

Impact Factor: 3.1 (UIF) DRJI Value: 5.9 (B+)

Panic in Banking Sector - A Theoretic Approach

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Abstract:

Arguments on the stability in the banking sector¹ have been raised again in these last two decades, focusing in the non-liquid nature and the inability of the banks to pay. The asymmetric information² can lead to a collapse in the banking sector, due to the fact that their fund providers are not capable of deciding whether the institutions in charge of their funds are safe enough. Thereupon, they can withdraw their funds in order to invest them somewhere safer.

If the economy indicators deteriorate and depositors lose faith in the banking system and panic spreads amongst them, the results may be catastrophic and may lead to a great number of bankrupts in the banking system. Although if there was no panic the economy could rearrange itself³ and have positive results. Panic in the banking system has proved to be an ongoing and difficult to prevent phenomena⁴, but in the case of a modification of the agreement with their depositors, the banks may be less exposed to insolvency, more liquid and safer in regards of the panic phenomena.

¹ Michael D. Bordo, John Landon-Lane "The lessons from the banking panics in the United States in the 1930s for the financial crisis of 2007-2008", Working Paper 16365, http://www.nber.org/papers/w16365

 $^{^2}$ The economics of money, banking and financial markets, 7th " Mishkin, Frederic S., ISBN 0-321-12235-6, page $39\,$

³ Alan Greenspan, "The age of turbulence", ISBN 1-4295-4652-2, page 67

 $^{^4}$ "Self-Fulfilling Risk Panics", Dt. N° 2011-003, "Serie de Documentos de Trabajo", Working Paper series February 2011

Key words: Bank panic, consumer confidence, panic costs, bank regulation, deposit guarantee.

Introduction

Strong belief in the banking sector, before the crisis of 2007-2008, that the banking market was "to big to fail" highlighted a huge problem for the regulatory policy in the banking sector. The only reliable way to prevent financial institutions to believe they had reached the stage "to big to fail", is to convince the creditors of the bank that even big banks may fail. The undeniable argument for the bank and its creditors, in regards of the weakness of the banking sector, is the devastating effect of banking panic. Panic in the banking sector can cause severe damage to the banking sector and the economy as a whole, due to insolvency or lack of liquidity. The loss may also affect the budgets of the respective governments, therefore affecting the interests of taxpayers. In response to this historical problem, the regulatory policies of central banks have failed to give a final solution in all history of conventional banking operation.

Insolvency in the banking sector refers mainly to the fall of economic indicators in a preceding period, which is accompanied by a fall in the value of bank assets. In order to reduce the risk of insolvency, the bank puts on sale the mortgaged property as collateral to the value of the remaining obligation by the borrower. If the rate of nonperforming loans increases and the possibility to sell at acceptable prices the guarantees issued in the market reduces, the situation can be alarming. When a bank is on the state of insolvency, the situation needs to be analyzed in order to figure out if it can improve without government intervention. This reaction is associated with the undertaking of a series of steps that have to do with restricting lending, in specific sectors of the economy or complete inhibition of lending, with the fulfillment of the

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 $^{^5}$ Benjamin Chabot, " The Cost of Banking Panics in an $\,$ Age before "Too Big to Fail"", WP 2011-15

requirements for additional capital and a change in the management of the bank.

The bank's illiquid nature is another reason for the exposure of conventional banks towards panic. Panic in this case is not necessarily linked to the investment performance of the bank or the rate of nonperforming loans, but it is instead related to the incapability of their fund providers to assess whether institutions holding their funds are safe or not. The bank may be financially healthy and have a good portfolio management, but a growing demand to withdraw funds from its depositors will lead to inability to provide the necessary liquidity. This inability would result in banks' bankruptcy, despite its good performance in the market. The bank cannot resist a crisis of panic because it keeps only a small reserve to respond to a natural demand of depositors for liquidity; the majority of funds are used in investments. On this point, the bank would be unable to respond to request for liquidity at a time when interbank borrowing is interrupted because of the panic spread in the sector.

Depositors panic has to do with the fact that their funds are safe up to a certain level. Despite data suggesting that results in losses due to banking crises have been, on average larger in over 10% of the annual GDP⁶, the safety of deposits above the level guaranteed by law has been considered an issue between the bank and its depositors. Respective governments have suggested a reasonable level of security and if this level is crossed, the deposits are subject to risk. In this sense the story of eight centuries of conventional banking risk suggests that the solution to the banking panic cannot come as a result of regulatory policies of central banks, but as a private agreement between the bank and deposit holders.

The new agreement, which aims at protecting the banking sector against panic, should be renegotiated on the

⁶ Glenn Hoggarth, Jack Reidhill, Peter Sinclair, "On the resolution of banking crises: theory and evidence", Working Paper no. 229, Publications Group, Bank of England

amount that is not subject to guarantee level by the respective countries' regulatory policies. The difference above this amount should be an ongoing concern for depositors in good and bad times for the economy. The panic risk occurrence is directly linked with the return expectations of depositors on their deposits. This element can be renegotiated, between bank and depositors, for amounts exceeding the level of deposit insurance as a difference between the total amount of the deposit and the guaranteed level. Sooner or later the depositors must accept that having a bank deposit contains a certain risk.

Crises of panic and regulation policies in the banking sector

Banking panic can have devastating effects on expected returns from the depositors. When a bank is at risk of bankruptcy because of the banking panic, depositors know they can incur significant losses and expected return of the deposits can be of negative value. A bank with safe deposits and a large portfolio of illiquid loans⁷ may have good prospects in the long run. However if for some reason all depositors try to withdraw their funds at the same time, even due to panic based on false information, problems with serious consequences would follow for the bank. Unable to find a way to sell illiquid loan portfolio, the bank may not be able to pay its depositors in panic. The fate of a bank panic hit by such a crisis would be an inevitable bankruptcy. Such was the fate would be of any bank in the case when governments have not fully guaranteed bank deposits measure and decide not to interfere with the funds to stabilize the banking sector.

A bank with large deposits and a large portfolio of illiquid loans can have good prospects in the long term. However, if for some reason all depositors try to withdraw their funds at the same time, even due to panic based on false

⁷ Carmen M. Reinhart -Kenneth S. Rogoff, "This time is different"-Eight centuries of Financial Folly, ISBN: 978-0-691-14216-6, pages xi

information, the bank may face with serious consequences. Unable to find a way to sell illiquid loan portfolio, the bank may not be able to pay its panicked depositors. A bank hit by panic crisis would inevitably follow bankruptcy. And such would be the fate of all banks if governments do not guarantee at full extent bank deposits and decide not to interfere with their funds to stabilize the banking sector.

Asymmetric information can lead to collapse in the banking sector, because their funding providers are not able to assess the safety of the institutions holding their funds. Because of the difficulty in assessing the situation this may result in financial panic in the banking sector accompanied by huge losses for the public and cause serious damage to the economy. To protect the public⁸ and the economy from panic in the banking sector, governments have implemented a number of regulatory policies related to the limitations of entry into the banking sector, giving detailed information about the activity, restrictions on assets and activities, guaranteeing deposits, restrictions on competition and limitations on interest rates.

Restrictions of entering into the banking sector. An important point in the context of regulatory policy is also that of the central banks rights to decide on licensing policies and supervision of banking activities in order to ensure the stability of the entire banking system. The purpose of imposing these restrictions and requirements in the banking sector aims at lowering the possibility that dishonest or inexperienced individuals become copartners or administrators in a bank⁹. A well-managed licensing process does not guarantee the successful activity of a bank, but it is considered as an effective method to limit access of unstable institutions in the market. This aims at reducing the possibility of failure in the future of banking activity due to unsystematic risk.

 $^{^8}$ The economics of money, banking and financial markets, 7th " Mishkin, Frederic S., ISBN 0-321-12235-6, page 39-41

⁹ "Licensing policy of banks", No. 12, dated 25.02.2009, Bank of Albania

Periodical reports. Regulatory policies provide stringent reporting requirements in the banking sector. bookkeeping should be carried out by following some strict rules, failure of which may result in substantial penalties on banking entities. The financial data banks are subject to periodic inspection of central banks and their annual results must be easily consultable and within a certain period of time available to the public. Providing information on a regular basis can prove that the legal and regulatory requirements related with sufficient capital, necessary liquidity, asset quality, sufficient reserves to the risks they have undertaken and administration as a whole, are being implemented¹⁰. This intends to protect depositors and to avoid abusive practices to identify in time the problematic banks. Through the provision of periodic information, the depositors of the bank are protected, by exploiting all existing possibilities for minimizing the government and the public cost.

Limitations on assets and activities. With limitation of assets and activities in the banking sector we mean the limitation of banks investments in the capital of companies that are not banks or financial institutions or participation as a partner in such businesses in a certain percentage (in Albania not more than 10 percent). To ensure the depositors that banks will be able to meet their obligations, central banks engage in stopping the participation of commercial banks in activities considered at high risk. In some countries such as the US commercial banks and other institutions that accept deposits are not permitted to invest in ordinary shares, because share prices experience significant fluctuations in the market, while in Japan and Germany the amount of stocks that banks can hold in commercial companies can be quite significant.

¹⁰ "On the reports at the Bank of Albania accordingly to the Unified Reporting System", No. 45, dated 10.06.2009, Bank of Albania

Deposits Insurance. The government use the possibility to assure citizens' deposits in order to avoid financial losses if the banks in which they are carrying their deposits may fail. In the absence of a deposit insurance, even a false information regarding the reduced funds in banks, could provoke a chain reaction in other banks in the market. However the size of the panic in this case can be assessed at a much lower rate than in the case of the liquidation announcement form the bank¹¹. Deposit insurance is an important element in preventing panics in the banking system, but their coverage is limited to a certain level. For those depositors who are carrying a higher rate level of funds (which are determined by the governments of the respective countries), even an uneasy signal about the banks' inability to pay will cause a panic situation in the banking system.

Restrictions of competition. In terms of a competitive market for deposits, their interest rate is determined by the rule of equilibrium of supply and demand. The level of interest rates may be influenced by individual strategies of commercial banks in relation to the targeted amount as part of aggregate demand on deposits. In any case, the equilibrium interest rate cannot be controlled actively by a certain bank. However, regarding the deposit's market, the governments tend to be concerned that the excessive competition between commercial banks could lead to increased credit interest rates. Furthermore it could lead to the risk of non-payment of loans and may increase the possibility for damaging the public. Even though the arguments defending the idea that an excessive competition could be the cause of such a situation are weak, some governments have already imposed restrictive rules on banking sector¹².

¹¹ Glenn Hoggarth, Jack Reidhill, Peter Sinclair, "On the resolution of banking crises: theory and evidence", Working Paper no. 229, Publications Group, Bank of England

 $^{^{12}}$ The economics of money, banking and financial markets, 7th " Mishkin, Frederic S., ISBN 0-321-12235-6, page 32-35

Limits on interest rates. Compared with other investment opportunities, deposit market is developed as a result of the confidence of depositors and the relative attractiveness of deposits associated with the paid rate of interest. Competition in interest rates has also been subject to restrictions by the regulatory policies of the central bank. In United States, after the crisis of the Great Depression from 1933 to 1986, for decades the Federal Reserve System ¹³ have had the power to set maximum interest rates that banks could have paid on saving deposits. These rules were created due to the common belief that unlimited competition in interest rates have encouraged such failures in the banking sector during the Great Depression.

Despite dissimilarities arising from differences in certain legislations, regulatory policies are essentially characterized by the same wave that has to do with the stability of the banking sector. The sustainability of the banking sector is provided by the licensing process, through the periodic inspection and the provision of deposit insurance. Even though that there are so many existing differences regarding the regulatory policies between US and Europe and Asia, their main goal remains the same: the stability of the banking system and the provision of deposits insurances.

Eligibility for avoiding banking panic

In favor of the stability of the banking sector and the provisions of deposit insurances, the Central banks offer protection measures against systematic risk and unsystematic one. Taking into account the damage that has been caused to the real economy as a result of banking crises on average accounted for over 10% of annual GDP, the main objective of regulatory policy

 $^{^{13}}$ The economics of money, banking and financial markets, 7th " Mishkin, Frederic S., ISBN 0-321-12235-6, page 35-40

remains the sustainability of the banking system and its impact on the real economy cycle. As a matter of high public interest that has to do with security of the citizens savings, the protection measures are the main focus of regulatory policies.

Regarding the importance of the banking system and considering the significance of a country's economic stability, it would have been quite easily accepted the solution by which the governments would guarantee 100 percent of citizens deposits. In this way, the risk would have been transferred from the banking sector into the state budget and furthermore it could lead to the protection against the risk of panic in the banking system. Due to the inability of governments to maintain such a liability that would damage every taxpayer and because of moral hazard that has been frequently appeared in the banking sector, the issue is dealt more in finding new strategies in order to limit such panics than finding a solution to the exhaustive character.

Banking panic caused due to the disturbance of the depositors for their shares of the non-insured funds, is valued by the government as a matter that has to be only between banks and their depositors. Even though a bank may be healthy and have a sustainable portfolio, the growing demand from depositors to withdraw their funds, will surely lead the bank in front of the unavailability to provide the necessary liquidities. In this case we going to deal with the panic that will occur not because of insolvency, but due to the illiquid nature of the bank. In this context, the risk to the banking panic should be classified as part of the systematic risk, which in the current conditions is inevitable nor from the application of regulatory policy, either by a better bank management.

When being in front of such bank crisis, the impact of regulatory institutions would vary from the type and the damage magnitude that is affecting the financial system. In an unsystematic risk situation, the financial results and the management of the financial institution that has a poor performance are in the spotlight. In such isolated case, the banking panic would not be a risk for the whole banking system. Regarding the case of the systematic risk on the other hand, it could be assumed that the whole market would get infected by uncertainty and insecurity. Even though the government's intervention to provide liquidity procedures can provide extra capital for the banking sector, this information can increase the levels of panic and insecurity¹⁴. In this case, it can easily be understudied that that the stability of the banking system will depend on willingness of the government to undertake a high risk and its force to provide the necessary liquidities.

In these conditions, when most regulatory policies and the limitations of activity in the banking sector are focused on the protection of deposits and stability of the banking sector, a sharp modification of the relationship between the bank and the depositors may help the banking system to get protected from panic crises. This protection may come as a result of a new agreement between the depositor and the bank. Without changing anything in the current regulatory policies and deposit insurances, regarding exposed deposit's part (unguaranteed part) it is suggested to conclude an agreement that accepts the risk of moderate loss in deposits in short term with the condition to recover these short term losses by the potential gains in the near future of the banking activity.

A new agreement between the involved parties in the banking sector, based partly on the rule (profit-and-loss sharing PLS) ¹⁵ by which the depositors participate in banks' risk investments, can be a sustainable solution against panic crisis. Depending on the overall performance of the banking sector, the return of depositors may be variable and so the risk is considerate to be divided proportionally among all the

¹⁴ Glenn Hoggarth, Jack Reidhill, Peter Sinclair, "On the resolution of banking crises: theory and evidence", Working Paper no. 229, Publications Group, Bank of England

 $^{^{15}}$ Islamic banking in a global economy" Ibrahim Warde, ISBN 0 $7486\ 1216\text{-}\ 5,$ page 20-21.

depositors of the bank. Instead of the current agreement, the unprotected depositors in order to ensure not only the principal of the deposit but also the anticipated return on deposits, may accept a new agreement based on real results of economy and not on the contractual provisions of the bank. As a result, this agreement, by accepting a moderate temporary loss on deposits in short term periods (losses envisaged to be restored in longer term periods), because of the collapse of economic indicators, will avoid the risk of panic.

The main purpose of this agreement is to avoid big losses for individuals and for bank depositors as a whole and for an temporary distribution of potential loss pro rata among the holders of deposits. This proportional distribution would avoid panic in bank desks and even though the depositors who would rush to be the first in the bank desk can't expect to get higher levels of funds than those of the depositors that are most backward in time. At first glance, such an agreement might seem to help out the banks, but it is equally beneficial for depositors. Avoiding panic not only protects the value of the assets of the banking system, (provided by the use of deposits), but simultaneously injects security and optimism in the performance of the real economy.

Due to the reformulation of the agreement with the depositors, whom accept to participate in profits and losses of the bank's short-term risk would proportionately avoid panic because of internal sharing risk of the bank with bank depositors. The acceptance of a moderate risk by depositors offers the possibility to avoid the sense of panic, which can cause drastic loss of deposits due to the lower prices that might arise in case of a crisis in the banking sector. If the consequences of banking crises would return in systemic crisis than this would also affect the solvency of all institutions that issue sale assets. The acceptance of the moderate risk by

 $^{^{16}}$ Systemic risk in Albanian banking system, Laura Vorpsi, Ina Cota, Albanian Socio Economic Review, ISSN 2222-5846, 2013

depositors would surely help to limit the panic crisis in the banking market.

In those conditions when the government it is impossible to provide a sustainable solution to the banking panic it seems normal to try to find the solution within the system itself and not weigh in the state budget, the cost of which is covered by the public again. The proposed agreement does not imply a revolution in the banking sector, but the recreation of a strategy "win-win" between the parties, with the main aim of achieving a sustainable protection against panic crisis in the banking sector. Regarding systemic risk the panic crisis may respond only on a behavioral attitude that would be directly connected with the expectations of the returns on deposits. And finally, this is why it can be said that the race of whom is going to be the first to withdraw the deposits in the banking desks, would definitely come to an end.

Conclusions

Due to the bank insolvency or lack of liquidity, panic crisis in the banking sector could cause major damages to the banking sector and the economy in general.

The losses due to panic crisis may affect the budgets of respective governments, thus affecting the interests of every respective taxpayers. An effective solution to panic crisis could be the 100 percent guarantee of deposits by state governments. Due to the inability of governments to maintain such a burden to the detriment of the interests of taxpayers and due to the moral hazard that has frequently appeared in the banking sector, the government's aim to limit the panic crisis in banking system through regulatory policies more than by finding a solution of exhaustive nature.

Asymmetric information can lead to the collapse of the banking sector, because the bank funds providers are not able to measure the wealth level of those institutions that hold their funds. The difficulty in measuring the situation could result in a financial panic in the banking sector and would cause huge losses to the public and in the other hand it would also provoke regress on the real economy. In order to prevent the panic crisis in the banking sector, governments have implemented a number of regulatory policies that are related to: the limitations of entry into the banking sector, obliged and detailed information about the activity, restrictions on assets and activities, guaranteeing deposits, restrictions on competition and limitations on interest rates.

Despite the existing differences between different legislations in various countries, these regulatory policies aim to create sustainability in the banking sector. The sustainability of the banking sector is provided by the licensing process, through the periodic inspection and the provision of deposit insurances. Even though that there are so many existing differences regarding the regulatory policies between US and Europe and Asia, their main goal remains the same: the stability of the banking system and the provision of deposits insurances.

If the given regulatory policies fail to provide a protection in order to avoid the panic crisis than the solution might be found on a new agreement between the depositor and the bank. By appreciating the important role of the current regulatory policies and partial deposit insurances for the exposed part of deposits, it is suggested to create a new agreement, which will accept a moderate rate loss in the short term that are is going to be covered by the potential gains in the near future of the banking activity. Due to systemic risk, this solution may be appropriate regarding the limitation of the panic crisis. Regarding systemic risk the panic crisis may respond only on a behavioral attitude that would be directly connected with the expectations of the returns on deposits.

The suggested agreement will help to avoid big losses for each depositor individually and as well as for the banking system as a whole. The Bank will share internal risk with a proportional distribution of potential loss pro rata among the holders of deposits. This proportional distribution would avoid panic in bank desks and even though the first depositors who would rush to be the first in the bank desk can't expect to get higher levels of funds than those of the depositors that are most backward in time.

The proposed agreement does not imply a revolution in the banking sector, but the recreation of a strategy "win-win" between the parties involved in the system, with the main aim of achieving a sustainable protection against panic crisis in the banking sector. A new agreement between the involved parties in the banking sector, based partly on the rule (profit-and-loss sharing PLS) by which the depositors participate in banks' risk investments, can be a sustainable solution against panic crisis.

Depending on the overall performance of the banking sector, the return of depositors may be variable and so the risk is considerate to be divided proportionally among all the depositors of the bank. Instead of the current agreement, the unprotected depositors in order to ensure not only the principal of the deposit but also the anticipated return on deposits, may accept a new agreement based on real results and not on the contractual provisions of the bank. The proposed model of the agreement between the bank and its depositors indicates that short-term losses on bank deposits due to systemic risk, would be insignificant in relation to the damage that could have cause panic crisis in the banking sector and in the economic performance of every country worldwide.

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