

## Why “Macro-prudentiality “ is Becoming More Important in the Sight of the Financial Stability to Prevent Systemic Crisis?

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### Abstract:

*The systemic risk is a risk that affects the whole market and not just a particular industry. It is also known as “volatility” or “market risk”. This type of risk cannot be predicted and entirely avoided. There are needed the right asset allocation strategies to mitigate it. The last financial crisis pointed out that there is the need to use well-defined macro-prudential policies and instruments to overcome it. The economic crisis has occurred 85 times in the world and the experience has shown that the policy makers need to review and take regulatory measures which need to be taken based on the situation. The main reason that these financial crises should be prevented is strongly related to the financial and social costs that it causes to the society and the financial institutions. One of the most important regulatory tools used is the macro-prudential regulation consists in narrowing this gap, imposing the banks to take on higher risks during difficult periods to ensure the credit support during crisis. Micro-prudential policies are the main instruments that ensure a financial stability. They can minimise the possibility of occurrence of systemic risks and structural weaknesses. These instruments include the inherited requests and the accumulated capital on the provisions prospective of liquidity indicators and appropriate collateral evaluations (IMF, May 2010). Albania as part of the Eastern European countries faced the crisis at the same way and time as the countries in this region. Albania needs well-defined micro and macro prudential policies to overcome this crisis. They also help on monetary policies.*

**Key words:** Micro-prudential regulation, Macro-prudential regulation, Financial Crisis, Systemic Risk, Albania crisis, Monetary Policies

## **Introduction**

The financial crises can be defined as major disorders of the financial market, which are followed by companies' bankruptcy and a substantial decrease of assets prices.

The financial crisis occurs when there is an increment of the non-symmetric information due to the financial market disorder causing severe problems of opposing selection and moral hazards, causing the financial markets to be incapable of channelling funds efficiently from savers to individuals and businesses with opportunities for productive investments. In these cases, the financial markets cannot function well and as a result, there is a considerable shrink in the economic activity.

The main purpose of trying to prevent the crisis is related to the increasing costs to the society. To overcome these crisis there are needed tools and instruments, well defined regulations in place implemented by the policy-makers.

There are about 85 crises that have already happened in different areas in the world. The last crisis, which we are facing, happened because of the crisis in the USA, which was strongly related to the phase of euphoria, and expansion in the USA.

## **Macro-prudential regulation**

The financial crisis in 2007-2008 is closely related to the term "macro-prudential" which has developed to be very important and helpful in the financial system. This term was used many years ago meaning international bank lending. A macro-prudential approach to regulation considers the systemic implications of the collective behaviour of financial firms.

An important feature of macro-prudentially regulation and financial stability is the heterogeneity of the financial system; homogeneous behaviour, where everyone sells or buys at the same time. In general the participants of the market

were initially supposed to be heterogeneous but due to a various number of factors, regulatory or not, they were led to homogeneity.

From this point of view, the systemic risk is endogenous and macro-prudential regulation is about identifying those endogenous processes that turn heterogeneity into homogeneity and make the financial system more fragile.

So far, the efforts to strengthen the financial system have been focused on the enhancement of macro-prudential orientation of regulatory and supervisory framework, explicitly an expanded focus on the financial system as a whole and its connection with the macro-economy.

The long-term supervision of the financial and macroeconomic stability involves the implementation of structures of macro-prudential referents that are set up exactly as a helpful element in the adaptation and improvement of methods of monetary policy that are working well even in our days.

Regarding what caused the crisis we can say that there were the banks causing it by putting assets that they did not expect to have consequences. This will be explained in more details in the next section when speaking of the micro-prudential regulation.

### **Micro-prudential regulation**

Micro-prudential regulation is the usage of capital and the current trend of capital adequacy and it is made of regulations and measures applied in the financial sector. It analyses the responses of a specific bank to exogenous risks; it does not incorporate endogenous risk and it disregards the systemic implications. Micro-prudential regulators should be careful when implementing these regulations, particularly the ones responding to market value and risk.

The following are matters that need to be taken in

consideration when speaking of the micro-prudential regulations.

- a) Measures of the value and riskiness of assets, i.e. price stability of and clients protection
- b) The choice of assets that can be held
- c) Who is in charge of holding these assets
- d) How instruments are listed, sold, traded and reported

Usually, the micro-prudential regulation is displayed on a matrix with the probability of a credit in loss, on one axis, from low to high. According to the regulators the financial firms must analyse their assets using this matrix and dispose of those assets where there is a high probability of loss.

Any bank holding assets that cause a large loss does not need regulations, thus losing its banking license. What causes the problem in these cases is the fact that their assets cause a big loss and the regulators inform them that they cannot be used. In this scenario, the matrix is irrelevant. The bank on the other hand, is aware that they need to sell the asset at a lower price and thus causing a capital shortage.

As a result the banks decide to sell the other assets previously held for their low correlation with the original problem asset, instigating asset correlations to rise. All this gives the impression that risk has raised even more and it causes banks to sell more assets.

The firms that have financed these assets with short-term liabilities should certainly mark them down and the other firms who have approached long-term liabilities should be able to consider if the assets are now fair value at the marked-down price and if they should buy. As an alternative, the spread of micro-prudential rules (non-banks) like insurance firms and funds have the tendency to lead to everyone being a seller at the same time.

This loss was a characteristic of the last crisis management in credit markets in 2007-2008 as well of the other financial crises in the world.

Ironically, the micro-prudential rule can contribute to turn a bad situation into a worse one.

Regulators should be aware of the implementation of micro-prudential rules, particularly on the rules related to market measures of value and risk and ensure that they do not artificially create homogeneous behaviour.

When a situation of boom occurs in a bank, the borrowers underestimate risks and overestimate it when the crash comes. The concept of “too low” and “too high” is altered in these cases and their definition should be kept clear.

In regards to the crisis, some argue that banks were not following micro-prudential rules strongly enough and as such these rules should be intensified and made more complete. The spread of micro-prudential rules can weaken the systemic elasticity.

### **The differences between macro and micro-prudential perspectives**

As Borio (2003) states, the macro and micro-prudential perspectives change towards their objectives and their understandings about the nature of risk.

The main purpose of the macro-prudential regulation that is merely focused in the welfare of the financial system as a whole as opposed to the traditional micro-prudential regulation is to increase the security and stability of the individual financial institutions.

We can also say that the risk has been supposed to be exogenous under the micro-prudential perspective, in the supposed meaning of a "potential shock" causing a financial crisis that originates beyond the financial system behaviour.

On the other hand, the macro-prudential approach states that the risk factors can be configured and endogenous, in other words with a systemic occurrence.

In accordance with this argumentation, macro-

prudential policy is addressed to individual financial institutions, markets and their common exposure to risk economic factors. It is also focused in the "pro-cyclical" behaviour of the financial system in the effort to promote its stability.

<b>Comparison of the macro – and microprudential perspectives</b>		
	<b><i>Microprudential</i></b>	<b><i>Macroprudential</i></b>
<i>Characterisation of risk</i>	Seen as independent of individual agents behaviour (“exogenous”)	Seen as dependent on collective behaviour (“endogenous”)
<i>Ultimate objective</i>	Consumer (investor/depositor)protection	Aviod output (GDP) cost
<i>Proximate objective</i>	Limit distress of individual institutions	Limit financial system-wide distress
<i>Calibration of prudential controls</i>	In terms of risk of individual institutions; bottom-up	In terms of system-wide risk; Top-down
<i>Correlations and common exposures across institutions</i>	irrelevant	important

## **Overview of counter-cyclical regulation**

Pro-cyclicality is a manifestation of market failure in banking and financial markets. As mentioned earlier in this article the credit mistake was made during the boom and that is obvious. The counter-cyclical bank regulations can be introduced, through banks’ capital or through their provisions. This needs to be achieved through simple rules, so that the regulators cannot stay calm in boom times, when they can become over-enthusiastic in booms.

Basel II and Financial Reporting Standards state an agreement which consists of an additional pro-cyclical impact over the capital required by banks, emphasising further the natural tendency of banks for pro-cyclically loans.

When there is a rapid increase in loan portfolios, it highly affects the non-performing loans by increasing them too. The loans that are given during boom times are more like to be default than those made in periods of slow credit growth. The

collateral requirements are tightened and in bad periods often relaxed in good times as collateral prices rise.

A proposal has been presented by Charles Goodhart and Avinash Persaud in regard to increasing capital requirements by a ratio linked to recent growth of total banks' assets.

This proposal implies a straightforward approach by using the counter-cyclical regulation as their implementation is easy.

An example where counter-cyclical bank provisions are introduced and implemented are Spain and Portugal. Very similar to the countries mentioned earlier is India, which implemented the counter-cyclical provisioning for lending in the housing market. The experience with these countries has shown that the implementation was feasible and in accordance with Basel rules. A characteristic of the Spanish dynamic provision system is that it relates provisioning to the credit cycle thus requiring higher provisions when credit grows which is more than the historical average. This system enables the provisions to build up in a fund during an improvement. These are known as 'statistical provisions' but can also be considered as 'macro-prudential provisions' that can go up to a slump to cover loan losses.

## **Overview of Funding and Liquidity Regulation**

If we have two banks with the same possessions out of which one finances expensive assets and the other finances cheap assets, the first one uses the deposits from their base deposit and the second one achieves it by the daily borrowing. According to the old bank regulations, these two kinds of banks were the same even regarding it from the perspective of the short-term financing; the bank was more 'efficient' because its financing was cheaper.

The issue of the minimum financing liquidity is a matter for discussions at the Basel Committee on Financial Stability

and at the Board Banking Supervision. A method has been set in which capital could be used to disincentive maturity mismatches.

During a financial crisis, the liquidity of assets falls due to the maturity of financing contracts that force a bank to put aside capital for liquidity by using the measures already implemented of the liquidity of liabilities and assets. As a result, for regulatory purposes the liquidity definition of assets could be fixed into two camps: liquid and illiquid, and the capital requirement could be different in different times.

## **Overview of Instruments and Market Regulation**

The crisis of the wholesale markets has highlighted the fact that complex instruments have to be tackled with regulations. Complexity is a problem that is usually not on its own but associated with other issues. The evasion of the regulation and taxes and mis-selling with the complex that simple products are illegal in most judicial cases.

These laws must be strengthened and applied. Supervisors should be able to check all instruments of the markets and fix any instruments that address systemic issues. Any contracts that are made difficult to understand on purpose for the customers should not be applied.

This fact implies that the sellers should make sure that their customers understand these tools. On the other hand, the regulators must block the application of dishonest instruments to prevent buyers' losses.

However, these fault regulation lines remain with the systemic risk to protect the consumer. The risk develops when trying to match complex liabilities to simple assets. There are products that enable an investor to track the capital index with minor management charges.

This asset is risky especially for old people, because the capital index does not counterbalance their financial liabilities



such as the cost of their mortgage, health care, pension etc. In some cases, complexity is not bad, but still depends on the definition of ‘risky’ and ‘safe’. Risk is a function of behaviour and not much of the instruments.

### **The implementation of Micro and Macro-prudential measures in Albania**

Albania as part of the Central and Eastern European countries has many features in common with these countries in regard to their economic and financial structures; they have the same development pattern and share similar problems. The same crisis affected these countries at the same time.

As in these other countries, even in Albania, there were many benefits from large inflows of capital, merely in the form of foreign direct investment and external financing. The entrance of the Western countries banks in Albania facilitated the capital inflows. As a result there was a credit and economic growth based on consumer-oriented model. Regardless of the inflation being kept stable, there were financial imbalances and weaknesses that affected the real estate prices.

The last crisis of 2007 - 2008, found Albania with a lack of liquidity because of the deposits being withdrawn. There were also lower levels of remittances and foreign direct investment. There was a lack of liquidity and exchange rate depreciation reflected on the balance sheets, which affected the consumption and investments. As a result of the economic situation, there were taken countercyclical measures in the form of expansionary monetary and fiscal policies. The countries that had lower financial and macroeconomic imbalances were in a better position to undertake countercyclical policies, and they were the ones that overcame earlier the crisis effects. Albania did not have banks bankruptcy or capital injections from the government, so it quickly changed the direction of the trust crisis and its negative

impacts in the financial system. Since that time, there were noticed a slow minor economic growth.

According to a report of the Bank of Albania in 2011, there were created many gaps in a short time and the economy was experiencing the so-called “risk taking channel”. There were also risk miscalculation from the banks. As it was noted from the high concentration in certain sectors or clients, there were no proper risk analysis and risk management by banks. The exchange of information was increased and the dialogue between bank supervision, monetary policy and financial stability was facilitated.

It is very important for the supervisors of financial stability to take part in the monetary policy decision-making process. Therefore, the policies of the Bank of Albania are also careful on the micro effects of decision-making.

There were established more strict measures in macro-prudential regulations and strengthening “at the place-supervision” of second level banks.

Through these interventions, it was meant to improve the governance and transparency of commercial banks, reinforce risk assessment and the strategies for its restraint, improve capital adequacy and liquidity ratio, and reduce the exposure to credit risk arising from uncovered borrowers in foreign currency or greedy practices followed by the commercial banks.

### **Measures taken by the Bank of Albania**

The Bank of Albania used a considerable amount of liquidities in the local currency in the interbank market, at the same time it strengthened the banking supervision and cooperation with foreign supervisory authorities of these banks.

A particular development is that of increasing the deposit insurance limit. This measure caused a turning point in the crisis of public trust in the banking system and in the

problems related to liquidities.

The Albanian economy benefited macroeconomic stimulus in the form of fiscal expansion. This countercyclical policy became possible because of the previous work to consolidate the fiscal position and anchor macroeconomic policies and public expectations.

The measures taken are as follows:

- Putting lower limits to banks large exposures in order to better diversify the risk arising from the concentration of banks' investments in international financial markets.
- Establishing a new quantitative limit for calculating, supervising and reporting of large exposures of banks to mother banks and related entities.
- Standardising the information that banks should give about the main activity of banks, their organization and management, risk management, their financial performance and accounting policies.
- Internal control as an important part of banks' governance should cover every part of the bank, in order to prevent the rise and development of unwelcome risks.
- Giving special attention even to transparency regarding banking and financial products and services offered. New legal requirements standardize the manner and form of providing information to customers about products and services offered by them.

The first lesson to learn from the supervisory authorities of getting out of crisis was following countercyclical policy, which would allow for braver measures in times of crisis.

Central banks possess the necessary tools to achieve the objectives: the base interest rate over refinancing operations; macro-prudential policy at system level; and micro-prudential supervision of commercial banks.

The availability of objectives and at least two instruments enables an optimal mix of policies.

## Conclusions

The recent financial crisis has stressed the position of effective systemic risk measurement, which remains a key factor in macro-prudential and regulatory policies. This enables the measures of systemic risk to touch the identification and evaluation of threats to financial stability.

The notion "macro-prudential" has evolved from virtual obscurity to an amazing importance, particularly after the recent financial crisis. Since the time it was created in 1970, it still defines the concerns in regards to the financial stability and its relation to macro-economy.

Also, the focus of these concerns has changed over time. They have been unified to excessive lending to developing countries, the impact of financial innovation and the development of capital markets, the effect of the regulation on "pro-cyclicality" of the financial system, as well as the consequences of the failure of key systemic institutions.

Throughout the whole time there have been made continuous efforts to clarify the meaning of the term macro-prudentially. It refers to the use of prudential tools with a clear objective to promote the stability of the financial system as a whole and not necessarily to individual institutions within it. Macro-prudential instruments include the integral requirements and capital accumulation in a liquidity indicators provisions perspective and careful appraisal of the collateral. Macro-prudential surveillance policies are strategic instruments to ensure financial stability, in fact they can reduce the repetition of systemic risks and structural weaknesses.

Regarding macro-prudential policies, the need for the development of specific anchors was argued, which would make the objective of financial stability more reliable, more transparent and therefore more accessible.

Measurement of financial stability or instability can be a

hard process, but this should not discourage us trying to accomplish it. The experience of Albania as a country with a developing economy shows that price stability and financial stability are prerequisites for each other.

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