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# Deposit Insurance System in Serbia - Weaknesses and Improvements

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#### Abstract

This paper points out the main features of savings deposit insurance system in Serbia. The aim is to critically examine the existing system of savings deposit insurance, thus pointing out its positive characteristics and identifying potential weak points. The idea is to propose, in accordance with international best practice and European Union guidelines, the possible improvements of the identified potential weaknesses, thus preventing possible "panic attacks" of depositors of credit institutions and escaping the consequences of a "domino effect" that can threaten the entire banking system On the premise of the identified weaknesses, some specific possible improvements of the existing deposit insurance system are proposed in the direction of minimizing the impact of moral hazard, adverse selection and principal-agent relationship. These improvements include ideas that are intended to initiate thinking about improving the system of deposit insurance in the future, when the institution reaches its full target and generates its fund assets.

**Key words:** deposit insurance system, deposit insurance, savings, depositor, bank, premium insurance, moral hazard, adverse selection, and principal-agent

**JEL Classification:** *G21*, *G22*, *G32*, *G33*, *L51* 

#### Introduction

In the financial market, banks are certainly the most important mediating financial institutions, not only in the capital volume and structure, but also in the functions they perform. Banks are financial companies which offer liquidity and facilitate funds transfer between savers (depositors) and debtors.

The stability of banking system in the financial market is provided in two levels, via basic security and via additional security. The basic security of banking system is provided by the system of bank auditing and regulation, whereas additional security is provided by the realization of the deposit insurance system in credit institutions.

Nowadays, the system of deposit insurance (deposit savings), along with the central bank institution and the super auditing of the banking system, represents an important base of the majority of developed finance systems. The essential idea of its application is to minimize the

risk of "bank runs" through small depositor protection and in that way keep the stability of financial system. A stable savings deposit insurance system provides confidence in financial institutions, encourages savings and promotes the development of financial institutions as well as the general economic growth. Deposit insurance is one of the mechanisms of the government used to promote the stability of the banking system, as well as to protect small deponents against loss, due to a banking crisis.

Deposit insurance is a legally established protection of deposits in case a bank collapses<sup>1</sup>. Deposit insurance can be established in a separate institution, or as part of an organization within a supervisory institution or a state agency, provided that their implementation must be based on a clear and precise legal regulation. Regardless of the goals, deposit insurance has always only one task - to pay out the depositors in case of bankruptcy, as soon as possible, in order to avoid panic and maintain the stability of financial system<sup>2</sup>, together with other participants in the finance market<sup>3</sup>.

Deposit insurance guarantees to the depositors that their deposits will be partially or totally repaid in case of a banking crisis. If a depositor is afraid that his funds are not available at any moment, it can provoke panic which can turn into a huge banking crisis, usually spread even to the major banks by the "domino effect". The result of panic is that the access to credits is severely restricted; the depositors lose access to their funds, which imposes a heavy obligatory burden to the economy, bearing in mind the costs of the system recapitalization. (Bernanke, B. 1983)

The system of deposit insurance in Serbia has been implemented not so long ago (2005) and in the very beginning it was confronted with many difficulties. The difficulties were not a result of the poor choice of insurance system or poor design, but they resulted from the banking system. The system of deposit insurance has overcome the initial problems mostly due to the state support and is now at the stage of gaining credibility, regardless of the world financial crisis. Despite the turbulent changes in the surrounding countries, which have been spread to Serbia, the deposit insurance system underwent changes at the end of 2008, with the aim of adjusting and harmonizing with the EU directive "94/19 EC on deposit guarantee schemes of European Parliament and Council". The changes and harmonization with the EU directive and its implementation in Serbia enforce the continual review and critical analysis of the existing deposit insurance system in Serbia, with the aim of its improvement and the restoration of depositors' confidence in the banking system.

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<sup>&</sup>lt;sup>1</sup> The first scheme of deposit insurance was set up in the U.S. in 1934, with the formation of the Federal Deposit Insurance Corporation (FDIC). FDIC is the official organization established by the U.S. federal government, established as a response to the failure of many banks during the Great Depression in the early 1930s (Rose, 2002, 48).

<sup>&</sup>lt;sup>2</sup> Creation and development of the global economic crisis in 2008, in addition to the increased restrictions in the economic sphere by the U.S.A. and the European Union, have caused the expansion and coverage of their deposit insurance schemes. The International Association of Deposit Insurer cites that there were 100 countries with almost 140 explicit schemes and another 19 countries with one scheme, in 2008.(http://uuu.iadi.org/deposit.html)

<sup>3</sup> It is characteristic that in the middle of the great global economic crisis, China and New Zealand have announced the introduction of the deposit insurance system, as well as the application of the insurance scheme to 20 countries at the end of 2008, which actually did not have any explicit scheme of deposit insurance. The economic measures of these states, in the field of deposit insurance, are intended to affirm the importance of deposit insurance for the stability of the banking system. Even though these measures' target group was the banking sector, they have been designed with the aim to regain the confidence in finance markets and they are spread in accordance with the unmistakable belief of some economic policies that deposit insurance positively affects the entire financial markets. An interesting fact is that the positive trust, which deposit insurance produces in financial markets, occurs at times when large debates that the establishment of such a system actually leads to a reduction of the economic development of the country are led. (Demirgue-Kunt, Kane and Levin, 2005)

In this sense, the main contribution of this paper should be an initiative to start the reexamination the existing insurance system on the basis of the achieved scientific results. Having in mind the aim and the object of research, the paper is structured in four parts. The first part presents the theoretical knowledge about deposit insurance. Then, the second part indicates the external rules of insurance, in accordance with the EU directive, and briefly presents the experience of certain surrounding countries. The third part gives the main characteristics and the design of deposit insurance system in Serbia, thus giving space for its critical review in the fourth part, in which the potential weaknesses of the existing deposit insurance system are emphasized. The fourth part also proposes the measures and guidelines for its improvement and presents some ideas for the future design of the deposit insurance system scheme, once the original difficulties are overcome, the credibility of the financial institutions is gained and the targeted assets fund is completely generated.

# Aims and Arguments for the Application of Deposit Insurance System

The Working Group on Deposit Insurance, established by "The Financial Stability Forum" identified the goals of public policies for the insurance of savings deposits and schemes, which can be elaborated on the following three broad categories (2001):

- 1. Those which contribute to the stability of the financial system;
- 2. Those which contribute to the protection of small depositors;
- 3. Those which contribute to increasing the ability of regulators to achieve other related policies.

Other goals include the development of formal mechanisms for resolving the problems of banks. They also contribute to the mechanism of payment, or avoiding and quick resolving of the financial crisis (Evanoff, 200, 1-2).

"The Financial Stability Forum" group identified key attributes of an effective deposit insurance system, which are given below in summary form (Şafakli, Güryay, 2007, 204):

- The frame in which the deposit insurance system is established should be explicitly defined
  its benefits, including the insurance coverage and limitations;
- o The participation of the bank in the deposit insurance system should be obligatory;
- The mandates of the depositor, insurer's responsibility, regulatory and supervisory agencies as well as of the central bank (agency) should be clearly defined. The insurance agreement should include the responsibility of the regime as well as a close coordination, free and timely flow of information among the agencies;
- o The insurers should have well-defined financing mechanisms for quick fulfillment of their obligation towards the depositors;
- The public should be informed about the key elements of deposit insurance, which secures the confidence in the system (Garcia, 2000, 7-12).

Consequently, few arguments that clearly indicate the role and importance of the implementation of savings deposit insurance system crystallized in economic discussions:

The first argument refers to the protection of small depositors. The thesis of this argument is based on the assumption that most savers do not possess adequate knowledge to assess the risk of the bank. This attitude is derived from the very complexity of the banking system, as well as the lack of transparency which simply arouses misunderstanding and poor estimates in people. (Kraft 2004, 3-5) In addition, there is a widespread opinion, that major depositors are much better informed than the small ones, and that in the case of a disruption in the business of the

bank, they will withdraw their deposits first, before a large number of the less informed small depositors. Most of financial assets are usually allocated in the form of savings in the bank. If there is no system of savings insurance, any inaccurate estimation of the bank can lead to a financial collapse and the loss of clients. Savers' deposit insurance introduces social responsibility for taking over the risk in order to ensure financial security of the clients. The "first in line- first served" rule is no longer valid with the existence of insurance, because everyone will be equally served.

The second argument is based on the thesis that deposit insurance increases competition in the banking sector. The premise of this argument was based on allegations of the small banks in the United States, that large banks, because of their size and recognizable names in the financial markets, have an advantage in collecting deposits at lower interest rates. (Kraft 2004, 3-5) The system of deposit insurance allowed to small banks to neutralize these advantages. The "neutralization of the advantages" argument has a very stressed political connotation, especially "in the light of the fact that small banks are seen as protectors of local interests and as a prevention of an unhealthy concentration of wealth and power in large banks." (Calomiris, White, 2000, 164-211). The economic basis of this argument is suspicious; in particular, if it is known that major banks are more effective due to the economic volume. Therefore, this argument of equal competition(Kraft 2004, 3-5) in case of savings deposit insurance system could be understood as a way of the survival of "the inefficient".

The third argument for the deposit insurance refers to the financial security aspect which is based on the fact that depositors will run on the bank if they suspect its ability to fulfill the responsibilities. In the countries where banks do not have full deposit coverage, or a reservation, the depositors' panic is possible because of the possibility of deposit loss. Simply, if a large number of depositors, for some reason, think that the bank has financial problems, they will withdraw money, which can cause trouble to the bank. (Kraft 2004, 3-5)

A bank run may cause a financial collapse to a solvent bank, because of liquidity decline, or even bankruptcy if there is no access to some external source of financing. It seems that a bank run on illiquid but solvent banks will not cause their bankruptcy if they have alternative external sources of liquidity. (Kraft 2004, 3-5) Central banks are ready to secure that kind of liquidity, in keeping with the famous Bager's rule "lend an unlimited amount money to solvent banks without critical collateral value" (Bagehot, 1873).

## The Implementation of Deposit Insurance

# The External Rules - European Directive for Deposit Insurance

The justification for the existence of the costs of deposit insurance security initiated the European Union countries' adoption of a directive "94/19 EC on deposit guarantee schemes of European Parliament and Council" in 1994, by which the EU member states are bound to comply with these rules:

- o Each EU member state must ensure the existence of at least one scheme of deposit insurance on its territory (therefore, explicit insurance);
- o The insurance must be a minimum of EUR 20,000 per depositor;
- The insured deposits must be paid within 3 months. The specified period may be extended to two times, for three more months (which is a total of nine months);
- The deposits that cannot be insured are the deposits of credit institutions or deposits arising from transactions of money laundering;

- O Deposit insurance also applies to the depositors in the branches of domestic banks that operate in the territory of some other EU member state;
- o If the deposit insurance in a country where some foreign bank's branch operates is higher than in the domicile country, the branch should be allowed to apply the deposit insurance that exists in that country (www.aod.rs).

The directive is the basic legal and regulatory instrument that aims to strengthen the public confidence in banking institutions of the EU. The scope of the directive provides a minimum level of the harmonization of the process of protecting the interests of depositors in case of bank failure. In that way, it motivates the members to create the necessary conditions and criteria for developing mutual trust and cooperation and build compatible models and common solutions to deposit insurance.

The obligations of the directive are contained in the introductory part of the document, and refer to:

- The mandatory principle which precisely defines that the obligations of funding the deposit guarantee system are in the exclusive jurisdiction of credit institutions, whereas the state has no such obligation. The transfer of the insurance costs from the state budget is considered as a state aid, which is prohibited by the "European contract";
- o The financial capacity of the implemented solutions to deposit insurance should be commensurate with the potential liabilities of the system for protecting deposits.

The document does not contain detailed responsibilities, guidelines and ready solutions, the way of super-auditing or financing, premium accounting methods or other performances. All these policies and measures are encouraging, and all EU member states are given the autonomy to define with their legislation the key elements of their system for protecting deposits, with the aim of decreasing moral hazard and their focusing on the small depositors` interest protection.

## **Deposit Insurance in Surrounding Countries**

In late 2008, Bosnia and Herzegovina adopted the Law Amending the Law on Deposit Insurance in the banks of Bosnia and Herzegovina. According to these amendments, the amount of an insured deposit is determined by the amount of KM 20,000, and it is regulated that the member banks secure only deposits of citizens, and that for the future, the jurisdiction in the amount of insured deposits is given to the Managing Board of the Deposit Insurance Agency of Bosnia and Herzegovina. These changes also confirm the deposit safety in the banks that are the members of deposit insurance programs, and also make closer the European standards in this field. The intention of passing this law is to strengthen the citizens' confidence in the bank system of Bosnia and Herzegovina. The concept of deposit insurance in Bosnia and Herzegovina is focused on the principle "per depositor per bank member", which means that a citizen can have in each member bank the amount of KM 20,000, covered by The Deposit Insurance Agency of Bosnia and Herzegovina. The determined rate of insurance premium is 0.3% per annum, on the base established by The Law on Deposit Insurance in banks.

With the amendments to The Law on Deposit Insurance (NN No.119/08), Croatia harmonized its legislation in the field of deposit insurance system with the directive of the European Union. The aim of the deposit insurance system is the protection of the citizens' deposits. The insured deposit amount is Hrk 400,000, regardless of the number of bank accounts, the amount of funds, currency, and the place where the bank accounts are booked. If necessary, the government of the Republic of Croatia may stipulate a higher amount of insured deposits.

The insurance through The Deposit Insurance and Bank Rehabilitation State Agency does not include deposits of the managing and supervisory boards' members or the credit institution management members, deposits of shareholders with a share greater than 5% of the voting

shares, deposits that are not made out to person, deposits banked under significantly favorable conditions, deposits arising from illegal acts, like money laundering, or the deposits in credit unions and savings-credit cooperatives.

Under The Law on Deposit Insurance 65/05 from 2005, Montenegro adopted the aims of deposit protection. Deposit protection includes deposits of citizens and legal persons, residents and non residents. All types of deposits made out to person are protected, including bank accounts, current accounts and savings. Exemptions from the deposit protection are specified by the law and they are in accordance with prevailing standards in the world.

In case of a bankruptcy of a bank, The Deposit Insurance Fund guarantees a payment of up to EUR 5,000 per depositor, regardless of the number and type of a deposit in the bank. The amount of payment is determined by adding all of the depositor's account balances and subtracting the total liabilities to the bank on the opening day of bankruptcy or withdrawal of license.

All the banks to which The Central Bank of Montenegro has granted licenses are automatically incorporated into the deposit protection system, which means that deposits in all the banks of Montenegro are insured.

The competence in bank deposit insurance is granted to The Deposit Insurance Fund which guarantees the pay out up to the guaranteed amount and in the estimated time limit, in case of bankruptcy. The deposit pay-out from the Fund assets must begin within 60 days at the latest, and end within 90 days from the day of the starting point of the protected case. The Deposit Insurance Fund arranges the payout over one or several banks.

The deposit insurance is free of charge for all depositors- citizens and companies. Banks have a duty to pay the initial and annual premium for deposit insurance to the Fund. The basic aim of deposit protection is that the citizens and companies be secured from the loss in case of bankruptcy of the bank in which they have an account or savings. In that way, the strengthening of confidence in banks is encouraged, indirectly influencing more favorable bank services.

# **Deposit Insurance in Serbia**

#### Fundamental Characteristics of Deposit Insurance System in Serbia

The design of deposit insurance system in Serbia is determined by The Law on Deposit Insurance Agency (Official Gazette of the Republic of Serbia, No.61/05, 2005), on the basis of which the Deposit Insurance Agency with the attributes of a legal entity was established. With passing this legislation the Agency for Deposit Insurance, Rehabilitation, Bankruptcy and Liquidation of Banks ceased to exist, and the Deposit Insurance Agency was appointed its universal legal successor.

In terms of the functioning of the banking system in the country and the environment, which occurred in 2008, the Law Amending the Law on Deposit Insurance was passed in order to effectively protect the deposit (Official Gazette of RS, No.116/08). The highest sum of the insured amount is also changed, and it is now EUR 50,000 (instead of the previous 3,000) in Dinar counter value at the official middle exchange rate applicable on the date of the decision of the National Bank of Serbia on the initiation of bankruptcy proceedings against the bank. The Agency determines the amount of the insured deposit per depositor, based on the balance of all the deposits of depositors in the bank on the day of the decision of the National Bank of Serbia on the fulfillment of the conditions for the initiation of bankruptcy, which includes the agreed interest rate up to the date of payment.

The institution at which banks ensure deposits and which accomplishes the payout in the event of the termination of bank operation is the Deposit Insurance Agency. (The Deposit Insurance Agency of the Republic of Serbia, 2009)

In accordance with the Law on Deposit Insurance Agency, the Agency performs the following activities:

- obligatory physical persons' deposit insurance;
- o activities of bankruptcy or liquidation administrator in banks and insurance companies;
- o it participates in the managing of banks where the Republic of Serbia is the shareholder;
- o it organizes and executes the procedure of sale of shares of these banks;
- o it organizes and executes the procedure of privatization of social, i.e., state capital in insurance companies;
- o it performs other activities on a behalf and at the account of the Republic of Serbia in accordance with the Law and other regulations (www.aod.rs);
- The Agency activities are more closely regulated by the following laws and decrees: (www.aod.rs);
- o Law on Deposit Insurance (Official Gazette of RS, Nos.61/05 and 116/08);
- Law on Bankruptcy and Liquidation of Banks and Insurance Companies (Official Gazette of RS, Nos.61/05 and 116/08);
- o Insurance Law (Official Gazette of RS, Nos.61/05 and 116/08);
- Law Governing the Relations between the Federal Republic of Yugoslavia and Legal Entities and Banks within the territory of the Federal Republic of Yugoslavia Being the original Debtors or Guarantors toward the Paris Club and London Club Creditors(Official Gazette of the Federal Republic of Yugoslavia, No. 36/02);
- Law on the Settlement of the Public Debt of the Federal Republic of Yugoslavia arising from the citizen's foreign exchange savings (Official Gazette of the Federal Republic of Yugoslavia, No. 36/02);
- o Law Governing the Relations between the Republic of Serbia and the Bankrupt Banks on the Basis of Assumed Foreign Credits and/or Loans (Official Gazette of RS, No.45/05);
- O Decree on the Manner and Procedure for Sale of Shares of Banks that are in the ownership of the Republic of Serbia or in the ownership of Banks in Bankruptcy and Liquidation in which the Deposit Insurance Agency performs the function of Bankruptcy and Liquidation Administrator (Official Gazette of RS, Nos. 59/04, 108/04 and 92/05);
- Operee on the Procedure for Sale of Capital of Insurance Companies by Public Tender (Official Gazette of RS, No. 42/06).

Bodies of the Agency are the Managing Board and the General Manager. The Board has seven members of whom three are the members by the function they perform, and the remaining four members are appointed and dismissed by the government. Managing Board is responsible to the government for its work. General Manager is appointed and dismissed by the Board, with the consent of the government. General Manager of the Agency is responsible to the Managing Board for his work.

The important provision, defined by the new law, is the expanded category of depositors, whose deposits are insured, and now, the insured deposits are of those depositors who are:

Physical persons;

- o Entrepreneurs;
- o Small legal entities;
- Medium legal entities.

By the law, the term insured deposit is a deposit of a physical person, entrepreneur and small or medium entrepreneurs, and it is insured by the Agency in Paragraph 1 of Article 3 of this law.

This law does not cover the following subject matters of deposit insurance:

- The deposits of legal and physical persons associated with the bank in accordance with the law regulating the business of the bank;
- o The deposits made out to a code, or a bearer;
- The deposits that are a result of money laundering or terrorism financing;
- o The deposits of the persons who, in the last three years, have been auditing the financial statements of banks in bankruptcy.

According to the mentioned laws, the state is the founder of the Agency, so that it guarantees for all of its obligations. The Agency establishes a special fund in order to ensure the deposit insurance funding. The Deposit Insurance Fund provides funds from:

- Deposit insurance premiums;
- o Revenues earned by the investing of the Deposit Insurance Fund assets;
- Funds from the Agency claims from bankruptcy estate of the bank based on the payouts of the insured amount;
- the Fund borrowing;
- o Donations, and funds from the budget of the Republic of Serbia.

Premium payment is determined by the Law on the Deposit Insurance Agency, which provides that the bank has to pay the initial premium of 0.3% of the pecuniary part of the its minimum capital requirement, within 45 days of the day of its registration in the court register. According to the law, the Agency determines the quarterly premium rate for the next year by 30th September of the current year. The criteria for determining the insurance premium rates are the state of the banking and financial system in Serbia, and the degree of risk exposure. The rate of quarterly premium is up to 0.1%, and it is computed and collected on the basis of the quarterly average of total insured deposits in the previous quarter, where the dinar premium is charged in dinar counter value, and foreign exchange in foreign currency counter value, at the middle exchange rate on the date of computing. If the funds in a separate account of the Agency exceed the amount of 5% of total insured deposits, the Agency may instantly suspend the computing and collection of a quarterly premium.

On the basis of the decision of the agency, additional funds may be ensured by collecting extraordinary premiums, up to 0.4% annually, in cases where the Fund assets are not sufficient for the payout of the sum of insured deposits. Even after the collection of extraordinary premiums, the Agency provides the insufficient funds for deposit insurance payout through borrowing, on the basis of the decision of the Board with the prior consent of the government.

A relevant provision in the Law which is of great practical importance is the payout period of the insured deposits in case of bank bankruptcy. The depositors' confidence in financial system should be increased, in particular, by the legal provision that provides the reduced terms for the payout of insured deposits in case of the initiation of bankruptcy proceedings. Namely, according to the Law, the Deposit Insurance Agency should start effecting the payouts within three days from the decision of the National bank of Serbia on the fulfillment of conditions for the initiation of bankruptcy procedure, and is obliged to ensure that a paying bank pays to each

individual depositor the insured amount within 30 days from the day of the submission of the documented requirement.

By adopting these changes, the deposit insurance system in Serbia made allowance for the initiatives of the European Union Commission, aimed at the improvement of the protection of depositors from the possible effects of global disruptions on the financial markets. Thus, depositors are provided additional security.

In addition to the main provisions, the law includes other details related to the penal provisions, agency report, and the like.

#### Serbia's Cooperation with EU Institutions in The Field of Deposit Insurance

The European Forum of Deposit Insurers (EFDI) was established in 2002 at the initiative of some European countries. The aim of this institution is to contribute to and improve the stability of the members' financial system and promote European cooperation in the field of deposit insurance. In parallel with this, its aim is to enable and facilitate the information flow and the exchange of experience that is of importance for deposit insurance, and to analyze the issues of common interest and importance not only in the member countries, but also in the countries that are not members, as well as the entire European public.

At this moment, the Forum has 46 members from 35 European countries and EFDI membership is open to all deposit insurance organizations, to the protection of depositors or deposit insurance funds, or any organization which is under the EU directive.

The Deposit Insurance Agency of Serbia is a member of The European Forum for Deposit Insurance from November 2004.

In addition to EFDI, the Deposit Insurance Agency cooperates with the International Association of Deposit Insurers- IADI.

The agreement on technical cooperation and assistance, signed between the Council of Ministers of Serbia and Montenegro and the Government of the Federal Republic of Germany, aims to strengthen savings in Serbia, especially the savings of the population sector. On the basis of the signed contract, the KfW Bankengruppe, Frankfurt am Main, provides Serbia with direct support in establishing a new deposit insurance system. The cooperation started in 2004, primarily in the area of providing consulting services by the experts funded by the KfW, and continued with the consulting services in the implementation of "Deposit Insurance" projects. The last phase of cooperation, which is ongoing, relates to the capitalization of the deposit insurance fund, as well as the training of the personnel. In addition to the training of the personnel, some measures relate to the promotion of policies and procedures in the field of deposit insurance, relaxation of legislation and establishing the premium system on the basis of risk exposure, as well as identifying the areas and measures to comply with the EU directive.

#### Weaknesses of the Insurance System in Serbia and Ways of its Improvement

Potentially weak points of the existing system of deposit insurance in Serbia relate to the possibility of the main features of the design to reduce, or minimize the three co-existing problems:

- 1. The problem of adverse selection;
- 2. The problem of moral hazard;
- 3. The problem of principal-agent relationship.

In the analysis of the main features of deposit insurance system in Serbia, when it comes to the three above problems, one can notice the following:

- 1. A positive effect on the problem of adverse selection has the fact that the insurance system covers all the participants, and is obligatory for all. A potentially negative side refers to the fact that the system of deposit insurance does not pay a differential premium.
- 2. The fact that the exclusions from insurance are broadly defined and fairly consistent has a positive effect on the problem of minimizing the impact of moral hazard. The potentially negative effect refers to the fact that there is no co-insurance clause, and partly to the amount of the insurance of savings deposits (optimal amount).
- 3. A positive side in the problem of principal-agent relationship refers to the fact that banks themselves finance the system through premiums, through the existence of explicit models of financing and ex-ante fund, and the insurance system is managed by the state agency. What are questionable is the independence of the state managing body, as well as the omission of bankers and depositors from the process of the deposit insurance system, at least as an advisory body.

It is obvious that this summary indicates that the Serbian deposit insurance system is mostly subject to the problem of moral hazard. Reducing the problem can affect the improvement of the existing deposit insurance system.

The first problem in minimizing the effect of the problem of moral hazard refers to the highest amount of the insurance limit in the existing insurance system, while bearing in mind that moral hazard is, by the rules, relatively greater in the systems in which there is a higher limit to which deposits could be insured. (Protić, 2002, 23-31)

In Serbia, as we emphasized in the fundamental characteristics of the deposit insurance system part, the deposits up to EUR 50,000 are protected in the amount of 100%. This amount of insurance is questionable from the standpoint of the distribution of deposits in banks. It has been under discussion whether the current limit of EUR 50,000 is optimal or out of line, and for what amount, considering the specific optimal amount. Therefore, it is not all the same whether the limit optimum is on lower, or upper limit. In order to give the final answer, it is necessary to dispose of the latest data on the dispersion of savings deposits in banks. Since these data are not available, we will try, on the basis of the intuition and the latest trend in the banking system (caused by the world's financial crisis and panic in some savers, movements in the euro zone and economic activities), to accept the assertion that the existing insurance limit of EUR 3,000 moved to the upper, optimal limit of EUR 50,000. In this case, the fact that the average amount of an insured deposit is increased, will be accepted with reservation. This reasoning should be taken with caution because it does not rely on relevant information on the dispersion of deposits and the amount of deposits of individual depositors.

If we accept this intuitive conclusion that the existing limit does not significantly contradict the specific optimum limit, then we can conclude that the height of the limit level is not a potentially important cause of moral hazard.

Secondly, if the acceptable limit is established on a relatively optimal level, then the causes of improvement should be sought in the field of exclusions and co-insurance. Co-insurance clause is important because a part of the risk is transferred to the savers, which encourages them to monitor banks and think about choosing a bank. Therefore, the introduction of the co-insurance clause would be a significant step in reducing the problem of moral hazard.

The author finds the appropriateness of co-insurance in the first case (referred to in the footnote<sup>4</sup>) in which EUR 50,000 is insured in the amount of one hundred percent, and the

<sup>&</sup>lt;sup>4</sup> There are two classic examples of co-insurance: 1) a part of a savers' deposit is insured up to the limit in the amount of 100%, whereas the rest is insured in the amount of a certain percentage; 2) a deposit is paid to a depositor up to the high limit, but in 80 % of the amount, thus the depositor being aware that he will

remaining EUR 100,000 is insured in the amount of ninety percent). Even though there is a clash in the general thinking that it is not good to introduce differentiation among clients, we think that, given the established limit, differentiation should be introduced for the benefit of the small and somewhat major savers, with the aim of encouraging the major savers to monitor the risk of the credit institution.

In accordance with EU "94/19 EC" directive, Serbia has introduced a wide range of additional exclusions from the insurance into its insurance system, thus significantly minimizing the problem of moral hazard.

The problem of adverse selection in the present deposit insurance system in Serbia has been minimized by the obligation of the participation of all participants. Nevertheless, the problem of adverse selection can be further reduced by introducing differential premium payment. In the deposit insurance system, all participants pay linear premium quarterly, with regard to the deposit base. In such insurance systems, relatively stable and cautious banks subsidize the other less stable and cautious, because they pay the same insurance premium with respect to the amount of deposit base, regardless of the limit of investment of the same deposits. This indirectly encourages banks to conduct a relatively risky business, which leads to the adverse selection.

It is unavoidable to point out that banking systems with a "strong" super-auditing of banks directly contribute to more efficient functioning of deposit insurance system, regardless of whether the differential premium is applied or not.

Therefore, it is not surprising that the expert debates do not insist on the necessary introduction of differential premiums. Furthermore, it is desirable that the system is simpler in the beginning of its operation, and this implies the practice of paying non-differential premiums. (Garcia, 2000) Therefore, it is not recommended to introduce differential premium payment, at least not in the short term.

Principal-agent problem in the Serbian deposit insurance system is not particularly great. The state, which is the most competent protector of public interest, controls the *ex-ante* fund institution, whereas the banks carry out the financing through the premium payments. Primarily in that segment of the principal-agent relationship it is potentially possible to make positive changes to improve deposit insurance system. The first objection relates to the actual management independence of the delegated management structure, if we know that it is elected on political grounds. The second fact indicates that the elected members of the controlling structures are not deposit investors (savers), which, in itself, might not be bad, even though their advisory role could be appropriate.

If the practice of the managing structures election on political grounds in the institution of insurance was terminated, with the aim of achieving the independence of that body, would such a body, elected in that way, engage the government and the Ministry of Finance and promptly receive the necessary financial support on time, in case of a crisis? It is clear that in emergency situations only the governing body consisting of civil servants (those same officials pursue the government policy) can alarm the competent state institutions on time and provide the necessary funds, especially if the deposit insurance fund assets are empty. In particular, it should be emphasized that if the insurance institution has no sufficient funds, then the state support will be much stronger, because every action in deposit insurance institutions would depend on the state. From this standpoint, the practice of appointing the members of the management structure from the ranks of civil servants seems to be optimal.

lose 20% in case of a bank failure, which drives him to monitor and control the operations of a credit institution.

Only after the total generating of the target fund assets, would it be possible to review the existing practice of the appointment of the management structure members, since then it would be less necessary to rely on the state. The stimulus for further thinking on this subject refers to the possibility of choice of, for example, two members according to their function in state administration, two members from the state administration, but not chosen by their function, and two members from the banking institutions and the rank of depositors.

In the transitional period to the complete generation of the target fund assets, it would certainly be useful to appoint an advisory body consisting of the representatives of banking institutions and savers, which would affect improving the quality of institutions. This is of special importance if we take into account that in certain moments the interests of bankers, state and savers can be quite conflicting. Therefore, with regard to the fact that the fund is not completely generated, the advisory body would have a clearly defined subordinate status in relation to the managing bodies.

#### Conclusion

The existing deposit insurance system in Serbia is harmonized with the EU directive"94/19 EC" through the amendments to the Law on Deposit Insurance at the end of the year, with the aim of securing the insured deposits of depositors and restoring the confidence in banking institutions.

The important characteristics of the designed deposit insurance system with an explicit funding model and *ex-ante* fund, with compulsory participation of all stakeholder groups and payment of the linear insurance premiums, with the increased amount of the insured deposit from EUR 3,000 to EUR 50,000, with the expanded categories of users and exclusions from insurance, short-term payments with the active participation of the state, provide legal and other protection for depositors and banking institutions from possible bank runs.

The potential weaknesses of the implemented insurance system in Serbia relate to the possibility of the main features of the design to minimize the three co-existing problems: the problem of adverse selection, moral hazard and principal-agent relationship.

A special segment of the necessary improvements relates to the reduction of moral hazard, through the introduction of co-insurance and possibly finding some other exclusions from insurance. The improvement in the segment of adverse selection is preferred through the introduction of differential premium payment. A better selection and appointment of the managing body members with the mandatory participation of all stakeholders represents a solution for the problem of principal-agent relationship.

It is not necessary to immediately introduce the changes to the insurance system improvements related to the three co-existing problems. We believe that this should be done at once, by changing the law, and not in segments and urgently, since the current insurance system cannot significantly influence the destabilization of the banking system. The fact is that the insurance system has not generated the targeted fund assets yet, so that it is still not desirable to think about the introduction of certain changes, particularly the differential premium payment and the change of the managing structure.

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# Sistemul de asigurare a depozitelor din Serbia: puncte slabe și ameliorări

#### Rezumat

Acest articol evidențiază principalele caracteristici ale sistemului de asigurare a depozitelor din Serbia. Scopul este acela de a examina critic actualul sistem de asigurare a depozitelor, astfel accentuându-i caracteristicile pozitive și identificând potențiale puncte slabe. Ideea este de a propune, în concordanță cu exemplele internaționale de bună practică și liniile directoare ale Uniunii Europene, posibile ameliorări ale punctelor slabe identificate, împiedicând astfel posibile "atacuri de panică" ale deponenților instituțiilor de creditare și evitând consecințele "efectului de domino" care poate amenința întregul sistem bancar. În baza punctelor slabe identificate, sunt propuse îmbunătățiri ale actualului sistem de asigurare a depozitelor, în direcția micșorării impactului hazardului moral, al selecției negative și al relației dintre mandant și mandatar. Aceste ameliorări includ idei care urmăresc să inițieze un plan de perfecționare viitoare a sistemului de asigurare a depozitelor, atunci când instituția atinge potentialul maxim si generează capital.