A SELECTION OF NDIF EXPERIENCES IN THE AREA OF COMPENSATION

Balázs Vajai - István Tóth

ABSTRACT

Nowadays, deposit insurance may be the element of financial stability that we know and hear the least about. One reason for that is that this element of financial stability is activated relatively rarely in a way which would make it visible for the broad public (when it has to compensate depositors), on the other hand these public acts manifest in processes that progress relatively fast. In spite of its obvious speed, compensation by deposit insurers is a scheme comprising a large number of actors and elements, extremely concentrated in time and also very complex in nature, its elements are worth examining one by one. In relation to the financial capacity to provide compensation we will describe its impacts on the market of government securities, in the context of communication we will discuss the spread of (fake) news and its prevention and customer reactions to the closure of a bank.

JEL codes: G01, G21, G 28, H12

Keywords: deposit, deposit insurance, compensation, NDIF, financial stability, financial safety net, stress test, resolution, crisis management, crisis simulation

1. INTRODUCTION

The National Deposit Insurance Fund (hereinafter: NDIF/Hungarian abbreviation: OBA) compensated depositors in the amount of HUF 219 billion in 2014-2015 due to the winding up of 10 credit institutions. During this (and the preceding) period abundant experience and practice accumulated at the NDIF. In the financial system of a market economy, the deposit insurance fund works as a safety net, having the primary aim of preventing bank runs and (in the case of loss of confidence) the withdrawal of deposits en masse. The article briefly discusses two areas which may be instrumental in implementing compensation rapidly and which previously were less subjected to research.

As of 31 December 2017, 99.59% of retail depositors were covered by the NDIF, which also means that the savings of the decisive proportion of depositors is under the insured ceiling of EUR 100,000 (*Kallóné-Vajai*, 2017). For them,

NDIF provides a safety net in the sense that should one or several institutions have to undergo winding-up, as it was the case earlier, depositors could be provided with compensation promptly enough to prevent the winding-up from causing them significant losses and prevent the loss of confidence of depositors in the banking system. As bank deposits and current accounts very frequently represent liquid financial assets necessary in everyday life, depositors are more sensitive to changes affecting their access to such financial means than for example to investments, accordingly, depositors' confidence in banks is a sensitive area of primary importance from the perspective of financial stability.

In most cases the closure of a bank by the authority (its liquidation or winding-up in legal terms) come as unexpected to customers, thus it is negative information and impacts them as such (even more so in a crisis). Negative information typically spreads faster (*Malarz–Szvetelszky–Szekfű–Kulakowski*, 2006) than positive or neutral information and its impacts are easier to be translated into practice by the population, if their money is "at risk", even if depositors do not have their savings in the credit institution concerned.

With a view to this, it is important for the depositor to have some knowledge of the financial safety net functioning in the banking system, which ensures their savings by providing prompt compensation even in unexpected, extraordinary circumstances beyond the depositor's control.

One indispensable prerequisite for prompt compensation is that the assets and the investment which cover the compensation implemented by NDIF should be liquid, safe and possibly the liquidation should be made free from market impacts (e.g. in the course of compensation).

The investments of NDIF are kept in a portfolio of Hungarian government securities. The government securities which serve as the financial security for compensation are liquidated in the days preceding the pay-out of compensations within a short time (in a certain significant amount conditional upon the compensation liability). The liquidation of securities is executed in one wave without a preliminary signal or indication to the market. From the perspective of financial stability, a question to be examined separately is whether the fast liquidation due to the NDIF's ability to fulfil its obligation results in a further market turbulence/distortion. Based on the analysis of the NDIF, there is no such impact on the market, because the Government Debt Management Agency carries out own account trading with NDIF, which does not appear directly on the secondary market.

2. INFORMATION AND COMMUNICATION

The communication of NDIF in periods of compensation significantly differs from communication in the time of "peace", when no compensation is to be executed. Customers knowledge in peaceful times is largely enhanced by the obligation of credit institutions to inform their existing customers at least once every year of their deposits being insured by the NDIF, new clients may be provided this information at the opening of an account or when they deposit their funds for a fixed term.

At the same time, experience shows that this partly increases the administrative burden of banking staff, on the other hand, it also results in a lot of misunderstanding. The annual written information provided by banks is not a Hungarian specificity, but a requirement by European Union legislation. At the same time, foreign, as well as domestic experience demonstrate that in several cases this information does not reach its objective and may lead to misunderstanding, many customers are not able to differentiate between the bank holding their account and NDIF, or interpret the information on the protection amounting to EUR 100, 000 as a windfall and submit a claim to that.

As is the case with every organisation interested in maintaining customers' confidence, the primary communication objective (and task) of NDIF is to increase the level of knowledge the population has with regard to deposit insurance.

When conducting knowledge surveys of NDIF in the retail sector, two factors are by all means recommended to be measured in the area of deposit insurance. One is the spontaneous knowledge of deposit insurance as a special consumer protection service¹ amongst those who have a relationship with banks, and the awareness of the ceiling of EUR 100, 000 as a "basic unit of measurement" of this service. The latter may be interpreted as the mandatory promise of deposit insurance, this is the maximum amount the depositor may be compensated for.

Spontaneous knowledge of NDIF was 55% in 2017 (from 32% in 2015), whereas assisted knowledge was 43% (from 29%). Assumably, the increase in spontaneous and assisted knowledge are in line with the media reports and communications of recent bank closures, where NDIF featured as the organisation providing deposit insurance and compensation.

Nevertheless, increasing the knowledge further is not only necessary but also desirable because it may happen that during times when no banking closures

¹ By spontaneous knowledge we mean the knowledge of consumers of the service (or brand) without any assistance, demonstrated independently when the consumer identifies the service (brand) by themselves. Assisted knowledge is when we ask about knowledge in a closed manner (e.g. "From the services listed below identify the services you are aware of").

happen, these rates drop and memories relating to deposit insurance fade away. One highlighted, though not spectacular way of doing it is the permanent communication of NDIF and the cooperation with professional organisations and organisations interested in supplying the next generation of specialists.

2.1 Crisis communication

The activation of compensation by NDIF triggers several processes in the area of communication from the 24-hour Call Centre through information in social media until the preparation of staff who work in banks. In addition, pursuant to current rules, the NDIF in two daily papers with nationwide circulation inform customers of the conditions of compensation and information related to the pay-out through paid advertising (and on its own website). As the NDIF does not have its own Call Centre (as opposed to for example British, Russian or Ukrainian deposit insurers), such a service is activated based on a contract concluded with market participants.

Maintaining contact with national and local media is permanent and of primary importance (it applies especially to local media in the case of closures affecting a certain region with a smaller coverage).

In the event of compensation, customers predominantly use the Call Centre to ask questions, which means that the activity of those concerned and those asking for information can be measured very well.

In 2015 in the case of the compensation of the DRB Bank Group, the number of incoming calls suddenly increased in a natural way as from the communication of compensation (in line with the above factor of "unexpectedness"), at the same time the second peak in the number of calls was recorded only on the 8th-9th day, when the NDIF started actual payments and the news of this spread amongst depositors. In such cases questions are mostly related to the expected date of payment, it becomes an even more important question if and when an acquaintance of the person concerned (a relative, a neighbour, etc.) had already received the compensation payment. Calls are received beyond the compensation period of 20 working days prescribed by law (due to deposits, which are hindered by law or otherwise, and deposits which are involved in inheritance cases, etc.), and their number does not drop drastically. One of the most typical reasons for protracted, delayed compensation, in addition to many other reasons, is the change of one's the permanent address, which depositors previously failed to report to the bank.

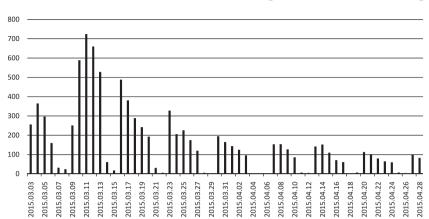


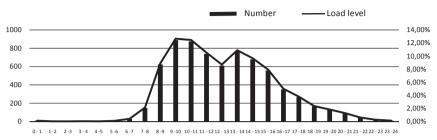
Figure 1
The number of calls as of the moment of the compensation of the DRB Group

Source: NDIF

Based on the call statistics of DRB Bank Group, the calls reached their peak in the morning hours, more specifically early morning hours when most depositors start their working day. Calls are received permanently in the afternoon and evening hours, but their number is on the decline. In the future, technical innovations gradually penetrate everyday life and in certain periods of the day even the number of callers asking for information may differ from the proportions recorded in this particular case.

Nevertheless, most callers ask standard questions (when the compensation begins, when I can get my money, etc.), therefore, in the future with the use of artificial intelligence even automated responses may be generated applying chatbot technology. As such a system could be applied by NDIF cost efficiently primarily in the cases of compensation, due to the costs of development and permanent follow-up, the application of innovative devices are subject of further consideration.

Figure 2
The distribution of calls in the first 20 working days of DRB compensation



Source: NDIF

The number of customer calls related to deposit insurance compensation in the examined period was primarily influenced by two factors: the geographic location of depositors (town or smaller settlement) and the amount of the average deposit. Urban customers with higher average amount of deposits generate a higher number of calls, whereas people living in smaller settlements and possessing lower amounts of deposits generate fewer calls. In addition, it may also be established that the customers of small-sized banks may also demonstrate a high level of awareness (see the customer activity of Széchenyi Commercial Bank), as the higher the amount of compensation per capita (to be paid by NDIF), the more likely it is that customers will make calls and inquire about their compensation.

80000 90.00% 70000 80.00% 70,00% 60000 60.00% 50000 50.00% 40000 40.00% 30000 30.00% 20000 20.00% 10000 10.00% 0.00% Tisza Körmend Alha Széchenyi Széchenyi Credit DRB Group Cooperative Cooperative Cooperative Commercial Union Cooperative Savings Bank Savings Bank Savings Bank Savings Bank Calls received number of compensated customers — Percentage of calls based on compensated customers

Figure 3
Call Centre activity

Source: NDIF

2.2 Rapid compensation promotes stability

Rapid compensation, in addition to promoting financial stability through sustaining public confidence, also means that there is no sufficient time for those concerned to set up an online group or groups, which may jeopardise financial stability.

As an example, we may refer to the case of the Orgovány és Vidéke Takarék-szövetkezet (Orgovány és Vidéke Cooperative Savings Bank), which had a high market share in its region (approximately 30, 000 customers and compensation payment of HUF 54.2 billion), which due to the long period of freezing deposits prior to compensation, developed into a case that received major public attention and triggered customer opinions.

The Hungarian National Bank (HNB/Hungarian abbreviation MNB) announced its decision on the revocation of the licences of the Takarékszövet-kezet on 4 July (Friday)2014 at 16.00² hours, this was the first piece of information for the depositors indicating that they will not have access to their deposits due to the ban on the withdrawal of deposits. More than three weeks elapsed between the revocation of the licence and the start of the winding-up procedure 25 July 2014 (the legal status triggering NDIF compensation). During this period of time, NDIF initiated further data checks and data cleansing in order to make it possible to complete the payment process as soon as possible after the start of payments (29 July 2014). At the same time, during this period there was an opportunity for depositors to set up so-called interest groups (mostly groups

² The decision of the Hungarian National Bank No. H-JÉ-I-281/2014

of those concerned) with the help of social media, media "hunted" for customers' stories posted on social media, which increased uncertainty and the drama surrounding the case. The fact that there was no spillover effect affecting other service providers is partly due to fortunate circumstances and partly to the starting of payment by NDIF. The calls received by the Call Center indicated the increasing impatience of callers from the second week after the closure of the bank onwards, which presumably was caused by the diminishing cash stock possessed by affected depositors and the uncertainty resulting from having no answer to the question concerning the date when they can have access to their money.

With the help of social media we may receive and promptly share information, regardless of the fact whether or not the given data, information is based on presumptions or reality. Experiments provide evidence (*Kiss–Rodriguez-Lara–Rosa-García*, 2014) of how important it is to see what others do with their deposits. The experiment shows that the bank run may only be avoided if those at the beginning of the line of decision-making decide not to withdraw their money from the operational or failing bank.

The positive information reassures those coming later and no bank run will evolve due to panic (on the other hand, I rush because I think others will also rush). If those at the beginning of the line withdraw their money (and here it is important that certain depositors need the money, this is why they withdraw it) that will trigger the bank run. The impact of the observation may be reassuring and may also trigger a panic, it all depends on the direction initial information takes.

2.3 Conclusions

The closure of the credit institution where the depositor held its money creates a major uncertainty in the given moment as regards when and in what form they might have access to their money, because in such cases depositors are unable to control their own resources necessary for their everyday life. If the depositor in parallel with compensation receives permanent and clear information as to the above questions, then no negative rumours may emerge, which will also stop a potential panic from catching on, which otherwise could have influenced the whole banking system.

3. THE INVESTMENT STRATEGY OF NDIF

The assets at the disposal of NDIF ensure a rapid compensation capacity, which enables the institution to start the payment of compensation for depositors. In a turbulent and sensitive period of time (e.g. the revocation of a credit institution's licence) the appearance of large amounts of government bonds on the market may generate further market turbulences, which the NDIF and the regulator wish to avoid and the same applies to "times of peace".

Currently, the NDIF in line with legislative provisions invests into passive index funds of government securities and it relies on the Government Debt Management Agency (hereinafter referred to as ÁKK with Hungarian abbreviation) as portfolio manager and the Central Clearing House and Depository Private Limited Company (KELER Ltd.) as a deposit manager. The portfolio manager invests the NDIF assets based on the MAX Composite Index (hereinafter: CMAX) defined in the investment strategy. With this high liquidity, it invests into low risk and well-diversified portfolio, where primary risk is caused by the maturity structure of bonds and the risk of the interest rate.

Legislation does not exclude the possibility of investing into the bonds of an EU Member State, which could also be applied as a risk mitigation tool. Approximately 20% of deposits covered by the compensation obligation is an FX deposit and the NDIF assets should also be invested into eurobonds to a similar extent.

In the case of an investment to be sold on the market, it has to be taken into account that in the case of an immediate liquidation of eurobonds (when compensation is executed), there might be a drop in the exchange rate, if the NDIF pursuant to its statutory obligations wishes to cash in on bonds due to its compensation obligations or its contribution to resolution.

3.1 The use of NDIF assets and the impact of a potential compensation on the market of government securities

The trade in government securities carried out on behalf of NDIF (the permanent follow-up of the CMAX portfolio composition, the investment of earnings) is done through the ÁKK, therefore the transaction does not take place on the market and thus it does not influence the market price because ÁKK carries out an own account trading with NDIF. ÁKK has the opportunity to delay the decision on the repurchased securities (revocation, remarketing or substitution with new bonds).

Should the trading take place through the Hungarian State Treasury, a similar set of conditions would be applied and the government securities sold have no direct impact on prices on the secondary market.

In the case of compensation, a large amount of government securities is sold, which does not cause any market turbulence due to the above, but it might as well have a significant impact on the Treasury Single Account (hereinafter: TSA, Hungarian abbreviation: KESZ) and its balance. This is due to the fact that the central government buys back the government securities representing the NDIF assets.

In the course of compensation, the NDIF uses paying partners to whom the security of compensation is transferred at the time when payment is effected.

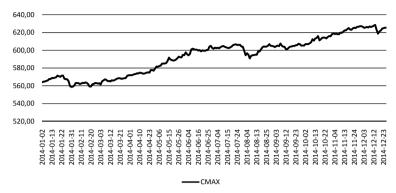
Abundant liquidity (due to the investment necessity) reduces the yield, therefore we analysed the impacts of compensation cases in 2014 on the CMAX index, representing the securities market very well and on the three-month reference yield (see *Table 1* and *Figures 4* and 5).

There is a minimum short-term (5-10 days) change, but in the opposite direction as compared to expectations, there is an increase in the yield, but no causal relationship may be unambiguously established between the amount of money necessary for the compensation and the changes in the yields, and several other explanatory variables might have had an influence on the yields, which the NDIF does not have the opportunity to analyse.

Table 1
The start of compensation in terms of payment

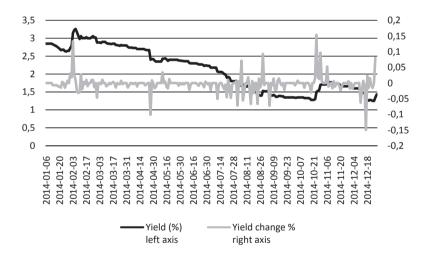
Körmend Cooperative Savings Bank	28.01.2014.
Orgovány Cooperative Savings Bank	29.07.2014.
Alba Cooperative Savings Bank	24.09.2014.
Széchenyi István Credit Union	08.12.2014.
Széchenyi Commercial Bank	10.12.2014.
Tisza Cooperative Savings Bank	13.12.2014.

Figure 4 CMAX index



Source: ÁKK

Figure 5
Changes in the 3-month reference index



Source: ÁKK

3.2 Experiences related to external sourcing

In the event of NDIF assets being insufficient for potential compensation, it has to involve external sources, primarily from the market (e.g. consortium lending or issuing bonds). The involvement of external sources due to its time consuming nature may cause a significant loss of time in the payment of compensation,

therefore the NDIF may also take out loan for a transitional period (maximum three months) from the Hungarian National Bank until a market-based external sourcing may be completed.

The NDIF may take out the three-month bridging loan from the Hungarian National Bank in order to be able to start the process of compensation with no delay. Experience shows that it takes only a few days to implement this (2015 DRB Group compensation), in parallel the process of state suretyship and the bridging loan application processes are going on. The security of the bridging loan is also provided by state suretyship.

In relation to the compensation of the DRB Group, the bridging loan was taken out on 4 March 2015 from the Hungarian National Bank, whereas bonds were issued on 3 June 2015 under the name of OBA2022/A³ (it took three months less one day), the earnings were used to pay the bridging loan back.

Due to the tight deadline, in the future it is worth considering provisional financing sources and the duration of time. If no domestic external sourcing can be secured or external sourcing could only be secured with difficulty, then international bond issue or consortium financing will be necessary, the process of which would even be longer because NDIF previously has not entered the international money market.

SUMMARY

Though information on deposit insurance is a consumer protection issue, it may be found in every branch of every bank and it is also featured in most advertisements for deposits, the spontaneous knowledge of people concerning deposit insurance is only slightly above 50% amongst customers who are related to any bank.

The knowledge the population has on this protection itself might mitigate the risk of a panic or bank run emerging in assumed or real crisis situations. It is recommended to further develop this knowledge and to further raise awareness in order to ensure that in the permanently accelerating financial sector (e.g. PSD2, or 5 seconds of transfer) the failure of a credit institution will not cause a problem. The most dangerous location where a potential panic might emerge/evolve is social media, where not only influencers but consumers and media users themselves can share information at ease and fast. By the time the regulator may implement a communication intervention, a considerable amount of loss may have been incurred by an individual service provider or in the whole sector

³ ISIN: HU0000356472

in total. This is one more reason why confidence-related prevention, i.e. awareness raising among the population in respect of NDIF is important.

Liquidating NDIF investments may be affected fast and without any disturbances within a short time and in an unforeseeable way and it has no direct impact on the market of government securities because the Government Debt Management Agency executes own account trade with NDIF, which cannot appear on the secondary market. NDIF investments are made exclusively into a portfolio of HUF government securities, whereas approximately 20% of deposits covered by the compensation obligation are denominated in foreign exchange, and the assets should also be invested into eurobonds to approximately the same degree, but this would result in new sources of problems, primarily due to potential problems relating to the fast liquidation of securities if and when the eurobonds would need to be sold on the market.

REFERENCES

- Act CCXXXVII of 2013 on Credit Institutions and Financial Undertakings. https://net.jogtar.hu/jogszabaly?docid=A1300237.TV (downloaded: 16.09.2018.)
- MNB (2014): A Magyar Nemzeti Bank H-JÉ-I-281/2014. számú határozata az Orgovány és Vidéke Takarékszövetkezet felett gyakorolt felügyelet során történő feltételes hatályú tevékenységi engedély visszavonásról, felügyeleti biztos kirendelésről, valamint egyéb intézkedések alkalmazásáról [The decision no. H-JÉ-I-281/2014 of the Central Bank of Hungary on the revocation of the provisional operative licence of the Orgovány és Vidéke Takarékszövetkezet, putting it under forced administration and the application of other measures]. https://www.mnb.hu/letoltes/keksz-9447042.pdf (downloaded: 16.09.2018.)
- Naresh K. Malhotra Simon Judit [eds.] (2009) *Marketingkutatás* [Marketing Research]. Budapest: Akadémiai Kiadó
- Kallóné Csaba Katalin Vajai Balázs (2017): Az Országos Betétbiztosítási Alap kártalanítási tapasztalatai a betétesek korösszetételéről és a betétösszegek eloszlásáról [Experiences of the National Deposit Insurance Fund in the area of compensation broken down according to age groups and the amount of deposits]. Hitelintézeti Szemle, 16(2) June, 28–39.
- MALARZ, K.–SZVETELSZKY ZS.–SZEKFŰ B.–KULAKOWSKI, K. (2006): Gossip in Random Networks. *Acta Physica Polonica. B. 37*(11), 3049.
- OBA (2003): Az első tíz év 1993–2003 [The First Ten Years 1993–2003]. Budapest: Országos Betétbiztosítási Alap.
- OBA (2012): "Fehér Könyv" a Soltvadkert és Vidéke Takarék Szövetkezetek betéteseinek kártalanítási eljárásában szerzett tapasztalatokról [National Deposit Insurance Fund, White Paper on the experiences in the area of compensation proceedings with respect to the depositors of DRB Banking]. Group]. https://www.oba.hu/images/stories/downloads/kartalanitasi_tapasztalatok/drb_whitepaper_hu.pdf (downloaded: 16.09.2018.)

- OBA (2013): Országos Betétbiztosítási Alap, Éves jelentés 2013 [National Deposit Insurance Fund, Annual Report 2013]. https://www.oba.hu/images/stories/downloads/eves_jelentesek/oba_eves_jelentes_2013.pdf (downloaded: 16.09.2018.)
- OBA (2014): Országos Betétbiztosítási Alap, Éves jelentés 2014 [National Deposit Insurance Fund, Annual Report 2014]. https://www.oba.hu/images/stories/downloads/eves_jelentesek/oba_eves_jelentes_2014.pdf (downloaded: 16.09.2018.)
- OBA (2015a): Országos Betétbiztosítási Alap, Éves jelentés 2015 [National Deposit Insurance Fund, Annual Report 2015]. https://www.oba.hu/images/stories/downloads/eves_jelentesek/oba_eves_jelentes_2015_5.pdf (downloaded: 16.09.2018.)
- OBA (2015b): "Fehér könyv" a DRB Bankcsoport Betéteseinek a kártalanítási eljárásában szerzett tapasztalatokról [National Deposit Insurance Fund, White Paper on the experiences in the area of compensation proceedings with respect to the depositors of Soltvadkert és Vidéke Takarék Szövetkezetek]. https://www.oba.hu/images/stories/downloads/kartalanitasi_tapasztalatok/soltvadkert_feher_konyv_rovid.pdf (downloaded: 16.09.2018.)
- OBA (2016): Országos Betétbiztosítási Alap, Éves jelentés 2016 [National Deposit Insurance Fund, Annual Report 2016]. https://www.oba.hu/images/stories/downloads/eves_jelentesek/oba_eves_jelentes_2016.pdf (downloaded: 16.09.2018.)
- OBA (2017): Országos Betétbiztosítási Alap, Éves jelentés 2017. 2017 [National Deposit Insurance Fund, Annual Report 2017].https://www.oba.hu/images/stories/downloads/eves_jelentesek/oba_eves_jelentes_2017_HUN_640_WEB.pdf (downloaded: 16.09.2018.)
- Kiss, H. J. Rodriguez-Lara, I. Rosa-García, A. (2014): Do social networks prevent or promote bank runs? *Journal of Economic Behavior & Organization*, 101, 87–99.
- SZVETELSZKY Zs. (2003): Ways and Transformations of Gossip. Journal of Cultural and Evolutionary Psychology. (1)2, 109-122.
- SZEKFŰ B.-SZVETELSZKY Zs. (2005): The Emergence of Gossip. Effects of Networked Communication Technologies on the Evolution of Self-Organizing Social Beliefs. In Nyíri K. (szerk.): A sense of place: The global and the local in mobile communication. Vienna: Passagen Verlag, 439–447.

Press releases

- KEOL (2014): Most már tényleg: megkezdődött az Orgoványi Takarékszövetkezet betéteseink kártalanítása [Now the compensation of the depositors of the Orgovány Takarékszövetkezet has started in earnest.]https://keol.hu/kecskemet-bacs/most-mar-tenyleg-megkezdodott-az-orgovanyi-takarekszovetkezet-beteteseinek-kartalanitasa (downloaded: 16.09.2018.)
- Zsámbóki, D. (2014): Levelet kaptak az orgoványi takarékszövetkezet részjegyesei [The share-holders of the Orgovány Takarékszövetkezet received a letter]. https://www.baon.hu/bacs-kiskun/kozelet-bacs-kiskun/levelet-kaptak-az-orgovanyi-takarekszovetkezet-reszjegyes-ei-562647/ (downloaded: 16.09.2018.)