investment by the banks to the public sector can be the main close door to the future active participation in the financing of the economy as a whole. The equilibrium between public and private interventions in the market can be explained by the following, graft 11, which explains the efficiency of the private goods and the inefficiency of the public goods.

Graft 11: Inefficiency in Supply of the Public Goods



P_x represent the price of the good, X the quantity of this good with a demand D and a supply S . X_D is the maximum capacity to produce and the demand of the good X , when this good is offered freely. If the good is offered by the market, the maximum demand

is **X**, considering the price **Pe**. In perfect competition market, as are the general private goods, there is efficiency in production, but in the public good the demand will increase to **XD** because we do not pay the price which \Rightarrow an inefficiency measured by the area (svXD) provoked by excess of demand measured by the quantity ($X \cdot XD$).

If the monetary authorities offer the money **XD**, the banks will do not pay the price of the currency and the savings for the future of families will do not have any return, just saving the currency, the money creation reduces their activity. There is only self-financing to individual enterprises and from the financial market to big enterprises. The small and medium enterprises have each more difficulty to stay in the market due to the scarce of liquidity available and also due to the increasing domestic and, mainly international competitiveness with economic and financial globalization. The banks, as an important sector of activity which create jobs, have been reduced. The financial innovation also contributes to this tendency.

6.4 Inefficiency in Supply of Money and Regulation

Another way to see the financial services in the market is to consider the crisis situation as those showed in the Graf 11, representing **XD** the maximum financial services offered by the financial firms, when their prices are close to zero. In this case, the money can be considered as a public good, offered in the market at lower prices. If the borrowers payed the market price then, the amount of money demand will be the **X** considering the price, and not **XD**, when this good is offered at lower price. But, the public goods have a price - the taxes, being the people with higher income those that pay more, namely, by the progressive taxes rates. *In the context of financial services who pay the price?*

It is also those that have their savings without returns (families). The commercial banks reduce their deposits and needs more capital to sustain their market financing and issued corporate bonds. At the same time the families are convinced to put their savings in non-monetary institutions, assuming more risks in order to get higher returns, if not, have their savings without returns, or even negative at interest rates. In fact, the interest rate as price of a currency is more important in the bank-based system; But why? Because in the market based system the sources of returns are,

essentially, from the investment in securities, such as bonds and equities, where shadow banking do not have the same rules (to capital neither to liquidity) as the commercial banks. In this sense the G20 try to enlarge the rules also to shadow banking through the Financial Stability Board.

The instability in financial sector is also the result of deregulation of the financial services since the long time ago, as was suggested by Paul Calem (1985): “Deregulation has enable banks to price their services more efficiently, and to differentiate their products more effectively. Product differentiation in turn, has enabled the banking industry to serve the different needs of various types of customers”. Business Review, Federal Reserve Bank of Philadelphia, 1985:27-28).” In fact, the customer decision-making has become more complex as a result of deregulation, but also much more dangerous, mainly to those with less financial literacy. Not less important it is to refer the opposite precautions, not with the liberalization to promote the financial market, but with regulation. The financial crises since at the end of the last decade, disturbs all markets, monetary, financial and also real market. The lower or even negative growth rates are the results of all these financial disturbances. Nowadays, the efforts is the opposite, that is, towards regulation. In this sense, we can refer the suggestion of Ben Bernanke (June, 2010) “The failure of large, complex, and interconnected financial firms can disrupt the broader financial system and the overall economy, and such firms should be regulated with that fact in mind.”, in Anna Chernobai, Ali Ozdagli, Jianlin Wang (2016).

7. Conclusion

The lower growth rates, even negative, show the situation of the real side of the advanced economies that provokes one of the most relevant problems to financial stability: *the changes in asset shrinkage*, which is the main finding of Maximilian Eber and Camelia Minoiu (2016). We also confirm the short run, but not the long run (LRPC) Phillis curve, and then, it is not expectable full employment in long-run, but on the contrary, a not controlled unemployment rate which implies a lower economic growth rates, as suggest the *Okun's Law*. There is a *crowding out effect* that reduces the

growth rates, particularly within the economies with higher public debt, namely in Japanese and US economies. The monetary economy has been changed a lot, namely in supply side where the commercial banks reduce activity, losing returns when they prefer to finance the public sector instead the private sector. Then, their capacity to issuance securities in the financial market has been reduced, and their demand for savings has been diminishing their returns and also, their capacity to make loans to the real economy by *credit multiplier*. The liquidity has been orientated to public sector allowing the financing of the public debt reducing the bank sector efficiency by perfect market competition in order to reach the Pareto efficiency improving the economic growth and the unemployment rates. If not, it will be the bigger banks to finance the biggest enterprises, namely public enterprises, and not private enterprises, that is, the Small and Medium Enterprises (SME). This reality implies that the credit growth as the main activity of commercial banks will be reduced, and will affect the economic growth rates. Not less important, the regulation implemented namely by Basel III, with requirements in liquidity and in capital, will imply mergers and acquisitions in the banking sector provoking a distance, between savers and banks, and reducing its role in the economy, as well as their contribution to economic growth. This situation it is negative for the families and SME, as main private economic agents, for the banks as a sector and also, for the economy as a whole, decreasing their economic and financial stability. In this sense, the contribution of the Beck, Carletti and Goldstain (2016) refer that, the recent crisis promotes not only an intensive regulatory reform debate, but also a discussion on the role of financial system in modern market economies and financial innovation. By this way, these efforts include the capital and liquidity requirements to all banks imposed by the new Basel III as regulatory standards, and also, by the one major financial reform in Europe: *the banking union*, which comprises a single supervision mechanism (SSM), a single resolution mechanism, a single rulebook and deposit insurance scheme. All these European rules to the banking sector, make them as a more regulated sector, and it is justified by the public good of their economic activity and, also by their negative financial externalities where the economic and financial confidence plays the maximum role. This idea was already implicitly referred by Ben Bernanke (2010) when he emphasizes the problem related with the interconnected financial firms and the economy as a whole.

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