CONSIDERATIONS REGARDING FINANCIAL STABILITY

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Abstract

International economic conditions are projected to have a favorable path in 2018. Thus, accelerating investment in infrastructure and real estate in China, as well as expectations of fiscal loosening in the United States, lead to an increased expectation for enhancement of global trade flows and to strengthen investor confidence. Instead, Britain's decision to leave the European Union, as well as political uncertainty in some euro-zone countries, may cause temporary distortions but also implications for economies in the european region. On the other hand, the divergence of the Federal Reserve and the European Central Bank's monetary policies, as the US expects further increases in interest rates, can be reflected in the activity of the government bond market as a result of the reorientation of investors to assets with higher yield, a trend amplified by the context of the economic environment with low interest rates. Recent developments in the field of financial technology innovation are an important challenge for conventional financial market (payment and settlement) infrastructures, especially in the context of multiple public and private initiatives and projects developed over the last few years. The digitization of financial services is an international concern due to the complexity of this phenomenon, and the lack of harmonized regulations and / or standards in the field. On the one hand, technological innovation in the field of payment systems has the potential to create a number of social benefits by improving access to financial services (financial inclusion). On the other hand, the integration of new technologies in the financial and banking field may imply additional information security risks, especially on payment and settlement systems. Financial technology innovation projects have also been developed by central banks in Europe, but also in America and Asia (for example in the UK, the Netherlands, Sweden, Canada, China and India). They target digital coin concepts, use in distributed real-time payment systems of blockchain technologology, artificial intelligence, and information security.

However, a large number of economists admit that the current crisis has emphasized the overcoming of the limits of (mainstream economics) and its implications in the field of financial regulation and the sphere of monetary policy that should focus not only on price stability, but also on financial stability. In other words, the banks, the financial institutions must be obliged to hold a minimal countercyclical capital and mandatory reserves that should be large enough to cope with the turmoil generated by the decrease of the asset prices and the liquidity risk. In macro-prudential policy, the "shadow banking system" (investment banks, hedge funds, private equity funds) must also be included.Last but not least, the central banks have to cooperate with the other categories of systemic risk managers: Financial Stability Oversight Council-FSOC (USA), European Systemic Risk Board-ESRB (EU), Financial Policy Committee-FPC (Great Britain), National Committee for Financial Stability-CNSF (Romania).

Keywords: *Monetary Policy; Financial Stability; Currency Policy,*

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1. Introduction and context of the study

The period until the outbreak of the financial crisis in 2007, also known as the "*great moderation*", was characterized by a low and constant global inflation (approximately 2%) that remained until the emergence of the first turmoil on the financial markets. But, since the early of the 1970's, several countries have moved into a floating exchange rate system. This offers the governments the flexibility to cope with an economic crisis. It has also created a trend towards a greater trade imbalance. Similarly, the public debt has constantly increased as a percentage of the GDP since the mid-1970's. In the developed world, the consumers and companies have also taken over even more debt. The debt is used to finance the purchase of assets, and the higher credit availability pushes the asset prices to become higher. The result was a cycle of credit expansion and collapse.

The recent financial crisis has generated an ample debate on the reconsideration of the action framework of central banks. The limitations of the monetary policy have been emphasized since the crisis previous period. Emerging market countries have had as objective the pursuit and stability of the exchange rate in as much as it influences inflation. But in reality they paid much more attention to it, as some developed countries have done, as part of an export-based growth strategy by the depreciation of the national currency. On the contrary, if a country leads a low interest policy to relaunch domestic demand, the investors will borrow (due to globalization) from the country where the credit cost is low and will invest in the countries that provide higher yields, which determines the appreciation of the currencies of those countries.

But it will be required a greater flexibility of the currency. The trilemma of the international economy dictates it: when the capital is mobile, the inflexibility of the currency will eventually lead to the assets bubble and to inflation. The pressure of capital flows will depend on the prospects of rich economies, especially America. Increasing the availability of emerging economies to allow the exchange rate to move will depend on what China does, which is currently staying the background of the dollar.

Therefore, the problem which the world economy is currently facing is triple. In the first place, the USA and Europe don't have a substantial economic recovery, the developed countries are still threatened by deflation, rather than by inflation. In the second place, there is still a large volume of liquidity fuelled by emerging economies at international level, which generates a high risk of financial instability in the form of bubbles in financial asset prices and the fragility of banks and financial intermediaries. In the third place, the macroeconomic and financial imbalances that haven't been yet absorbed, risk to reverberate on the exchange rates, generating a generalized monetary instability(IMF, 2013)[9]. The central banks are then trying to reduce the interest rates, or (since 2008), to buy assets directly. This leads to the temporary cessation of the crisis, but each cycle seems to lead to even higher levels of debt and asset prices.

2. Historical perspectives

2.1. Redefining the monetary policy objectives

Historically speaking, the monetary policy objectives have changed in time. In accordance with the gold standard and its successor, the Bretton Woods system, essentially characterized by fixed exchange rates, the credit volume of the economy was limited. The monetary policy of most countries has given priority to the stabilization of economic growth. In the 1970's, 1980's, the economic policies in Western countries were usually of *neo-keynesian type*, relying on what it was called in that period the "active monetary policy". Within this "active" policy represented by notable economists such as: I Fisher, J. M. Keynes and M. Friedman, the main objective of the monetary policy was the *price stability*. The conviction of the neo-classics was that the stability of economic growth was closely connected to the *neutralization of price movements*. The result is that the main public service is that the central bank makes available a quality currency, a currency whose value doesn't change in time. The role of the central bank is to provide the required liquidities to relaunch the economic activities, and the main instrument used was the *refinancing of commercial banks*.

The main objective was to stimulate the economic growth, although some central banks have started to pay more attention to price stability. The effect has been that the countries have expanded their money supply too fast and suffered a trade deficit and an additional pressure on the currency exchange rate. However, under these circumstances, it was harder for the financial bubbles to swell.

After the 1980's, this policy was replaced by a "*new monetary policy*" or the consecrated name - "inflation targeting" characterized by the increase in the importance of the objective of ensuring price stability. The main factors that determined the revision of the priorities were:

- Globalization of markets
- Development of non-banking financial intermediation
- Financial innovation
- Triumph of the idea that inflation is a monetary phenomenon.

Actually, this monetary policy is questioned. Until the outbreak of the crisis, monetary policy strategies were based on the assumption that monetary stability necessarily leads to financial stability and both lead to sustainable economic growth. Among the prestigious authors who have expressed critical views on monetary policy based on this conception, was IMF chief economist O. Blanchard and former governor of the Bank of France, J. Larosière. Looking back on things, the fact that the central banks did not react to the excessive rise in credit that triggered the crisis was signaled by economists, particularly by N. Roubini (2006), who showed that the central banks are face the effects of financial globalization, but without having the cooperation mechanisms required to prevent the consequences of this process.

Researches carry out by Fischer in 2011 consider that the central banks should use the leverage of macro-prudential supervision (credit terms for mortgages, capital adequacy ratios and of counter-cyclical liquidity) to prevent the increase of dangerous asset prices for the financial stability. (Fischer, 2011 cited in Spulbăr and Niţoi, 2012, p.76)[12]. Additionally, Stiglitz (2011) considers that the deficiencies of these standard macroeconomic models require their fundamental review and a reassertion of the lessons of modern theory of general equilibrium, which were apparently forgotten in the years preceding the latest global crisis. Thus, the new macroeconomic framework should include an analysis of existing risks, information and institutions in a context characterized by inequality, globalization and structural transformation. In terms of macroeconomic policy, the focus should be not only on price stability but also on financial stability. (Stiglitz, 2011 cited in Spulbăr and Niţoi, 2012, p.76)[12].

2.2. Concepts of monetary policy and currency strategies

The opinions regarding the currency are dominated by two completely opposed concepts. In accordance with some authors, the currency is *outside of the production process* (outside money) because it doesn't exercise lasting effects on the relative prices of goods and services; its *offer is an exogenous* size. Under these conditions, the quality of the currency doesn't depend on the economic policy but it depends on the monetary policy. The role of the currency is that of an "instrument' (Gurley and Shaw, 1960)[8].

For the other conception, the currency is created by the credits that banks grant to non-banking sectors. So, it is *inside economy (inside money*), its offer is *endogenous* (Tinbergen, 1956)[14]. In the literature, this principle is known as the Tinbergen rule. According to Tinbergen's principle, interest rate policy can not sustain both macroeconomic stability and financial stability. This requires additional tools such as financial regulation. The currency is therefore intrinsically connected to the financing of economic activity. In the opinion of the monetarians represented by M. M. Friedman, A. Schwartz, Ph. Cagan, E. Phelps, K. Brunner, Al. Meltzer, D. Laidler, H. Johnson, R. Lucas, the central bank should not be concerned about what is going on outside the banking field, and the situation of non-bank financial intermediaries. Its sole task is to ensure price stability.

In monetary economies, the process of creating the currency required for making expenditures is the engine of the economy. This process is more and more complex, as the financial markets develop, but continues to give a greater power to banks, which makes banks remain the main actors of the financial scene. The special position of the banks comes from the fact that their liabilities (passives) are considered and really liquid real assets (currency) for non-banking agents.

Therefore, the *banks have a dual nature*: in terms of assets, banks grant loans as private companies that seek to obtain profit; in terms of liabilities, banks are part of the monetary system and ensure the conversion of the currency they create (scriptural currency) into the currency of the central bank (primary currency). It results that banks face risks that they can't assume on their own. In the concept of the *endogenous* currency, the responsibility of maintaining the liquidity of the banking system lies with the central bank. However, since the power to create currency belongs both to the central bank and commercial banks, maintaining the liquidity of the banking system is not possible without *regulatory constraints and without prudential supervision***.**

Milton Friedman and Anna Schwartz in their book A Monetary History of the United States, 1867–1960 , they made famous the assertion of monetarism that „inflation is always and everywhere a monetary phenomenon"

The triumph of the idea that inflation is an exclusively a monetary phenomenon has taken place since the 1980s, being characterized by an unprecedented rise in inflation.

P. Volcker and the *Fed* management *operated* vigorously, raising the guiding interest rate from 11.2% in 1979 to 20% in June 1983, fact that reduced the inflation from 13.5% in 1981 to 3.2% in 1983. (Cerna, 2014)[7].

Internationally those countries that followed the monetarist principles have succeded to control the inflation and to keep an satisfactory economical growth. In 1973 the Japan's inflation rate was around 25 percent per year and realise to 10 percent and continued to reduce it further.

When Margaret Thatcher, leader of the Conservative Party in the United Kingdom, won the 1979 general election, Britain had endured several years of severe inflation, which was rarely below 10% - and by the time of the election stood at 15.4%.Thatcher implemented monetarism as the weapon in her battle against inflation, and succeeded at reducing it to 4.6% by 1983.

This policy was then imitated by various other central banks, which in that period adopted the strategy called *monetary targeting*. This further begs the question of what put the monetary policy in the first place, taking into consideration the Friedman,s view on this point in 1968: „The first and most important lesson that history teaches about what monetary policy can do – and it is a lesson of the most profound importance – is that monetary policy can prevent money itself from being a major source of economic disturbance...There is therefore a positive and important task for the monetary authority – to suggest improvements in the [monetary] machine that will reduce the chances that it will get out of order, and to use its own powers so as to keep the machine in good working order... A second thing monetary policy can do is [to] provide a stable background for the economy... Our economic system will work best when producers and consumers, employers and employees, can proceed with full confidence that the average level of prices will behave in a known way in the future – preferably that it will be highly stable".

Friedman succinctly pointed out the importance of *maintaining financial system stability* in a crisis. How a central bank acts as a *lender of last resort*, especially in a crisis, is an important factor affecting price developments. This point is clearly shown in a comparison between the US in the 1930s and Japan since the late 1990s. In the former case, the price level declined by around 30% within a few years. There are many causes for that sharp decline in the US, but the single most important one was that the Federal Reserve did not act aggressively enough as a lender of last resort.

An appreciable example of this role of the central bank was the Bank of Japan's decision to provide an unlimited amount of liquidity to Yamaichi Securities after massive off-balance sheet losses 30 billion US dollars at that time, could be regarded as the Japanese equivalent to Lehman Brothers in 2008. The materialisation of systemic risk was thus prevented.

The generalized adoption of the monetary aggregates targeting generated a 30-year period of price stability, a reduction in inflation that favored *financial globalization*, paved the way for *financial innovations*, and facilitated the assumption of high risk by investors in the period called "the Great Moderation". During this period, together with the liquidity created by banks (deposits), the volume of liquidity created by non-bank financial intermediaries (titles capable of providing immediate access to payment methods and derivative contracts which transfer the risk factors embedded in these titles) has greatly increased the total level of liquidity.The big succes of great moderation was determined by the increased effectiveness of monetary policy as well as structural factors linked to globalization and the developement of large emerging markets. Applying this monetary policy on the assumption that, in the long run, the main driver of inflation is currency supply, coinciding with the implementation of reforms on the labor market, such as France, Germany wich decided no to index salaries with inflation rate, and the spectacular gains in productivity provided by new technologies have been important deflation factors.As a result of globalization, the pressure on consumer price declines was much higher and competition from many and increasingly skilled workers in emerging countries (India, China, Brazil) led to a slowdown in wage growth in developed countries.

As a result, the *control of currency by central banks has significantly lost importance*. Thus, in the late 1980s, central banks changed their strategy. Their goal was no longer the direct limitation of the growth of money supply according to a certain limit (monetary aggregate targeting), but the maintenance of the growth of the general price index within a narrow margin - *inflation targeting.* Also, in the middle of the 1990s, some central banks adopted - often informally - the so-called *Taylor rule*, which indicates to the monetary authorities the short-term interest rate level which is to be adjusted according to the production and/or inflation deviations towards the target. (Taylor, 1993)[13].

An example for an informal application of the Taylor rule is *Fed,* which, under the leadership of A. Greenspan, has adopted a pragmatic approach, according to which the issue of inflation expectations, namely of the trust in the value of the currency, can be performed in a channel with narrow foreshores. This framework was theoretically codified and presented as a new monetary policy strategy: *flexible inflation targeting* (Bernanke and Mishkin, 1997)[4].

3. THE CONCEPT OF FINANCIAL STABILITY

3.1. Financial instability

But success created has generate its own problems. The reality is that the "Lost Decade's" as some authors called the great moderation was preceded by so much praised price stability. A prolonged period of high growth coupled with low inflation gives rise to optimistic sentiment, which is at least partly responsible for fostering financial bubbles. In addition, low inflation tends to justify prolonged monetary easing, which in turn can become one of factors contributing to the formation of bubbles.

In the last decades of the 20th century, the financial industry assimilated a radical innovation that combined three elements in order to allow credit spread risk. These elements are:

- *Derivative operations* referring to events that can occur in the credit process (credit default swaps or CDS)
- *Value-at-risk* models (Using the data provided by VAR modeling, financial institutions can determine whether they have sufficient capital buffers to cover losses, or whether higher risks than the acceptable ones require a reduction in exposures)
- Keeping of the Accountancy on Market Value of assets (*Mark to Market*).

This innovation has given rise to huge enthusiasm and an extraordinary development of credits with an increased diversification of the financial assets range through the phenomenon called securisation.

The central banks and financial regulating authorities have considered that these *vehicles* determine the development of financial markets and risk reduction through dissemination, thus leading to a more solid and efficient financial system. Consequently, the central banks and the regulating authorities decided not to intervene without considering the systemic risk and fragility of the credit system. These innovative practices have spread until they become common not only for banks and financial institutions but also for each market participant. The enthusiasm went further seeing that the others did the same and that they were successful, and therefore, everyone tried to imitate the behavior of others.

Regarding things retrospectively, most economists agree that monetary stability doesn't mean financial stability, because it has stimulated the economic agents (banks, regulating authorities) to take increased risks (Blanchard, Dell'Ariccia and Mauro, 2010)

This "paradox of credibility" overlaps another one emphasized on the 1990's by H. Minsky - the "paradox of peace". "The debt crisis arises precisely when things go well and the economic agents take advantage of the economic growth and low interest rates not only to borrow, which is rational from an individual point of view, but also to borrow a lot in a contagious manner" (Minsky and Kaufman, 2008)[11]. But this setting of expectations didn't mean stabilization. Once with the sensible decline in real estate and securities prices, the banks have started to be concerned about their risky portfolios and have ceased to grant loans to companies and natural persons.

There exists a general consensus that supervision and regulation of financial institutions as well as macroprudential policy measures are the primary instruments assigned to financial stability. "Today, the Federal Reserve sees its responsibilities for the maintenance of financial stability as coequal with its responsibilities for the management of monetary policy, and we have made substantial institutional changes in recognition of this change in goals. In a sense, we have come full circle, back to the original goal of the Federal Reserve of preventing financial panics." (Bernanke, 2013, p.11)[3].

Monetary policy is no longer limited to controlling inflation. In order to contribute to global financial stability, it must also take into account credit growth and the evolution of financial asset prices. In terms of prudential policy, it is no longer confined to controlling the individual risks borne by financial and banking institutions, but by macro-prudential supervision, it must contribute to the stability of the global financial system.(Cerna, 2014)

Considering the enthusiasm created by the derivative financial products, a strong, well-thought system is required, a large-scale and long-term system that would incite banks to manage their liquidity in accordance with the maturity of their assets. In other words, the banks must be constraint to hold liquid reserves as much as their investments are less liquid, and the connection between the central banks and the bank supervisory bodies needs to be strengthened. The macro-prudential policy should also include the "shadow banking system" (investment banks, hedge funds, private equity funds).

Another important objective is the cooperation of central banks with the other categories of **supervisors**, namely various bodies for the coordination of systemic risk management: Financial Stability Oversight Council-FSOC (USA), European Systemic Risk Board-ESRB (EU), Financial Policy Committee-FPC (Great Britain), National Committee for Financial Stability-CNSF (Romania)(Ingves, 2011)[10].

3.2. The macro-prudential policy application

Macro-prudential policy is a *top-down* type approach, according to which the central bank determines an aggregate level of the *minimum capital*, which then distributes on banks according to their predisposition to systemic risk. Practically, it is about establishing a certain level of the minimum capital, which is to be imposed on the financial institutions of systemic importance depending on the cumulative overcome of the volume of granted credits compared to the level that would be obtained by complying with the long-term trend (Borio and Shim, 2007). The prudential regulation briefly described above is a precautionary one. Its objective is to reduce the oscillations of the financial cycle so that these fluctuations don't cause crises, and if, however, the crises appear, they are less serious. But those provisions are not enough to make banks resist to the shocks caused by the possibile decrease in the assets price. The reason is that the banks which don't manage carefully how to finance their investments undergo what is called the "liquidity paradox”. The liquidity of the market is nothing but the belief of each participant that he will anytime find a partner willing to buy his assets at a cover price. Considering that this collective belief is ruining, no one will want to buy assets whose future value can’t estimate(Adrian and Shin, 2008)[1].

The solution adopted by the US in 1994 by the law called the Federal Deposit Insurance Corporation Improvement Act (FDCIA) proved to be effective. But the problem is with the Mark to Market-type asset portfolios. Such assessments encourage the maturity mismatch by financing the non-liquid assets with immediate resources. Thereby, a portfolio of assets is assessed at the same price (market price) regardless of whether it is guaranteed by T years rated bonds or short-term maturity bonds. Or between the two cases, the liquidity risk is completely different.

It is suggested to use a process called *Mark to funding* which consists of the registration of the portfolio of assets guaranteed with T years rated bonds at the updated value of the T years anticipated prices (Anon 2008)[2].

However, it is required that this calculation to be made by the supervisor in order not to mask the possible lack of liquidity of the financial institution.

The central banks must also impose the establishment of *compulsory reserves* for the portfolios of assets which have a high risk of liquidity.

Recent developments in the field of financial technology innovation are an important challenge for conventional financial market (payment and settlement) infrastructures, especially in the context of multiple public and private initiatives and projects developed over the last few years. The *digitization* of financial services is an international concern due to the complexity of this phenomenon, the difficulties in understanding and properly assessing the risks it involves, and the lack of harmonized regulations and / or standards in the field. On the one hand, technological innovation in the field of payment systems has the potential to create a number of social benefits by improving access to financial services (*financial inclusion*). On the other hand, the integration of new technologies in the financial and banking field may imply additional information security risks, especially on payment and settlement systems.

Financial technology innovation projects have also been developed by central banks in Europe, but also in America and Asia (for example in the UK, the Netherlands, Sweden, Canada, China and India). They target *digital coin concepts*, use in distributed real-time payment systems of distributed legder technologology *(blockchain)*, artificial intelligence, and information security. Furthermore, since April 2017, Bitcoin has been accepted for payment for the settlement of public and private payment obligations in Japan. Also, in April 2017, a proposal was launched on the G20's involvement in supporting the development of blockchain technologies in order to promote the establishment of a common regulatory and harmonizing framework for the activities of central banks in this field.

5. Conclusions

A large number of economists admit that the current crisis has emphasized the overcoming of the limits of (mainstream economics) and its implications in the field of financial regulation and the sphere of monetary policy that should focus not only on price stability, but also on financial stability. In other words, the banks, the financial institutions must be obliged to hold a minimal countercyclical capital and mandatory reserves that should be large enough to cope with the turmoil generated by the decrease of the asset prices and the liquidity risk. In macro-prudential policy, the “shadow banking system” (investment banks, hedge funds, private equity funds) must also be included.

The disputes between the monetary policies of the major economic powers are manifested by an additional pressure on the exchange rate. Therefore, if a country has a low interest policy, in order to relaunch domestic demand, investors will borrow in the country where the cost of the loan is low will invest in the countries where the asset yields are higher, which determines the appreciation of the currencies of those countries. The appreciation of the currency stimulates consumption and can cause either financial instability (asset bubbles) or inflationary tensions, depending on the type of asset on which the speculations are concentrated.

On the other hand, the use of the guiding interest rate as a monetary policy instrument must be made more flexible to become more sensitive to the credit slippage and for the increase of the financial asset prices. This instrument must be complemented by the specific instruments of macro-prudential policy, which are mainly based on the minimal counter-cyclical capital (to prevent systemic risk) and compulsory reserves (to make banks able to cover the potential liquidity shortage).

The monetary policy cooperation is indispensable in a globalized and unstable financial system. It supposes that the body created by the G20 and the IMF (*Financial Stability Board* - FSB) to work together with the other international and national supervisory institutions to report the global risks and to encourage central banks to adopt the same macro-prudential policy principles.

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