

Savings cooperatives + integration = More efficient payment services?*

László Bodnár – László Delikát – Bence Illés – Ádám Szepesi

After a short introduction of the history of savings cooperatives, the article focuses on the sector's role in payments in general. Its drawbacks from a payments point of view are examined, which are mostly be associated with the decentralised operation of the sector and the high level of manual procedures. The authors elaborate what possible effects the new integration might have on domestic payments, specifically focusing on those areas where further improvement is needed. Finally, they conclude that the ultimate solution for the lawful operation of an integrated model with multiple participants would be a unified accounting system.

Journal of Economic Literature (JEL) Classification: G21, E42, P13, R11

Keywords: savings cooperative, integration, payment inspection, Takarékbank, Payment Services Act

1. Introduction

Based on the experiences gained during inspections of the savings cooperative sector's payment systems, the purpose of this paper is to raise awareness and focus on the reinforcement and importance of legal compliance, within the framework of the current on-going development of the integration's IT-infrastructure. In this paper, after a brief description of the history of the integration, we present the role of the savings cooperative sector in payment services, and then detail the anticipated impacts of the new integration on domestic payments turnover and discuss the areas of payment services where there is still room for improvement.

* The views expressed in this paper are those of the author(s) and do not necessarily reflect the official view of the Magyar Nemzeti Bank.

*László Bodnár is an analyst of the Directorate Financial Infrastructures of the Magyar Nemzeti Bank.
E-mail: bodnarl@mnb.hu.*

*László Delikát is an analyst of the Directorate Financial Infrastructures of the Magyar Nemzeti Bank.
E-mail: delikatl@mnb.hu.*

*Bence Illés is an analyst of the Directorate Financial Infrastructures of the Magyar Nemzeti Bank.
E-mail: illesb@mnb.hu.*

*Ádám Szepesi is an analyst of the Directorate Financial Infrastructures of the Magyar Nemzeti Bank.
E-mail: szepesia@mnb.hu.*

The views expressed in this article are those of the authors and do not necessarily reflect the official view of the Magyar Nemzeti Bank.

*The Act on the integration of cooperative credit institutions and the amendments of certain economic laws*¹ (hereinafter: Integration Act) was promulgated on 12 July 2013. This Act expects the members of the integration to participate in significantly centralised cooperation with mandatory membership prescribed for the savings cooperatives and the institutions that participated in the previous integration in their capacity as a bank, where the members provide cross-guarantees for each other, pursue a concerted business policy and build on common synergies. The Act prescribes, amongst others, the establishment of a unified IT system by 1 July 2016, which also serves as a good opportunity for the sector to revise its payment functions and role. At present, savings cooperatives provide their customers with their products and services (account management, lending, investments, etc.) under quite different conditions (working day periods, deadline for submission for same-day settlement and processing deadlines).

The framework for the domestic payments is determined by the Act on Payment Services² (hereinafter: Payment Services Act), while the rules pertaining to the management of payment services are governed by the MNB Decree on the management of payment services³ (hereinafter: MNB Decree). Compliance with these laws is mandatory for all players, not only in the framework contract on payment services (announcement, operating rules, general terms and conditions, individual contracts), but also in daily practice. The requirements outlined in the legislation must be adapted to the payment processes and operating rules of the given savings cooperative; in addition, the related other IT systems should also work accordingly.

At present, the savings cooperative sector is heterogeneous in regards to the applied account management systems. The savings cooperatives currently use five account management systems developed by different manufacturers, but also the same system might have various versions in use simultaneously, due to the difference in time of purchases and ad-hoc developments. The features and essential properties of the individual systems are fundamental determinants of the savings cooperatives' payment processes and opportunities, ultimately defining the way they can comply with legal requirements. An essential expectation vis-à-vis the unified IT system prescribed in the Integration Act is that it should simplify the sector's account management processes, and as a system that determines the payment services of the entire sector, it should reduce the number of violations of the payment legislation arising from the heterogeneity of the present systems and the different solutions, and by increasing the service quality it should contribute to raising the customers' confidence in payment services.

¹ Act CXXXV of 2013.

² Act LXXXV of 2009

³ MNB Decree 18/2009 (VIII.6)

In addition to the data of the payment and settlement systems, we also relied on the experiences of the payment services inspections conducted by the MNB in the period 2012–2014. It should be emphasised that the inspection experiences in the savings cooperative sector – in terms of the number of payment legislation violations and the frequency of violations – do not materially differ from the inspection experiences at banks. The infringements identified during the payment inspections conducted at the credit institutions have been made available for the public in MNB's annual reports before, and the resolutions passed upon the completion of the individual inspection procedures were also published on MNB's website;⁴ in the chapter on inspection we analyse the findings of the individual resolutions with regard to the savings cooperative sector.

2. History of the integration of the savings cooperatives

Smaller regional banks serving households and small enterprises were established all over Europe and the world in the last third of the 19th century. However, from the middle of the 20th century there was an increasing demand for the standardisation of their services as banking groups, organised in networks by countries. These integration efforts were implemented successfully in the developed countries; local small banks maintained their independence in business decisions, while, as part of the national integrity, they established a super bank – operating as a commercial bank – common risk funds and other centralised service organisations in order to reduce their costs and improve service quality. As a result of the successful integration they achieved a market share of 20 to 30 per cent, allowing them to become significant players in the financial sector in all countries. This was the pattern that was followed by the German, Italian, French, Dutch, Austrian and Finnish cooperative movements (*Kiss 2009*).

The first organisation that provided financial services as a cooperative society in Hungary was established more than 150 years ago; however, in the framework of this paper we only go back in their history up to the end of the 1980s, which was the period when integration efforts really started to accelerate. In the two-tier banking system established by the end of the 1980s, due to the market competition there was increasing demand among the savings cooperatives, which were fully independent entities both in legal and business policy terms, to establish an organisation that was capable of representing their interests and, in part, ensuring their governance and supervision more efficiently.⁵ For the purpose of creating

⁴ www.mnb.hu/A_jegybank/kozerdeku_informaciok/tevekenysegre_mukodesre_adatok/teljesitmenyeskapa_citas_20100115

⁵ Since 1956 the organisation of the savings cooperatives, the representation of their interests, and in part their governance and supervision was conducted by the National Association of Cooperative Societies (SZÖVOSZ) and the County Association of Cooperative Savings Societies (MESZÖV).

the new super institution, first they established the Bank of Hungarian Savings Cooperatives Ltd (Takarékbank) in 1989, followed by the establishment of the National Association of Savings Cooperatives in 1990, as the legal successor of the National Association of Cooperative Societies. The National Association of Savings Cooperatives was in charge of developing the uniform market strategy and the independent and concerted representation of interests, while Takarékbank performed a kind of central banking function, limited to account management and the support of liquidity management, for the savings cooperatives and banks that were transformed from savings cooperatives. Takarékbank kept the bank accounts of these institutions, managed part of their payments while these joined the national and international payment infrastructure indirectly, via Takarékbank. The duties of Takarékbank included the centralised management of individual institutions' liquidity and participation in the development of the business plans and strategies, business policies, system development concepts and sample regulations. With the establishment of Takarékbank it became possible for the customers of the savings cooperatives to avail themselves of services that the individual savings cooperatives would not have been able to provide alone or could have done so only at high costs (e.g. bankcard services, foreign currency payments). In addition to standardising the services, the savings cooperatives also aimed at cooperation in the area of information technology, as a result of which they established Takinfo Ltd. in 1994 with the support of Takarékbank. The duty of the new organisation was to provide the savings cooperatives and Takarékbank with a unified IT background, direct connection between Takarékbank and the savings cooperatives and to coordinate the IT developments necessary for the sector.

At the beginning of the 1990s the integration continued to develop. The National Savings Cooperatives Security Fund was established in 1991, and then in 1996 out of the 256 then existing savings cooperatives 246 signed the *Integration Agreement*, thereby creating the National Savings Cooperatives Institution Protection Fund. The purpose of the uniform institution protection fund was to strengthen the confidence in savings cooperatives, guarantee the protection of the deposits, as well as to strengthen financial stability and solvency. For the purpose of fulfilling its duties more efficiently, the new organisation also had extensive audit rights. Those ten savings cooperatives that did not sign the integration agreement created 2 separate business federations, and thus in 1993 the National Interest-Representation Association Of Savings Cooperatives was established with the National Savings Cooperatives Institution Protection Fund as its institution protection fund. After this, in 2010, one bank and six savings cooperatives established the Institution Protection Fund of Regional Financial Institutions. In addition to the aforementioned organisations, the First National Voluntary Deposit Insurance and Institution Protection Fund of Credit Unions – an institution protection organisation comprised only of credit unions – was also established. Based on their functional systems

and regulations, the former four institution protection funds managed the risks in different manner and with different capital cover, and as such they were unable to serve the interests of the sector and customs efficiently.

In addition to the coordination of the business and risk management functions, attempts at cooperation were also made in the area of information technology by those credit institutions that had no contractual relationship with Takinfo Ltd. A few members of the National Savings Cooperatives Institution Protection Fund established TAK-INVEST Information Technology and Service Provider Private Limited Company in 2002, which developed a state-of-the-art centralised bank IT software (Eurobank), performed the operation of the system and provided continuous stand-by services at moderate service prices and costs.

By 1997 – at the initiative of the Hungarian State – Deutsche Genossenschaftsbank, the German super bank of Volksbank and Raiffeisen Bank, became the controlling owner of Takarékbank, of which the sector expected improved capital supply, broadened the product range and expertise, and introduced modern processes, thereby making it possible for credit institutions operating in the form of cooperative societies to become successful in Hungary as well, similarly to the advanced market economies (Kiss 2009). Following the privatisation of Takarékbank in 1997, DZ Bank AG became the majority owner (71.95%), while the savings cooperatives had right of veto in the General Assembly of Takarékbank despite their minority ownership interest (23.05%). In 2003, the savings cooperatives acquired a call option for the share of DZ Bank AG, which they exercised in 2010 (Moizs and Szabó G. 2012). With this, the central bank of the savings cooperatives was transferred to national ownership; accordingly the decision on developments was the sole competence of the savings cooperatives based on their own interest independently of the potential profit expectations of an external owner.

An important milestone in integration was reached in 2008 when 15 savings cooperatives and Takarékbank established the TakarékJpont network, offering standardised household and SME products and services under a uniform brand name and logo (Moizs and Szabó G. 2012). In addition to the existing services, the savings cooperatives participating in the TakarékJpont cooperation provided their customers with uniform banking, investment, advance savings for housing and insurance products. However, the standardised corporate profile and product development did not become a determinant factor; at the beginning of 2015 only 23 savings cooperatives made use of the opportunity to standardise their products; thus, the sector still has not implemented a service portfolio – and in particular standardised payment products – that is more competitive than before. Despite the numerous initiatives (e.g. TakarékJpont programme, TakarékJ

Academy,⁶ KÖT Biztosító Egyesület,⁷ TAK-INVEST Ltd. etc.), in the absence of proper authorisation and legal basis the National Association of Savings Cooperatives, the National Savings Cooperatives Institutions Protection Fund and Takarékbank could not serve as the engine of mutual business development. Since the integration agreement represented a loose legal relationship and could be breached without any consequences or sanctions, efficient cooperation between the members of the integration could not be enforced, and thus individual interests and consideration continued to dominate the sector and the members failed to capitalise on each other's strengths with a view to attaining common goals. One of the consequences of this was that no significant measures were taken with regard to the standardisation of the functionality, operation and development of the savings cooperatives' account management systems.⁸

Due to the partial failure of the previous initiatives aimed at integration, in 2013 the legislator – with the goal of standardising the sector and thereby increasing its competitiveness – prescribed stricter, mandatory membership in the institution protection fund and shared responsibility to strengthen the financial stability and the efficient functioning of the sector. In 2013, with the Act on the integration of cooperative societies, Parliament adopted a law that clearly pointed in the direction of a heavily centralised integration prescribing mandatory membership, undertaking cross-guarantees towards each other, pursuing concerted business and releasing common synergies. The Act established the Integration Organisation of Cooperative Credit Institutions (hereinafter: Integration Organisation) with all of its members being cooperative credit institutions (including savings cooperatives that were transformed into banks), Takarékbank and the Hungarian Development Bank.

The Integration Organisation has become the common institution protection organisation of the cooperative credit institutions operating in Hungary, which regulated the internal procedures and thus it replaced – and became the legal successor of – the institution protection funds that previously operated separately. The Integration Organisation may prescribe binding regulations for its members, monitor the solvency and capital adequacy of Takarékbank and the cooperative credit institutions, and may also perform crisis management functions, as necessary.

⁶ Takaré Academy was set up within the framework of the National Association of Savings Cooperatives with the purpose to organise the education tasks in a uniform education and development system.

⁷ An insurance company established by the National Association of Savings Cooperatives.

⁸ This chapter is partially based on the following documents: Magyar Takaré. (no date indicated). Integration Groupings and Their Institutions. Time of download: 12 May 2015. Source: Országos Takarékszövetkezeti Szövetség: <http://www.magyartakarek.hu/integracios-csoportosulasok-es-intezmenyeik>; Magyar Takaré. (no date indicated). Our History. Time of download: 12 May 2015. Source: Országos Takarékszövetkezeti Szövetség: <http://www.magyartakarek.hu/tortenetunk>

Takarékbank has become the central bank of the new Integration Organisation with regard to all savings cooperatives, vested with extensive audit rights. Its primary duty is to develop uniform business operation along a common strategy and business policy, which covers product development, marketing and standardised risk and liquidity management, and last but not least the implementation of a unified IT system, which bears the utmost significance in terms of providing payment services. The cooperative credit institutions are obliged to use the sample regulations issued by Takarékbank as central bank, implement the business measures related to the integration, have their accounts managed by Takarékbank and also to keep their disposable funds at Takarékbank or in instruments distributed by it. By the end of 2014, the Integration Organisation completed the due diligence review of the savings cooperative sector with the goal in mind to set up a risk pool (*SZHISZ 2015*); however, the integration process and the development of closer cooperation among the savings cooperatives has not come to a halt; as a result of the anticipated mergers and amalgamations by 2016 less than 90 institutions will remain out of the 256 savings cooperatives counted in 1993.

3. Payment turnover of the savings cooperative sector

In Hungary, banks provide financial services typically in larger settlements, whereas savings cooperatives traditionally tend to serve the population of smaller settlements. Customers can manage their finances in person and use the services provided by the payment infrastructures by means of savings cooperatives or the Post in one third of all settlements. The customer base of the entire savings cooperative network – which at the end of 2014 comprised of 1,500 branches (agencies) of 114 savings cooperatives – included 870,000 natural person customers qualifying as consumers, 160,000 enterprises and other organisations (mostly micro-enterprises) and 1,100 local governments (*SZHISZ 2015*).

Based on its special customer base, the savings cooperative sector is less active in the money and capital markets, and plays a more dominant role in the payment turnover of households and small enterprises. In addition to its dominant household customer base, it is continuously increasing its market share in SME financing with the major support of the Funding for Growth Scheme launched by the MNB. The payment services of Takarékbank and the integration of savings cooperatives can be divided into three parts:

i. payments “outside” the integration, which includes the payment turnover initiated by Takarékbank and the savings cooperatives covered under the aegis of the integration and sent to the members of the national payment systems

(ICS⁹ and RTGS¹⁰). The foreign currency transactions sent abroad – also with the intermediation of Takarékbank – also forms part of the turnover outside the integration; however, in this analysis we only focus on the turnover of the forint payment systems in Hungary.

- ii. payments within the integration*, which includes the payment orders of the savings cooperatives and their customers sent to each other. The accounting and settlement of these are performed by Takarékbank, and as such they do not appear in ICS or RTGS.
- iii. the internal, so-called “on-us” payment turnover of the savings cooperatives*, where the payment order is executed in the given saving cooperative’s own account management system between two payment accounts.

We have detailed figures only with regard to the payment turnover managed by Takarékbank outside the integration, based on which we performed an analysis covering the period 2012–2014. Consequently, the payment turnover of Takarékbank includes not only its own turnover, but – as the central bank of the integration – also that of the savings cooperatives; therefore hereinafter the turnover managed by Takarékbank shall mean the payment turnover of the integration.

3.1. RTGS turnover of the integration

The share of debit turnover of the savings cooperatives integration in the total turnover executed in RTGS is negligible: based on the transaction value it accounted for 0.5–2 per cent on average, while in terms of quantity it was around 1–1.5 per cent. A considerable part – as high as 5–10 per cent – of the outward turnover of Takarékbank (calculated on the basis of the transaction value) are cash items; at other banks this ratio is barely 1 per cent, which suggests that the customers of the integration pursue cash-intensive activity. Furthermore, a notable amount of transactions are cleared via the intraday clearing platform of ICS, whose settlement (i.e. the actual financial completion) takes place in RTGS. The share of these items within Takarékbank’s debit turnover fulfilled in RTGS accounted for 15–30 per cent on average in value terms.

⁹ The ICS (Interbank Clearing System) is a gross payment system, working on the principle of batch processing, operated by GIRO Ltd, which mainly performs the settlement of small value transfers, direct debits based on authorisation letters (e.g. public utility bills) and other payment operations linked to administrative transfers. ICS operates two clearing models, i.e. overnight clearing (InterGiro1, IG1) and the multiple intraday clearing (InterGiro2, IG2). The latter clearing module is available for the customers and credit institutions since July 2012. Originally it settled the transfers daily in 5 cycles, which was increased to 10 cycles per day from 7 September 2015.

¹⁰ The Real-Time Gross Settlement System (Hungarian RTGS) is the payment system for the large value, urgent forint payments, which handles – amongst others – the settlement of the interbank and the IG2 clearing by the central bank (financial settlement).

3.2. ICS turnover of the integration

The turnover of the savings cooperative integration in ICS – which settles small value payment transactions – is significant, accounting for 8 per cent of the total turnover of ICS in volume terms and 4 per cent in value terms, i.e. the sector typically sends a large volume of small value payment orders to the payment system, similarly to other credit institutions with a large household customer base. Intraday settlement accounts for two thirds of the savings cooperative integration's turnover sent to ICS on average, while the remaining one third is settled in the overnight system. Its share compared to the banking sector's total turnover was similar on both settlement platforms during the period under review: its turnover sent to the overnight system and to the intraday system accounted for 4 per cent and 8 per cent of the total turnover, on average, based on transaction value and volume, respectively.

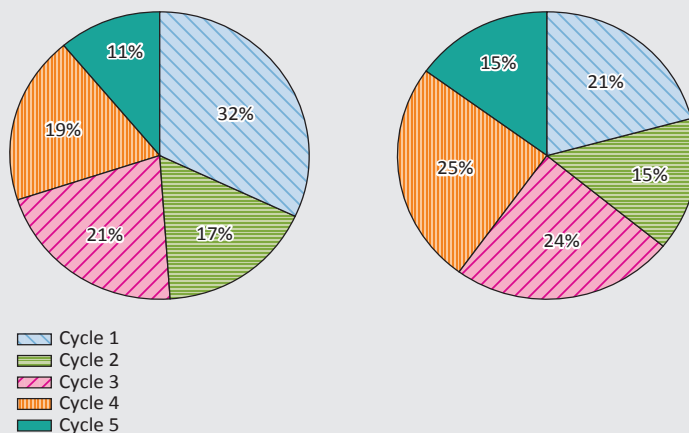
Looking at the distribution of the intraday transfers sent by the savings cooperative integration, it can be stated that – based on the value of the settled transactions – it is higher in the afternoon: roughly half (47–52 per cent) of its turnover settled in the intraday clearing system is typically fulfilled in the third and fourth settlement cycles. On the other hand, based on the number of items, a large part of its turnover (30–35 per cent on average) is already submitted in the first clearing cycle; i.e. in the morning hours it fulfils a large volume of small value orders (*Figure 1*). This is attributable to the fact that the settlement of the payment orders submitted by the household and small enterprise customers (value dated orders, standing orders) are due already at the start of the specified debit day, and that the customers submit a large number of payment orders after the cut-off time, the settlement of which takes place the next morning. Compared to the other participants of the banking sector, this is not a unique phenomenon, and a similar intraday trend can also be observed at credit institutions with a large household customer base.

As a result of the Integration Act of November 2013, the direct membership of 15 savings cooperatives and credit unions¹¹ has terminated, and from this moment on these institutions continued their operation under the “umbrella” of the integration as indirect participants of the system (*MNB 2014*). Simultaneously there were also examples of exits: certain savings cooperatives¹² – which wanted and could remain outside the new integration – were transformed into banks after leaving the integration, thereby becoming direct participants in the clearing systems. On

¹¹ Mecsek Takarékszövetkezet, Szarvas és Vidéke Takarékszövetkezet, Szegvár és Vidéke Takarékszövetkezet, Hajdúdorog és Vidéke Takarékszövetkezet, Füzes Takarékszövetkezeti Hitelintézet, Alsónémedi és Vidéke Takarékszövetkezet, Nagykáta és Vidéke Takarékszövetkezet, Örkényi Takarékszövetkezet, Pilisvörösvár és Vidéke Takarékszövetkezet, Turai Takarékszövetkezet, Tisza Takarékszövetkezet, Tiszántúli Első Hitelszövetkezet, Magyar Vidék Hitelszövetkezet, Szentesi Hitelszövetkezet, Széchenyi I. Hitelszövetkezet

¹² Duna Takarékszövetkezet (later: DUNA Takarékszövetkezet), Polgári Takarékszövetkezet (later: Polgári Bank Zrt.)

Figure 1.
Distribution of debit turnover of the savings cooperative integration by intraday clearing cycles, based on the number of items (left panel) and the value of payment transactions (right panel), (figures from 2014)



Source: MNB

the whole, the changes in membership did not have a considerable impact on the ICS and RTGS turnover of the integration. The growth in turnover seen after 2013 was primarily attributable to the expansion of the real economy – which also increased the systemic payment turnover – rather than to the changes taking place in the integration. Looking at the relative share of the integration’s debit turnover compared to the aggregated ICS turnover, it can be noted that it has not changed significantly even after the end of 2013, i.e. it was consistently around 4 per cent in terms of value and around 8 per cent in terms of volume of items.

4. Payment inspections

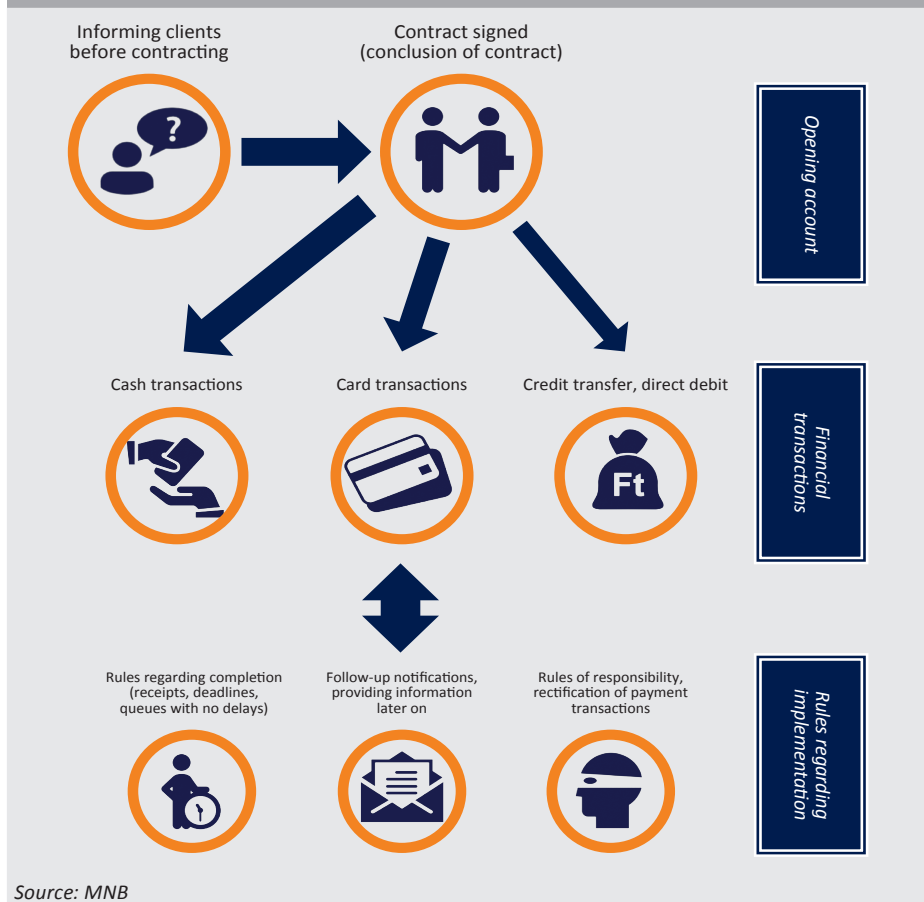
The regulations of the payment services legislation (Payment Services Act and MNB Decree) ensure that the provision of payment services is managed smoothly in a calculable and secure way. The Payment Services Act contains, amongst others, those provisions of the EU Directive on Payment Services in the Internal Market¹³ (hereinafter: PSD) that relate to the provision of information to customers, contracting, framework contract, the approval and adjustment of payment transactions, as well as to the liability and compensation for losses. The MNB Decree is another important legal regulation, in addition to the Payment

¹³ Directive 2007/64/EC

Services Act, which contains (in addition to the rules stipulated in PSD with regard to the execution deadline of the payment order and payment transactions, and the value date governing interest calculation) the requirements related to the unified designation of the payment accounts, the general and special rules applicable to the execution of payment transactions, the detailed requirements pertaining to certain methods of payments and provisions related to clearing turnover.

Flexible access to payment services and, in certain cases, the statutory provisions require payment service providers (typically credit institutions) to conclude framework contract with their customers and manage payment accounts for them. The service providers manage the funds of their customers on the payment accounts, execute their payment orders to the debit of such accounts and credit the amount of the payment transactions received in favour of them also to these payment accounts. The noncompliance of payment services may lead to customer

Figure 2.
Payment services based on framework contract



complaints. If the payment orders are executed incorrectly, the Payment Services Act provides the payer with the right to adjustment or to claim the refund of the payment transaction amount. The execution process of the payment orders based on framework contract is illustrated in *Figure 2*.

As a result of the asymmetric information characterising the payment services market, it is not easy – and sometimes it is even impossible – for the customers to enforce their consumer interests. A vast majority of the payment services involves multiple parties; e.g. a payment transaction is often carried out with the mutual cooperation of 5–6 actors (beneficiary – beneficiary’s service provider – clearing house – settlement bank – clearing house – payer – payer’s service provider), and the parties at the two end of the payment chain do not necessarily have direct contact with each other in terms of the payment; accordingly, they have different information with regard to the payment transaction, they may have no direct access to certain information at all, as it is available only for the other party from its own service provider.

In Hungary, compliance with the statutory provisions related to payment services by the institutions providing payment services (at present the credit institutions and Magyar Posta Ltd.) is authorised by MNB, the institution vested with public authority powers, and it conducts such inspections¹⁴ in accordance with standardised requirements, within the framework of an administrative procedure, based on the rules of the Act on the General Rules of Administrative Proceedings¹⁵ the MNB Act. The institutions are selected for the inspection based on risk considerations.¹⁶ Upon planning of the selection, the payment services market share of the credit institutions is assessed based on the number of bank accounts managed by the given institution and the turnover transacted with ICS, RTGS, the Posta Clearing Centre and number of foreign currency payments (hereinafter: payment services weight). In the case of savings cooperatives, the applied account management system is also taken into account for the purpose of planning, as experience shows that this is a major determinant of their automatic and manual processes.

4.1. Special features of the savings cooperative sector’s account management systems

The account management system used by the credit institutions has outstanding significance in terms of the practical implementation of the payment services. At present, the savings cooperatives use five different account management systems developed by four vendors (*Table 1*).

¹⁴ In the period 2010–2013 MNB’s payment service audits also covered the provisions of the MNB Decree, and the provisions of the Payment Services Act after the integration of HFSA in MNB on 1 October 2013.

¹⁵ *Act CXL of 2004*

¹⁶ The inspection plan is compiled considering the institutional risk ranking determined based on the breakdown of the risks of payment services function to the given institution.

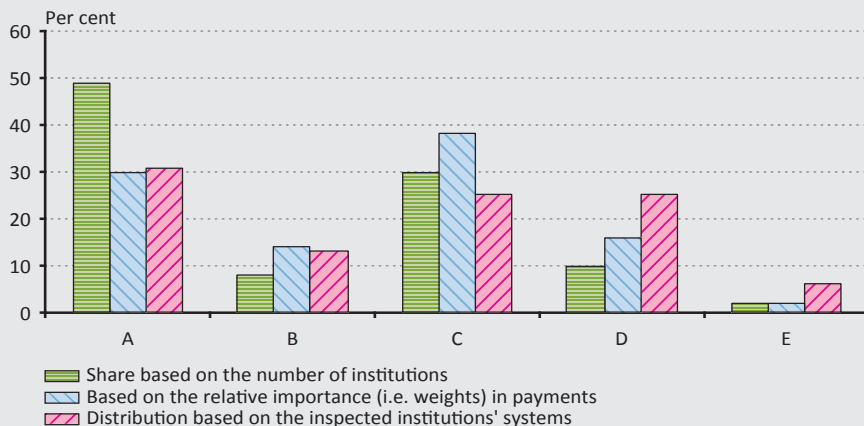
Table 1.
Key data of the account management systems

Name of the system	Developer	Year of introduction
KisbankiBOSS	Online Zrt.	1990
Eurobank	Takinvest Kft.	2003
Polaris Dream	Integra Zrt.	2007
Globe	Bank Assistance Zrt.	2008
Moonsol	Online Zrt.	2010

Source: Own compilation.

For business data protection reasons, in the following we refer to the account management systems in anonymous form (A, B, C, D and E). Based on the number of institutions using the individual systems and the payment services weight thereof, it can be concluded that two systems are dominant in the savings cooperative sector (Figure 3), as these two systems cover almost 80 per cent of all savings cooperatives, and the payment turnover transacted by these systems reaches almost 70 per cent of the sector's total payment turnover.¹⁷

Figure 3.
Market share of savings cooperatives' account management systems and distribution of the inspected institutions' systems



Source: Takarékbank, MNB

¹⁷ See payment services weight.

Within the framework of payment services inspections conducted by the MNB in the period 2012–2014, all account management systems used in the sector were inspected,¹⁸ and thus MNB has payment experiences with all account management systems. At the same time, it should be emphasised that the purpose of inspection is to verify compliance with the payment services legislation rather than to audit the savings cooperatives' systems; however, as previously mentioned, the practical implementation of certain legal rules and provisions is largely influenced by the features and capabilities of the applied IT systems.

4.2. Findings of inspections of the savings cooperatives' payment services

As already mentioned in the introduction, the experiences gained in the savings cooperative sector do not differ substantially from the experiences gained during audits of banks in terms of the ratio of violations of the payment services legislation or other infringements, but the reasons giving rise to the violations are often typical of the sector, and therefore – in order to terminate the violations in an efficient manner that impacts several institutions – we deemed it essential to process the experiences of payment services inspections conducted in the savings cooperative sector. In the period 2012–2014, the MNB conducted payment inspections at 30 savings cooperatives. In most of cases, the deficiencies found in connection with the payment services functions of savings cooperatives could be attributed to the decentralised operation characterising the sector and to the high degree of manual processing.

Based on the topics and chapters of the respective legislation, for the purpose of performing a more in-depth analysis, we grouped the violations identified during payment inspections conducted at the savings cooperatives, as follows: violations related to *(i)* the conclusion of contracts, *(ii)* the obligation to provide information and notification, *(iii)* acceptance, execution and rejection of orders, *(iv)* queuing and partial payments, *(v)* restriction of the right to refund, *(vi)* making of the payment transaction amount available to the beneficiary immediately, *(vii)* the application of value dates.

In addition, we also grouped violations by the source of the deficiencies. According to this, we identified deficiencies *(i)* related to the framework contract (e.g. obligations to provide information and notification, limiting the right to refund, etc.), *(ii)* in the IT-system (e.g. queuing and partial payment, making the payment transaction amount immediately available for the beneficiary, application of value dates, etc.), and *(iii)* failures due to manual processing or omissions (e.g. compliance with the conditions for opening a current account, acceptance, execution or rejection of payment orders).

¹⁸ Between 2012 and 2014 more than 30 savings cooperatives were inspected in total.

These two types of grouping are required because in terms of compliance with the legislation and from the perspective of the customers using the payment services, the way the service provider ensures compliance bears no significance. The same statutory provision may also be breached due to manual processing or a failure in the system; e.g. a payment transaction may be credited with delay due to the incorrect parameterisation of the IT system which does not start the processing on time, but also because the administrator in charge of making the credit entry fails to perform his/her duty in a timely manner. Identification of the dominant source of the violations characterising the savings cooperative sector may be instrumental in the elimination of the failures and contribute to the design of the IT system to be implemented in the future in a proper, compliant manner.

4.2.1 Typical violations

4.2.1.1 Fulfilment of conditions related to the opening of current accounts

The Payment Services Act stipulates the documents and instruments that the service provider must require from their customers as a condition for opening a current account.

It is a general inspection experience that the internal regulations clearly regulate – albeit differently at each savings cooperative – the range of documents to be presented on a mandatory basis upon the opening of a current account.¹⁹ Due to administrative failures and/or the absence of proper control points, certain savings cooperatives often failed to have legal person customers, already registered at time of the opening of the current account, present the required documents not older than 30 days, confirming that the legal person is in the prescribed registry. Occasionally, the savings cooperatives opened the current account based on documents older than required or even in the absence of the instrument.

4.2.1.2 Obligation to provide information and notification

The Payment Services Act regulates the credit institutions' obligations to provide prior and subsequent information with regard to the payment services framework contract and the payment transactions. In addition to the obligation to provide information, it also regulates the cases when the payment service provider may charge a fee for the information and the cases when it may not do so. The key principle related to the obligation to provide information with a prescribed content is that it must be complied with in a clear, easy-to-understand and accurate form, and that the subsequent information on the execution of the payment transactions should be consistent with the prior information.

¹⁹ The payment service provider fulfils the payment transactions on the payment account opened for one or several customers. The current account is a payment account opened by the account holder, based on its statutory obligation, for the purpose of managing its payment turnover within the framework of its regular economic activity.

In accordance with the general practices, the savings cooperatives meet their obligation to provide subsequent information with regard to the execution of the payment transactions in the form of bank account statements. In this respect, the Payment Services Act specifies that in the case of customers qualifying as consumers and micro-enterprises subsequent information on the execution of the payment transactions must be provided at least once a month – even on paper if the customer requests so – free of charge. Namely, the statutory provision does not permit the charging of a fee for the delivery of the bank account statement. However, the vast majority of the inspected savings cooperatives charged a fee for the delivery of the account statements, typically when it was sent by post, but there were also cases when the fee was charged for personal provision as well. In addition, the savings cooperatives often failed to specify in the framework contract – or did not specify clearly enough – the way they would ensure the statutory exemption of the subsequent information from the charges.

It was also a frequent failure that savings cooperatives charged their customers fees, commissions or costs that they failed to announce earlier, or announced not clearly enough, or compared to the prior information the designation of the subsequently charged fee was not clear. It was also a typical failure that they debited customers' payment account with the fee, commission or cost elements specified in the prior notification in aggregate rather than item by item, thus based on the debited amount customers were unable to ascertain that the fees were charged in accordance with the announcement or could verify this only with difficulties.

Out of the requirements related to the obligation to provide customers with information, specified in the MNB Decree, the rules pertaining to the notification related to the execution, queuing or rejection of official transfer orders and collection orders were violated the most often.

The typical failures resulting in the violation of the obligation to provide information – which were generally attributable to the incorrect interpretation or occasional misinterpretation of the legal provisions, or to the incorrect stipulation thereof in the framework contract – are capable of generating direct or indirect financial losses for customers and also suitable for misleading customers or influence their decision-making in certain cases. In terms of volume, these kind of failures affected a large number of customers. With the fee charged for the delivery of the subsequent information the savings cooperatives obtained unjust financial gain to the detriment of their customers.

4.2.1.3 Acceptance, execution or rejection of payment orders

The rules of executing payment orders are regulated by the MNB Decree, the purpose of which is to guarantee minimum service quality and, by the transparent definition of the unified requirements for the acceptance and execution of the

payment orders, to ensure that payment orders are executed in a predictable manner by customers.

In most cases, the violations identified in the management of payments related to debiting earlier than prescribed or to late execution. Consequently, the payment orders were completed in an unpredictable manner for consumers. Due to early debiting, customers no longer had the opportunity to change the sequence of the execution of the payment orders, whereas in the case of late execution the beneficiaries were unable to dispose over the amounts belonging to them at the earliest time prescribed by law. These violations may have occasionally generated financial losses for customers. At savings cooperatives, the most frequent reason for earlier debiting than justified was that they incorrectly scheduled the start-of-day and end-of-day procedures in their account management system. In such cases, in the account management system a given working day was opened for accounting entries already on the previous calendar day, usually after the completion of the end-of-day procedure of the previous working day, and thus the amount of the ad-hoc or standing orders, transfers or direct debits becoming due (value dated) on the opening working day were removed from the customers' disposal earlier than stipulated in their order. Due to earlier debiting than the due date, the payer could no longer dispose of its own funds in the period remaining until the due date of the payment order. The impact of the earlier debiting than justified is greater on Fridays, because if the credit institution executes the debiting of the payment order already on Friday, late at night, while the order was originally due on Monday, and thus the customer cannot spend the funds during the weekend by bank card, although the funds for the payment order could be provided either by a transfer credited or a cash deposit made on Monday.

4.2.1.4. Queuing and partial payment

If the payment order submitted by the customer cannot be executed due to shortage of fund, the credit institution may – depending on the agreement with the customer – queue or reject it. According to the established practice, if the payment order is queued the savings cooperatives regularly check – several times a day – the availability of the funds until such time as the funds are provided or until the end of the queuing period, and if the fund is credited to the payment account, they execute the payment order. If during the queuing period the funds required for execution are not received, execution of the order is rejected on the last day of the queuing period. Experience showed that savings cooperatives often performed the queuing process incorrectly, as they occasionally kept the payment order queued for a period other than specified in the agreement with the customer or queued it without an agreement, or on the contrary, they failed to queue the payment order despite the agreement.

The failure in the practice of the savings cooperatives was mostly caused by the fact that the number of days set in the system as the queuing period was not consistent with that specified in the framework contract, and as such the payment orders were not executed in accordance with the provisions of the framework contract. It was also a frequent failure that the start date of the queuing period captured in the system of the savings cooperative did not comply with the statutory provisions which also caused the duration of queuing to be inadequate. It was a less frequent failure that upon the migration of customers, which accompanied the merger of the savings cooperatives, the settings were not standardised and as such they not always ensured the standard queuing in accordance with the provisions of the framework contract.

The failures related to queuing make the predictability of the execution of the payment orders uncertain for customers.

4.2.1.5. Restriction of the right to refund

In the case of collection orders, the Payment Services Act provides an opportunity for the refund of the payment transaction amount if the payer party qualifying as a consumer or micro enterprise was not aware of the amount to be collected at the time of approval and if the amount of the transaction was not reasonably expectable in the given situation. According to the statutory provisions, the payment service provider is obliged to investigate the legitimacy of the refund claim on a case-by-case basis, and depending on the result of the investigation it should either refund the customer for the already collected amount or reject the claim of the payer party. The framework contract of the savings cooperatives – with the goal in mind to prevent their payer customers from potentially misusing their right to refund – generally restricted the customers' right to refund, bypassing the investigation of individual claims. At the same time, the savings cooperatives' customer complaint registers did not contain any customer claim for the refund of the payment transaction amount, thus it could not be established whether the customers have lodged any claim with the savings cooperatives for refund at all, or such claims were rejected by the savings cooperatives by default with reference to the contractual terms and conditions.

The general restriction of the right to refund may have a particularly detrimental impact due to weakening the confidence in the payment services, and particularly in direct debits.

4.2.1.6 Making the payment transaction amount immediately available for the beneficiary

Pursuant to the requirement to credit incoming payments immediately, as specified in the MNB Decree, the payment service provider of the beneficiary must ensure that the amount of the payment transaction is at the disposal of the beneficiary

customer immediately after it has been credited to its own account. The typical failure at the savings cooperatives in this area was attributable to the manual processing of the postal cash transfers, the foreign currency and RTGS payments and pending items. The delay existed not only within the same day, but also for one or several days, i.e. the beneficiary customer was not able to dispose of the amount belonging to him even for several days in certain cases. It should be noted that at most of the savings cooperatives these payment transactions are credited by manual processing. The length of the delay is significantly impacted by whether the payment transaction amount is credited in the head office of the savings cooperative or in the branches/agencies thereof. Delays of several days occur more frequently in the latter case, as the crediting process is longer than in the case of central processing and it is done by several administrators thereby increasing the risk of omission.

A typical example characterising the erroneously parameterised IT system includes the timing of the intraday crediting of the transfers, the frequency of which was not set identically at the savings cooperatives. Takarékbank processes the payment orders under the intraday clearing standard – which, in addition to the payment transactions received from the ICS intraday clearing system, includes the payment orders between the savings cooperatives, settled by Takarékbank – every 15–20 minutes, i.e. practically on a continuous basis, after which the savings cooperatives are able to receive the credit transfers in their own system and credit them to the payment accounts of their beneficiary customers. Some of the savings cooperatives launched the process to credit the incoming payments every 20–30 minutes, while others did so only every 1.5–2 hours. This latter setting did not ensure, at the vast majority of the incoming credit transfers, that the payment transaction amount was made available immediately for the beneficiary, as occasionally those were credited to the beneficiary’s payment account only roughly 2 hours after receipt. It was also a typical failure that the savings cooperatives’ end-of-business day was not aligned with the operating time of the clearing systems, as a result the payment transaction amounts received on the respective day were only credited to the beneficiary’s account on the next business day.

The not immediate, delayed crediting of the credit transfers provides the credit institutions with unlawful financial gain as the amounts not yet credited to their customers’ payment accounts provide them with free liquidity.

4.2.1.7 Application of value dates

Applying disadvantageous value dates for consumers – which is not in conformance with the provisions of the MNB Decree – usually occurred in case of those, not-immediately credited payment transactions whose crediting took place only the following business day or even later. The application of a value date later than prescribed typically occurred in the case of manually credited payment transactions; however, the failure was often attributable to the fact that the account management

system of the savings cooperative did not permit the application of backdated value date for the credit entry, as required.

The application of a later credit value date than prescribed results in loss of interest for the customer and interest gain (float) for the credit institutions.

4.2.2 Source of violations

4.2.2.1. Failures related to the framework contract

The source of a major part of the violations related to the provisions of the Payment Services Act is the framework contract for the provision of payment services. It is typical of these failures that they affect a wide range of customers qualifying as consumers and micro enterprises and are often attributable to incorrect interpretation of the law. At the same time, there were examples of applying a contractual condition, violating the provision of the Payment Services Act, where the credit institution wished to gain an illegal advantage to the detriment of the customer. The failures mentioned first include the charging of fees contrary to the provisions or providing prior or subsequent information with incorrect or unclear content, while the latter ones include the application of contractual conditions that generally restrict the customers' right to refund of the payment transaction amount, bypassing the investigation of individual claims or the unlawful charging of fees.

4.2.2.2 IT system failures

The system failures often related to the account management system, and thus the same problem also existed at other savings cooperatives using the given system. The general experience is that while these system errors were fixed at the savings cooperatives inspected on the basis of MNB's administrative procedure, the software vendor has not always eliminated the error – which it became aware of it in this way – at the savings cooperatives not yet inspected.

There are two types of distinctive IT system errors. *(i)* The account management system has the appropriate feature necessary for compliant operation, but the credit institution is not familiar with it or sets the parameters incorrectly. Example of this cases include, as mentioned earlier, the improper timing of the process of crediting the credit transfers received during the intraday clearing or the setting of the queuing period contrary to the agreement. *(ii)* The account management is not capable of performing certain process in compliance with the rules; the system requires development to make it compliant. An example of this case is the lack of applying a credit value date earlier than the booking date.

4.2.2.3 Failures attributable to manual processing or omission

The savings cooperatives often launched with delay such computer-assisted processing routines the start of which required the intervention of the operator rather than being controlled by integrated automatism. In addition to the delayed

launch of the computer processing, a number of violations could be attributed to the decentralised operation and the large degree of manual processing, which characterises the savings cooperatives. Experiences show that ad-hoc failures committed by the administrator occur significantly more frequently at savings cooperatives where manual tasks were performed by the branches, with respect to the payment accounts opened by them, rather than by the back office in the savings cooperative's head office. The improper setting of the queuing period in the account management system, as well as the delayed rather than immediate crediting of the postal cash transfer, the RTGS and the foreign currency credit transfers were also attributable to manual processing.

4.3 Failures in the payment services of the savings cooperative sector

During the inspection of payment services conducted in the period 2012–2014 at savings cooperatives and other credit institutions, failures were identified on more than 360 occasions. In evaluating the experiences we ignored the impact of the different number of audited items, arising from the size of the credit institutions, and we considered only the number of infringements per credit institution. In this way, we made the inspection experiences at the savings cooperatives comparable with the payment service inspection experiences at other credit institutions.

The number of failures identified was roughly the same at both institution types. However, at savings cooperatives it was a general inspection finding that *(i)* in connection with the framework contract and the obligation to provide information similar failures were identified, attributable to the application of the contract templates and sample regulations issued by Takarékbank and the National Savings Cooperative Institution Protection Fund,²⁰ and *(ii)* the number of failures attributable to manual processing was higher.

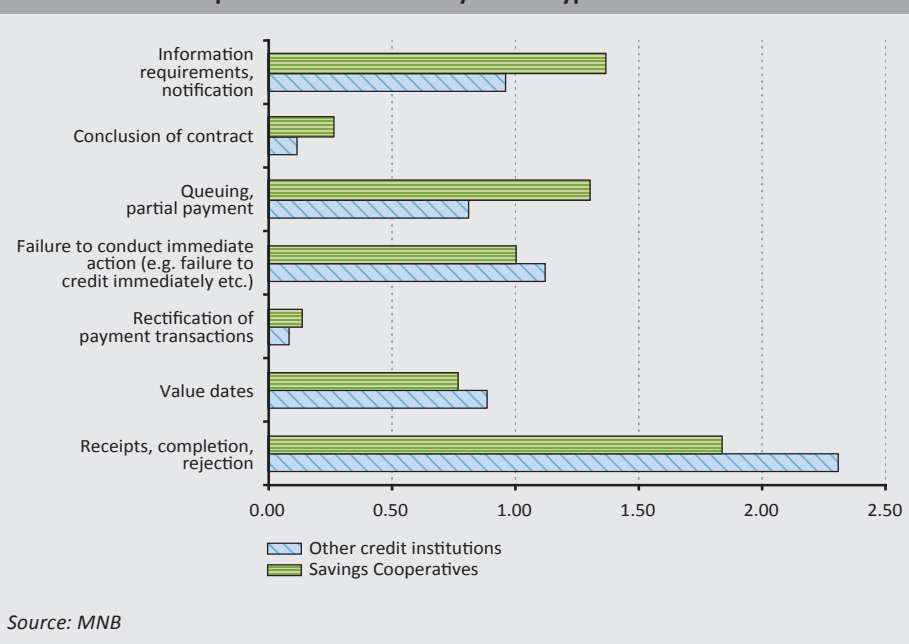
Figure 4 illustrates the average number of failures by institution type, grouped as indicated in Chapter 4.2.

On the whole, based on the inspections two major risk factors can be identified in the savings cooperative sector. One of them is the large degree of manual processing present in the payment functions of the savings cooperatives, which typically led to ad-hoc failures and in these cases for compliant functioning in-process control, development and/or automation is needed. The other risk factor is the degree to which the requirements of the payment services legislation were taken into consideration upon designing the process of the applied systems. Accordingly, the probability of compliant processes also depended significantly on the account management system applied by the given savings cooperative. According to the

²⁰ We only have inspection experience related to the provisions of the Payment Services Act from 2014 onwards.

Figure 4.

Number of failures per credit institution by failure type



inspection findings, institutions of the former integration where the IT function and/or the account management was outsourced (to TAKINFO or TAK-INVEST) comprehend the processes of their payment functions to a lesser extent and in connection with this they are aware of the failures and risks thereof to a lesser extent than those institutions that did not outsource the function. We found that some of the savings cooperatives have no significant influence on the outsourced function and on the developments necessary for statutory compliance, and it is not always clear whether the failure giving rise to an infringement was caused by the savings cooperative or the company that performs the outsourced function.

Based on the inspections, the MNB notified Takarékbank several times of its findings related to the payment services of the savings cooperatives and the functioning of their account management system. Takarékbank did take MNB's findings into account and changed its processes, but there is a lot to do after the entry to force of the law regulating the integration of the cooperative credit institutions. The implementation of a unified account management system may offer a solution for the standardised and compliant operation of the multi-player integration model.

5. Potentials of the unified IT system of the savings cooperative integration

Taking into consideration the deadline of 1 June 2016 – prescribed by the Integration Act for the implementation of the uniform IT system – Takarékbank has launched its project, which covers the setup of a data centre, a unified account management system and front office system and the migration of the legacy systems. In February 2015, the first IT system that is unified at the level the integration was launched at all savings cooperatives and it manages the investment products and services.

There are basically three options for the implementation of the unified account management system. One is the implementation of a completely new system, the advantage of which could be that it may incorporate all relevant considerations necessary for the efficient and professional functioning and at the same time ensure full compliance with the payments services legislation. Another option could be to choose one of the present account management systems that all savings cooperatives would apply uniformly in the future. In this case, the existing known failures of the system must be eliminated, and it must be prepared for the management of the considerably higher turnover by increasing its capacity. As a third option, the present stand-alone systems would be preserved, but with appropriate development and a unified front-office system they would be linked, thereby ensuring standardisation of the sector's payment services. Although the first option would be the most expensive solution in the short run, in the long run the operating and development costs of a new, modern system could be significantly lower than the parallel maintenance and operation of the existing systems. At the same time, irrespective of the way the integration complies with the obligation to implement a unified payment system, with the implementation of the new system compliance risk will significantly increase anyway, as the non-compliant specification of the system will have a negative impact on the payment turnover of not only one savings cooperative or a minor group of the savings cooperatives, but on that of the entire sector.

The design of a unified account management system have to provide the savings cooperatives with the opportunity to eliminate the earlier payment failures typical of the sector and take account of the anticipated developments in payment services in Hungary and globally. In our view, upon developing the standardised payment service processes the following criteria must be considered:

i. Acceleration of money transfers. The immediate (prompt) crediting of the credit transfers received as part of the intraday clearing, and the reduction of the time required for the execution of the payment orders initiated by the customers of the savings cooperatives, to be executed in the intraday clearings, from the

maximum 6 hours permitted by the MNB Decree, would help increase the competitiveness of the sector. In the new integration of the savings cooperatives 15 savings cooperatives and credit unions have lost their direct membership and become indirect ICS and RTGS members. As a result of this, the time required for the execution of domestic forint payments increased roughly by 30 minutes (Császár 2015) compared to the previous practice in case of these institutions. At the same time, this did not lead to an infringement in their case as instead of the general 4-hour rule²¹ they came under the effect of the 6-hour rule.²² The longer time required for the execution in the case of these savings institutions as a result of the standardisation was an unavoidable drawback and definitely prejudices their competitiveness, since they lost the possibility of faster payments provided by the direct ICS membership. This, in their case, conflicts with the international trends and with MNB's efforts to focus the development of the payment service processes on the acceleration of the payments. In order to accelerate the payment services of the savings cooperatives an integrated, real-time online system should be implemented, which – in addition to accelerating the payments outside the integration – could attain the realisation of immediate payments within the integration, and make it possible for the account holders of the savings cooperatives to manage their finances in the branch of any savings cooperatives (i.e. also other than their home savings cooperative). This would be a major step forward also in the prompt clearing of the cash withdrawals made within the integration at a savings cooperative other than the one that manages the account. A properly specified system would also permit the termination of violations – as found and criticised earlier during the payment services inspections conducted by the MNB – and the revision of the processing routine of the sector related to the intraday clearing to achieve faster processing, and it would also create the conditions for connecting to a prompt money transferring system operating 7 x 24 hours.

- ii. Postponing the close of business day.* In order to enhance the competitiveness of the sector the end of business day should be set to a later time on all working days of the week than now, and the early afternoon cut-off times for the acceptance of the payment orders for same day execution – generally characterising the savings cooperative sector – should be prolonged in order to ensure the customer-friendly acceptance and execution of the forint and foreign currency payment orders. The extension of working hours is also required by the anticipated future national and international payment services development trends (7x24 availability, introduction of prompt money transfer).

²¹ Section 17 (2) of the MNB Decree

²² Section 17 (3) of the MNB Decree

iii. *The highest possible level of automation in the processing of payment transactions.* In order to increase efficiency and strengthen compliance, in addition to the credit and periodic credit forint and foreign currency payment orders it could be expedient to provide proper IT support for the processing of public authority payments by the savings cooperatives, and the processing of postal money orders centrally, at the level of the integration.

References

Császár, P. (2015): *Four hours is actually how many hours? – The actual time required for intraday transfers.* Financial and Economic Review, 14(1), pp. 166–192.

Kiss, G. K. (2009): *A “vidék bankja” megteremtésének dilemmái Magyarországon.* Hitelintézet Szemle, 8(6), pp. 496–515.

Magyar Takaréék. (no date indicated): *Integrációs csoportosulások és intézményeik.* Országos Takarékszövetkezeti Szövetség: <http://www.magartakarek.hu/integracios-csoportosulasok-es-intezmenyeik>. Downloaded: 12 May 2015.

Magyar Takaréék. (no date indicated): *Történetünk.* Országos Takarékszövetkezeti Szövetség: <http://www.magartakarek.hu/tortenetunk>. Downloaded: 12 May 2015.

MNB (2014): *Payment systems report.* p. 47.

Moizs, A. – Szabó G., G. (2012): *A szövetkezeti hitelintézetek története, jelenlegi rendszere és sajátosságai Magyarországon.* Hitelintézet Szemle, 9(1), pp. 67–85.

SZHISZ (2015): *Szövetkezeti Hitelintézetek Integrációs Szervezete.* <http://szhisz.hu/> Downloaded: 18 June 2015.