COVERAGE OF DEPOSIT INSURANCE FUNDS

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Summary

During the recent years, the role of deposit insurance funds has increased, and their stable and efficient operation serves the interest of the bank system and also of the economy as a whole. More and more countries, including China, recognise that being familiar with the national bank system is not sufficient due to the complexity of today's economic connections. The bankruptcy of a geographically distant credit institution may deeply affect the bank systems of other countries, and may lead to panic. In such cases, the depositors may rush the bank branches, the panic may spread and lead to the closure of additional banks, which may cause a recess of the economy as a whole. This is when the deposit insurance funds may intervene, which are intended to minimise the damages suffered by the depositors of the credit institutions and consequently by the economy as a whole in the crisis situation. In our country, the National Deposit Insurance Fund started its operation ca. 25 years ago, and it provides compensation for the depositors unfortunately more and more frequently, as a result of which its assets and coverage ratio have significantly reduced.

Key terms: *deposit insurance, deposit insurance fund, NDIF, coverage, EU*

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Introduction

In 2015, the National Deposit Insurance Fund (NDIF or Fund) requested the deposit insurers of 18 countries to supply their key figures to allow it to create an international database. The issue of deposit insurance is not generally mentioned in our everyday life, but it is part of it, as it affects anyone depositing his or her savings in a credit institution. In the recent years, deposit insurance has caught attention again, since due to the bankruptcy of many credit institutions the National Deposit Insurance Fund has had to administer numerous compensation procedures. The savings of many thousands of depositors have been paid, and consequently the NDIF has found itself in a difficult financial situation. The assets accumulated during the years have been used, and therefore the bankruptcy of any credit institution in the near future may cause difficulty for the national deposit insurer.

Material and Method

As regards the topic of our research, deposit insurance is rarely mentioned in the literature, and therefore we have made our study first of all by analysing the documents made available by the National Deposit Insurance Fund to us and the NDIF database containing the primary data of deposit insurers of foreign countries. This study is intended to give a descriptive introduction of these figures, however, we believe that the available figures may serve as a basis for further researches.

Sources of Deposit Insurance Funds

The assets of the deposit insurer are maintained mainly by the payments of the member institutions (credit institutions). Basically three types of deposit insurer are distinguished based on this: the ex ante and the ex post ones as well as their combination, the so-called hybrid funds (Kenesey – Pataki, 2015). In the case of an ex ante fund the member institutions pay membership fees as required, while in the case of an ex post fund the amount of the contribution is decided by the deposit insurer on the occurrence of a damage event based on its extent, which must be then paid by the credit institutions. Typically, ex ante funds prevailed also previously in Europe. The membership of the International Association of Deposit Insurers (IADI) included 83 deposit insurance funds in July 2017. Nearly 80% of these deposit insurers operated as ex ante funds (IADI, 2017). The advantage of the system is that the deposit insurer is able to appear on the monetary and capital market, and thereby it has a chance to increase its capital. In addition, the national deposit insurer is allowed to increase the membership fee once in a year, and to raise credits from the National Bank of Hungary in order to improve its liquidity, if its assets are not sufficient to pay damages.

Directive 2014/49/EU issued by the European Parliament and the Council on 16 April 2014 sets requirements, among others, the funding of deposit insurers. Pursuant to Article 10(1) of the Directive:

"…DGSs shall raise the available financial means by contributions to be made by their members at least annually. This shall not prevent additional financing from other sources." (European Parliament and Council, 2014)

The deadline for the transposition of the directive by the member states into their national laws was 3 July 2015, except for the risk-based fee payment, which model had to be worked out by the member states by 31 May 2016. (Lentner – Zéman, 2017).

Previously, payments to the national deposit insurer were proportionate to the deposits, that is the more deposits were at a credit institution, the more contribution it paid (Kovács – Szóka, 2016). Article 13 of Directive 2014/49/EU specifies the rules of calculation of contributions to the deposit guarantee systems. In accordance with Section (1), the contributions must be based on the amount of the covered deposits and the degree of risk incurred by the respective member. The deposit guarantee systems may use their own risk-based systems, however, the contributions must be calculated in proportion to the risks incurred by the members.

In compliance with the above EU requirement, ex ante funds must be in place in all countries of the European Union from 4 July 2015, i.e. the day of the Directive's coming into effect, laying thereby an emphasis on the importance and priority of the trust of depositors.

Presentation of the coverage figures of the national and foreign deposit insurance funds

Coverage according to the definition by the National Deposit Insurance Fund: *"It is an internationally approved index for the assets and coverage of the deposit insurance institutions, which compares the liquid assets of the Fund with the* *theoretical compensation obligation of the Fund at the member institutions at a specific time."* (NDIF, 2015)

Based on this, coverage is calculated as a ratio of the liquid assets available for compensation and of the insured deposits. (Baranyi – Széles, 2010)

The ratio of the available financial assets and of the insured deposits is specified by the European Parliament and by the Council for the member states of the European Union as the method of calculation of the coverage, similarly to Hungary.

The NDIF is an organisation which protected the savings of the depositors of credit institutions operating in a difficult and uncertain economic environment after the political transition. In 1993, the NDIF was established, in fact, without a start-up capital, and payments of membership fees by the member institutions were the only source for the Fund. The coverage was 0.09% at the end of the first year, and 0.25% at the end of the second year. (NDIF, 2013) Subsequently, the index increased from year to year, except for 1999, and it was steadily above 1% despite the increase of the insurance limit value in 2003, and then also in 2004 due to joining the EU. The reduction of the index started from 2009, when the Fund had to pay compensations in the case of more and more credit institutions having more and more deposits, and therefore its assets and consequently its coverage gradually reduced. In 2014, improvement was observed, and the index exceeded 1% again, however, in the next year, the Fund had to pay compensations in the largest ever amount.

The database containing the figures of deposit insurers of 18 countries (Sweden (SWE), Slovakia (SLO), Italy (ITA), Bosnia and Herzegovina(BIH), Albania (AL), Montenegro (MNE), the Czech Republic (CZE), Bulgaria (BUL), France (FRA), Lithuania (LTU), Malt (MLT), Germany (GER), Romania (ROU), Finland (FIN), Norway (NOR), Serbia (SRB), Turkey (TUR), Slovenia (SLO)) and Hungary (HUN) collected by the NDIF contains the figures as of 31 December each year between 2005 and 2015. It contains, among others, the numbers of damage events occurring in the individual counties and of the compensated depositors (private persons and companies separately), the amounts paid for damages and specified in the currency of the relevant country, the coverage of the deposit insurers and its method of calculation.

The database contains data for all countries, however, the coverage level is missing for Finland, Germany and Slovakia. Based on information supplied by the National Deposit Insurance Fund, a "new" deposit insurer was established in Finland in 2016, and the development of its funding system is still in process. As regards Germany, the coverage index and its calculation method are missing, and as regards Slovakia, only figures for the years preceding the period under study are available.

Due to the missing figures, we are going to present the coverage figures of the deposit insurers of a total of 16 countries, including Hungary.

During the 12 years in the period from 2005 and 2016, the National Deposit Insurance Fund had to pay compensations to depositors in connection with the bankruptcy of a total of 13 credit institutions. The distribution of payments is uneven in the period under study, since 10 out of the 13 bankruptcy events occurred in 2014 and 2015. During the 12 years, the total number of the compensated depositors to whom the Fund paid almost 169 billion forints was 162,090. The majority of the failed credit institutions were savings co-operatives with low numbers of depositors. It is clearly indicated also by the fact that the total number (64,400) of the compensated depositors of the 6 credit institutions (4 savings co-operatives, 1 credit union, 1 commercial bank) liquidated in 2014 does not reach the number (74,000) of the depositors of the 4 credit institutions (2 savings co-operatives and 2 banks) compensated in 2015.

Figure 1 shows the number of failed credit institutions in Hungary, Italy, Bosnia and Herzegovina, the Czech Republic, Bulgaria, Lithuania and Serbia between 2010 and 2015. In the additional 12 countries included in the database, no damage event occurred. The figure clearly shows also that the most damage events took place in Hungary, the deposit insurance fund of Lithuania had to take measures also in 7 cases in that period.

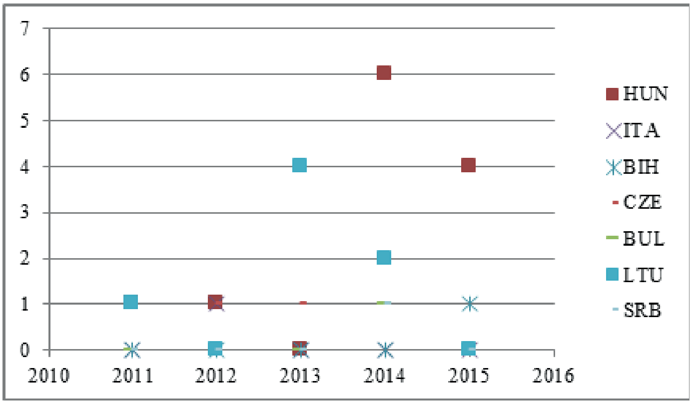

Figure 1: Number of compensations 2010–2015.

Source: Annual report of the National Deposit Insurance Fund for 2015 (2015)

The largest compensations since its foundation were paid by the NDIF in 2015 and 2016. The Fund paid a total amount of HUF 105 billion on the deposits insured up to EUR 100,000 according to the requirement set by the European Union for its member states. The DRB bank group (South Transdanubian Savings Bank: HUF 23 billion, DRB South Transdanubian Regional Bank: HUF 22 billion, BRB Buda Regional Bank: HUF 19 billion, ÉRB North Hungarian Regional Bank: HUF 40 billion) was compelled to raise credits at the central bank to pay compensations to its clients, which were refunded by it by means of bond issues in a short time. Consequently, the coverage of the Fund significantly reduced. This is illustrated by Figure 2.

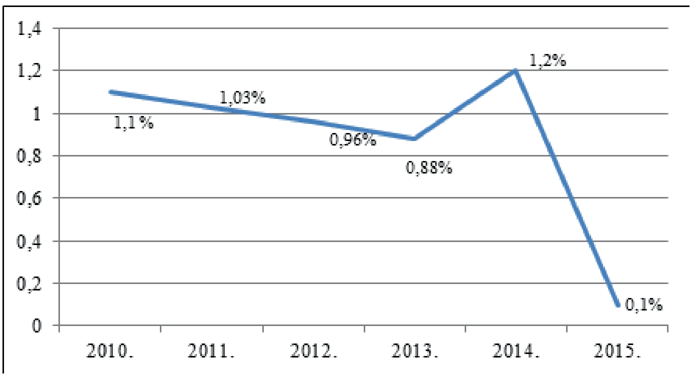

Figure 2: Coverage of the National Deposit Insurance Fund (%) 2010–2015.

Source: Annual report of the National Deposit Insurance Fund for 2015 (2015)

On 31 December 2016, the coverage of the Fund was ca. 0.1%, which means that the NDIF would be compelled to raise additional credits at the central bank if another damage event occurs.

This level is the lowest one in the European Union, and its reason, that is the fact that Hungary has had the most failed credit institutions in the recent years, is illustrated on Figure 1. The largest amount of compensation was paid in Bulgaria, where the Bulgarian deposit insurer had to compensate ca. 102,000 clients due to the bankruptcy of one credit institution.

The coverage figures of the countries included in the database as of 31 December 2015 are illustrated on Figure 3, based on which the value is typically between 0 and 5%.

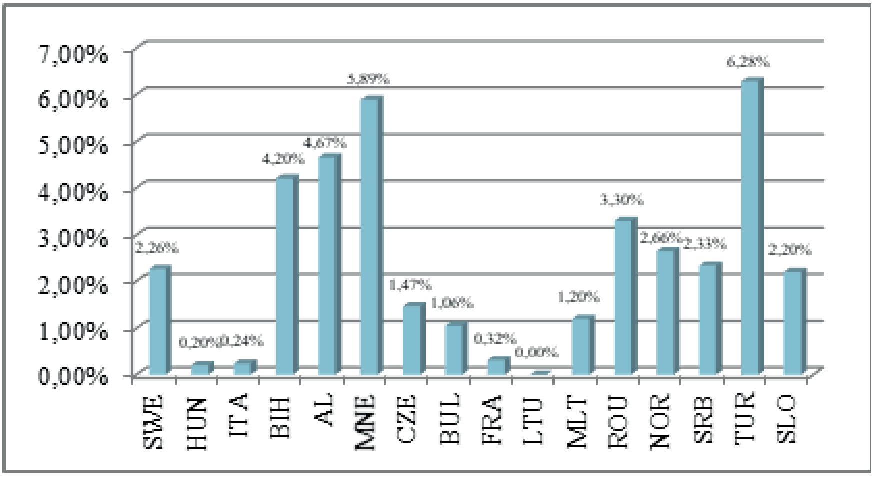

Figure 3: Coverage of the deposit insurance funds of the countries under study (%) (31 December 2015)

Source: Database of the National Deposit Insurance Fund (2017)

Based on the figure, the coverage is 0% in Hungary due to the above detailed reasons, and also in France, Italy and Lithuania.

Based on information supplied by the NDIF, the deposit insurance fund of France was established in its currently still operating form in 2014, and is under maintenance, and therefore the coverage level is ca. 0%.

Between 2010 and 2015, a total of 7 credit institutions were compensated in Lithuania on the basis of the figures provided by the NDIF, and 15% of the insured deposits was compensated in 2011, 3.5% in 2013, and 6.5% in

2014. Currently, the repayment of the credits of previous compensations is in process, this is the reason for the low coverage.

Italy has caught attention in the recent years, since the Italian bank system was able to survive the crisis of 2007 only by means of state rescue packages. The last damage event occurred in Italy in 2012, when 20,000 depositors were compensated, however, the coverage of the deposit insurer is around 0%. The Italian deposit insurer was one of the deposit insurers operating as ex post systems, that is, the depositors were compensated by means of credit raising when the damage event occurred.

Specification of the coverage of deposit insurance funds

The fact whether the coverage of a deposit insurance fund is stable naturally depends on the bank system and openness of the relevant country, and on how it is affected by the international economic processes.

According to a study made by the International Association of Deposit Insurers (IADI) in 2019, factors such as the volume of deposits, the number and sizes of the member institutions, the businesses they are engaged in and the extent of their risks must be taken into consideration to specify the coverage lever. (IADI, 2009)

There are several methods available to specify the optimum level, but all of them minimise the potential losses of the deposit insurer. It is worth taking into consideration also the historical background of the relevant country and the frequency of bankruptcies for that purpose.

The Federal Deposit Insurance Corporation (FDIC) is the deposit insurer in the United States, the first deposit insurer of the world, which was established after the Great Depression in 1933. At the end of 2016, the deposit insurer of the U.S. had a coverage limit-value of USD 250,000 and a coverage level of 1.2%. After the failure of the Lehmann-Brothers bank, the assets of the FDIC also significantly reduced, and as a result of the infection impact, the bank panic swept through the bank system of the U.S. This was reflected also by the coverage index of the FDIC. In the last 20 years, the coverage of the deposit insurer of the U.S. was lowest in 2009, when it reached even a negative value (-0.36%). However, the deposit insurer of the U.S. was able to recover, and its coverage level is steadily above 1% at the moment due to the increase of the membership fees. (FDIC, 2017) Article 10 (2) of Directive 2014/49/EU of the European Parliament and the Council provides:

"Member States shall ensure that, by 3 July 2024, the available financial means of a DGS shall at least reach a target level of 0,8 % of the amount of the covered deposits of its members." (European Parliament and Council, 2014)

In fact, the coverage level is only a momentary condition. If a big credit institution fails, the deposit insurer might not reach the required value overnight, after assessing the compensations. There was an example for this in Hungary in connection with the compensation of the DRB bank group. On 31 December 2015 (Figure 3), all countries under study, other than Hungary, France, Italy and Lithuania, were able to reach the coverage level of 0.8%.

A study made in 2011 modelled the losses of the Italian deposit insurance system in the light of the Basel II regulation, for which the figures of the Italian bank system for 2007 were examined by means of the Monte Carlo simulation. The document served as a basis for the method of calculation of the coverage level of 0.8% specified by the European Union and to be reached for the deposit insurers of all EU member states. The analysis relied on the fact that the coverage of the Italian deposit insurance system would be sufficient to pay 98.96% of the insured deposits under normal circumstances. However, if the Italian bank system is reached by a considerable infection impact, and is affected by it as a whole, then the coverage of the deposit insurer would not be sufficient to fund the losses.

In view of the compensation experiences of the recent years, the coverage level of 0.8% approved by the European Parliament does not fully ensure the compensation of the savings of the depositors up to EUR 100,000 if a big credit institution fails.

In the period from 2005 to 2015, out of the 19 countries (including Hungary), no damage event occurred in Albania, Montenegro, France, Malt, Finland, Turkey and Slovenia on the basis of the database. However, in countries where compensations were paid, based on the figures of all deposit insurers, it is clear that after the damage events the assets of the deposit insurers and consequently their coverage indexes significantly reduced.

Not all countries included in the database are EU member states (Bosnia and Herzegovina, Albania, Montenegro, Turkey, Norway and Serbia), and therefore the deposit insurance value limits of these countries also differ from the level of EUR 100,000 specified by the European Union in 2009. Norway has the highest value limit, where it is NOK 2,000,000, i.e. ca. more than HUF 60 million. Albania has the lowest limit, with a payable maximum insurance amount equalling to HUF 5 million, in Turkey to HUF 8 million, in Montenegro and Serbia to HUF 15 million.

The Eastern European countries (Albania, Bosnia and Herzegovina, Montenegro, Romania, Serbia) have accumulated relatively significant amounts in their deposit insurers during the recent years. When the establishment of the uniform deposit insurance system was planned, the European Parliament raised the possibility of granting loans by the deposit insurers to each other. Then a situation could have occurred when the potential failures of the credit institutions of Western European countries having more developed bank systems but lower coverages would have been funded by the deposit insurers of the Eastern European countries with steady coverages. The proposal has been rejected for the time being, similarly to the issue of the creation of the European Deposit Insurance Scheme (EDIS).

Conclusions

To summarise the above, it can be stated that the specification of the optimum coverage of the deposit insurer is fundamentally important for the efficient operation of the Fund. Based on the international figures collected by the NDIF, the national deposit insurers of the individual countries currently seem to be able to meet the coverage level of 0.8% required from 2012, except for Hungary, France, Italy and Lithuania. The National Deposit Insurance Fund currently has a coverage of ca. 0.1%, which is one of the lowest values in the EU. The fact how the expected target level can be achieved in the future depends on the economic performance of the country and on the international financial situation. Based on the current processes, the number of credit institutions in Hungary is likely to reduce in the future, which will not necessarily be caused by bankruptcies, but by mergers. Therefore the number of the NDIF member institutions will reduce, but the amount of contributions will not, as they will be effected on a risk basis. Any bankruptcy would cause uncertainty for the deposit insurer of our country, however, as the NDIF also points out, the deposits of the clients suffering damages will be naturally compensated, with the involvement of additional credit raising at the central bank if necessary.

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