ECONOMY & FINANCE • VOL. 6 ISSUE 3 • SEPT. 2019 • DOI: 10.33908/EF.2019.3.3

EXPERIENCES RELATING TO THE INTRODUCTION OF IFRS 9 IN THE BANKING SECTOR

Éva Gulyás – Cintia Somogyi¹

ABSTRACT

Since 2018, most credit institutions have been required to prepare IFRS financial statements. The transition was expected to result in improved comparability and a reduction in administrative burdens. Our study investigates whether these expectations are borne out by the experiences of survey respondents. Building on the results of earlier surveys and our own observations, in the summer of 2018 we conducted a survey to assess the banks' experiences relating to the introduction of IFRS 9.

This research adds nuance to our previous conclusions that the success of the transition is assured by the availability of Hungarian-language literature, the setting of realistic deadlines and use of the appropriate GAP analysis, while difficulties are presented by the shortage of relevant skills and the high one-off changeover costs.

We observed significant differences depending on whether a given bank had already prepared IFRS individual financial statements before the transition to IFRS 9. The greatest challenge overall was the immaturity of the IT system, while the most important accounting challenges included the impairment model, SPPI tests and taxation issues.

Based on the responses, the opinions of the surveyed banking professionals did not confirm the expected benefits of the introduction of IFRS and IFRS 9; they regarded the drawbacks as having a greater weight.

JEL codes: G21, G23, G28, M41

Keywords: accounting, banking system, regulation, financial instruments

1 Éva Gulyás: senior lecturer at Corvinus University, Budapest. Cintia Somogyi: consultant at FX Software Zrt.

1. INTRODUCTION

The year 2018 had special importance for most credit institutions operating in Hungary, as from this year onwards - with a few exceptions - it became compulsory for all credit institutions to prepare their financial statements in accordance with International Financial Reporting Standards (IFRS) (Mészáros, 2015). The new requirement did not represent completely uncharted territory for credit institutions with securities that were, or had been, quoted on stock exchanges in the European Union, since these companies had been required to prepare their consolidated financial statements in accordance with IFRS since 2005. (Vajay 2015) Even for these companies, however, the application of IFRS for individual financial statements was still a new development, although the consolidated financial statements clearly could not have been prepared without defining the individual corporate data in accordance with IFRS. Another group within the credit institutions sector did not prepare IFRS financial statements either at individual or consolidated level; but they may have been required to report such data to their parent companies, and thus they already had some level of IFRS expertise. For certain participants in the sector, however, both the generation of IFRS data and the compilation of financial statements with the new structure and content represented an entirely new task. The expected impact of the changeover to IFRS was an improvement in competitiveness and comparability, as well as a reduction in the associated administrative burdens. In our study, we set out to answer the question of how much the surveyed institutions feel they benefit from these advantages, and what other benefits or possible drawbacks the transition represents for them. In order to evaluate the possible responses we reviewed several previous surveys, which are presented in the following section, and based on the results of these, in the July-September 2018 period we used a questionnaire to elicit the banks' experiences relating to the introduction of the IFRS 9 standard.

According to previous studies – which did not relate exclusively to credit institutions and did not focus only on IFRS 9 – a successful transition is supported by the availability of Hungarian-language literature, the setting of realistic (1-2-year) deadlines and performance of the appropriate GAP analysis, while difficulties are posed by the lack of expertise and the high one-off costs of the transition (*Bartha* et al., 2014) A Deloitte survey focusing on IFRS 9 – conducted before the transition – showed that, for the actors participating in the survey, the classification of financial instruments, the changes in the methodology for recognising impairment, the definition of past-due items and the change in disclosure requirements were expected to cause problems (*Veszprémi* et al., 2018).

Before creating our own questionnaire and processing the obtained results, we hypothesised that the present experiences of the transition to IFRS 9 would be

similar to the results of earlier surveys relating to the adoption of IFRS. At the same time, we expected the answers to differ significantly depending on whether the respondent is classified as a small or large bank, whether it had already transitioned to the use of IFRS for its individual financial statements in 2017, or whether it had previously needed to produce IFRS data for any reason. We assumed that the larger banks had already switched to individual IFRS financial statements in 2017, or had at least previously generated IFRS-compliant data, and thus they would judge the advantages to be greater and the disadvantages to be less significant.

In our paper we analyse the received responses, taking the results of earlier surveys into consideration, and attempting to confirm or disprove our own assumptions.

2. **RESULTS OF EARLIER RESEARCH**

Prior to the primary research, we conducted secondary research to familiarise ourselves with the previous surveys into the transition to IFRS. Here, we summarise the results of a total of four questionnaire-based surveys, one covering the countries of Central and Eastern Europe, and three conducted with the participation of companies in Hungary.

The Big4² accounting firms compiled a joint questionnaire for the purpose of assessing experiences related to the application and introduction of IFRS. The questionnaire was sent out in the summer of 2013, primarily to European countries, where the use of IFRS is mandatory for the consolidated financial statements of exchange-listed companies, and for individual financial statements in most cases. The questionnaire extended to cover an assessment of the success factors, pros and cons of the introduction of IFRS, as well as the link with taxation (Bartha et al., 2014).

Ernst and Young (hereinafter: EY) conducted a questionnaire-based survey of domestic companies in the spring of 2015, with the aim of mapping experiences related to the transition to IFRS in Hungary. The questionnaire was completed by 49 businesses, 25 percent of which are active in the financial sector. Some 78 percent of the respondents already had an IFRS reporting obligation in the form of a parent-company reporting package or IFRS financial statements. The survey

² Deloitte Kft., Ernst & Young Könyvvizsgáló Kft. (EY), KPMG Hungária Kft., Pricewaterhouse-Coopers Könyvvizsgáló Kft (PwC).

covers the success factors, challenges and benefits of the introduction of IFRS in Hungary (Bartha et al., 2015).

In October 2016, PricewaterhouseCoopers (hereinafter: PwC) conducted a survey of almost 100 businesses regarding the transition to IFRS, with the aim of canvassing the businesses' opinions and assessing the average level of readiness (*Kökény*, 2017).

Deloitte conducted a second questionnaire-based survey in 2018, into what companies think about the transition to IFRS, and the challenges it entails. This survey also features questions that relate directly to the IFRS 9 standard, the findings of which will be discussed here separately (Veszprémi et al., 2018).

2.1 Success factors and challenges of the introduction of IFRS

One of the key factors for the successful introduction of IFRS is the training of the appropriate number of *accounting professionals with IFRS skills*, which is also of critical importance in Hungary because there are significant differences between the domestic accounting regulations and IFRS (Bartha et al., 2014). Some 54 percent of respondents in the Deloitte survey thought that they did not possess the specialist expertise necessary for the transition (Veszprémi et al., 2018), while in the PwC survey 25 percent of respondents saw a shortage of IFRS specialists as a difficulty (Kökény 2017). Based on this, it is clearly necessary to ensure continuous training and develop the up-to-date training materials needed for this (Bartha et al., 2014). Besides this, it is considered crucial for enough *Hungarian-language specialist literature* of the appropriate quality to be at the disposal of accounting professionals, with 84 percent of companies participating in the EY survey believing that this is one of the fundamental prerequisites for a successful transition (Bartha et al., 2015).

Another key factor for a successful transition to IFRS is that the accounting professionals be *receptive* to the changes. This can be promoted by appropriate communication on the part of the regulatory authorities, which makes it possible for businesses to prepare in time for any changes, and thus be capable of surmounting the challenges that arise. With the right communication, it is possible to prevent the emergence of doubts regarding the transition, and resistance to the changes on the part of accounting professionals (Bartha et al., 2014).

A notable success factor is the *setting of reasonable, achievable deadlines* by the regulators, which ideally means a transition period of more than one year, but less than two years (Bartha et al., 2014). Complying with the set deadlines is easier if the companies, at the beginning of the transition, prepare a GAP analysis with the aim of identifying the differences between domestic accounting rules

and IFRS, including an examination of the impact of the transition on operating processes and controls, IT departments and taxation issues (*Bodor* et al., 2017). Based on PwC's survey, the effectiveness of implementing the transition is largely dependent on the amount of time invested in preparing the impact study. Businesses who spent an average of 2.3 months analysing the impacts of the transition found it easier to overcome the obstacles that arose and keep to the set deadlines (Kökény, 2017).

The results of the GAP analysis depend considerably on whether *the business in question had previously prepared IFRS financial statements or a parent-compa-ny reporting package.* Based on the EY survey, 68 percent of respondents who had previous IFRS experience believed that their existing systems and processes would be capable of generating the data necessary for IFRS financial statements, while most of the companies who did not have prior experience were unable even to judge what kind of changes they could expect (Bartha et al., 2015).

The countries featuring in the Big 4 survey judged the harmonisation of taxation rules with IFRS to be a less important factor than anticipated, but in Hungary the taxation issues were also of key importance, as there are several taxes, especially corporate tax and local business tax, that will be impacted considerably by the transition (Bartha et al., 2014).

2.2 The benefits and drawbacks of introducing IFRS

The countries featuring in the Big 4 survey unanimously regarded the *comparability* and *transparency* of financial statements as the greatest benefit of the transition to IFRS. For foreign investors today, a basic requirement is the ability to compare the performance of businesses operating in different countries, which is achievable through the introduction of the most widely accepted accounting system in the world, IFRS. Consequently, countries that have already introduced IFRS are more competitive, and have proven to be more attractive to investors, than countries where the adoption of IFRS has not yet taken place (Bartha et al., 2014).

The respondents highlighted as an additional advantage the *improvement in accounting skills* resulting from the introduction of IFRS. This is partly because the authors of the standard endeavoured to align the accounting more closely with business objectives, and partly because the introduction of IFRS makes it essential to ensure the continuous updating of accounting skills (Bartha et al., 2014).

Finally, for businesses that prepared their individual financial statements in accordance with the local statutory provisions, but their consolidated financial statements or parent-company reporting package in compliance with IFRS, the transition resulted in the discontinuation of the parallel book-keeping, and thus in a *reduction of administrative burdens* (Bartha et al., 2014).

Besides the benefits of introducing IFRS, the respondents also highlighted numerous difficulties, the most significant of which proved to be the *skills shortage*. Of the 16 countries featuring in the Big 4 survey, 16 highlighted that accounting professionals did not possess the skills and experience necessary to manage complex or special transactions, which could lead to misinterpretation of the standards and the compilation of unreliable financial statements (Bartha et al., 2014).

A further drawback of introducing IFRS is the *high one-off cost*, which basically consists of the financing necessary for performance of the GAP analysis, the system-level IT developments, the training of employees and the use of third-party consultants (Bartha et al., 2014).

2.3 The introduction of IFRS 9

In its survey conducted in 2018, Deloitte separately mapped out the challenges of the IFRS 9 standard. Some 91 percent of participants in the survey disposed over some kind of financial instrument, but only 6 percent of them were businesses that were active in the financial sector. Consequently, the results of the survey cannot be applied directly to the banking sector, but it is certainly of interest to examine which aspects of the IFRS 9 standard represent a challenge for businesses.

Based on the survey, difficulties arose in the following areas in the course of introducing the IFRS 9 standard:

- classification of financial instruments (business model, SPPI test);
- determination of the impairment methodology;
- handling of past-due items;
- disclosure obligations;

The difficulties that arose prompted 82 percent of respondents to seek outside assistance, which primarily took the form of information provided by the parent company. Besides this, the surveyed companies took on the board the requirements of IFRS 9 by participating in training courses and engaging third-party consultants (Veszprémi et al., 2018). Interestingly, only a third of respondents in PwC's survey of 2017 thought that they needed outside professional assistance (Kökény, 2017).

3. METHODOLOGY -THE QUESTIONNAIRE AND ITS PROCESSING

The earlier surveys only provided information about the credit institutions sector indirectly, so in order to assess the credit institutions' experiences relating to the introduction of the IFRS 9 standard, we conducted a questionnaire-based survey with the involvement of professionals from 15 credit institutions in Hungary.

In what follows, before summarising the results of the survey, we will describe the methodology of the research.

The primary research was conducted in the form of a questionnaire, which focused on assessing the experiences of participants in the IFRS transition project (including: accounting, IT, project management, risk management departments). In the course of the survey, we set out to answer the question of how successful the respondents judge the transition to have been, what challenges they faced during the project, and what benefits and drawbacks of the introduction of IFRS 9 they encountered.

In the questionnaire, we used both open-ended and multiple-choice questions. For the multiple-choice questions, we provided the option of answering "Other" whenever the possible answers listed by us were not exhaustive. In addition to questions relating to quantifiable data and facts, we used evaluative questions to assess the respondents' opinions regarding the IFRS 9 standard. Besides these, the insertion of a few verification questions into the questionnaire provided the opportunity to examine the consistency of the replies (*Majoros*, 2011). To avoid distorting the results, if several completed questionnaires were received from a single credit institution and the correct answer could not be clearly obtained from publicly available data, then we assessed the received replies based on the mode of the answers received from the bank concerned.

The survey targeted departments participating in the transition project (such as treasury, accounting, IT, project management, risk management). The online means of accessing the questionnaire (Google Forms) and a downloadable version (Microsoft Word) were provided to the respondents in the period lasting from July to September 2018. Where there was personal contact the questionnaire was sent directly to the respondent, and in the absence of such it was sent by email to the person responsible for the coordination and management of bookkeeping tasks.

The selection of the respondents took place using a non-probability sampling method, specifically a voluntary sample (Majoros, 2011). Consequently, the sample cannot be regarded as representative, and therefore the results of the survey can only be interpreted in the context of that sample. To expand the scope of the results – due to the small sample – we also performed the tests described below.

As the starting point for the analysis, based on the received response we built a unified database in Microsoft Excel, then separated the explanatory and result variables, and examined the responses with cross-tabulation analysis based on various criteria.

We performed the analysis with Cramer's V, which is also applicable in descriptive statistics, and with Eta². Cramer's V shows the closeness of association between two variables. The coefficient can have a value of between 0 and 1: a value of close 0 corresponds to independence, and a value close to 1 points to a very strong correlation (SPSSABC, 2018c). Eta² can be used to examine the deviation between group averages, and it shows as a percentage the extent to which the explanatory variable influenced the difference between group averages (*Huzsvai–Vincze*, 2012).

For checking the correlations between the variables we used the Fisher exact test in the Statistical Package for the Social Sciences (hereinafter: SPSS). The Fisher test shows, even given a small number of sample elements, whether there is a significant correlation between two variables in a 2×2 contingency table (SPSS-ABC. 2018b) To extend the test to an $R \times C$ – that is, a larger – table, we used the Fisher-Freeman-Halton test (IBM, 2016). Besides this, we analysed the evaluative questions with a one sample *t*-test, which is suitable for examining the differences between averages given a small number of sample elements (SPSSABC, 2018a). The respondents did not state the official opinions of the credit institutions; they completed the questionnaires based on their own views.

4. RESULTS

The questionnaire was sent to approximately 100 specialists at 30 credit institutions operating as joint stock companies. Responses were received from 28 specialists at a total of 15 credit institutions, which represents a 28 percent response rate. Of these, 1 questionnaire was unsuitable for evaluation, so this respondent was screened out of the analysis. Accordingly, following this we took into consideration the responses of the remaining 27 respondents.

4.1 Selection of the explanatory variables

The questionnaire contained a total of 26 questions, with a further two questions to ascertain the respondent's basic data: the credit institution, and department (e.g. accounting, IT, project management, risk management) where the respondent works. These questions were indicated as compulsory in the questionnaire, because we worked on the assumption that they would prove to be explanatory variables in the course of analysing the other questions.

Fifty-six percent of the respondents; that is, 15 persons, were accounting professionals, and 12 of these questionnaires were received from Treasury and Accounting departments, and 3 from the chief accounting officers of credit institutions. Besides these, responses were also received from IT, risk management, project management, regulatory reporting, controlling, ALM, mid-office and management departments.

4.1.1 Grouping of credit institutions

Identifying the workplaces of the respondents created the opportunity for us to obtain additional information about the bank based on the data contained in the credit institutions' individual and consolidated financial statements. We assumed that certain objective factors – for example, the size of the credit institutions, or the accounting system applied at individual financial statement level in 2017– would have a material impact on what the respondents think about the transition to the IFRS 9 standard, and therefore we examined the credit institutions in the sample on the basis of three criteria:

- size of the credit institution
- accounting rules applied at individual financial statement level in 2017;
- IFRS reporting obligation before the transition to IFRS 9.;

Size of the credit institution

First, we created size-based "Large Bank" and "Small Bank" groups. The grouping was performed based on the robust average of the balance sheet totals in the individual annual financial statements for the financial year ending on 21.12.2017 (HUF 950.14 billion). Credit institutions with a higher balance sheet total than this average were categorised in the "Large Bank" group, and banks with a lower than average balance sheet total in the "Small Bank" group. On this basis, the sample contains 7 large and 8 small banks.

The balance sheet total is an item of data accessible in the *Golden Book* published in 2017 by the National Bank of Hungary (MNB) in respect of all 40 credit institutions operating as joint stock companies, and therefore we examined how big a cross-section of the total statistical population is covered by the sample:

	Large Banks		Small	Banks	Total		
	Number of banks	Balance sheet total (HUF Bn)	Number of banks	Balance sheet total (HUF Bn)	Number of banks	Balance sheet total (HUF Bn)	
Sample	7	18 630	8	1 531	15	20 161	
Golden Book	10	25 036	30	6 373	40	31 409	
Sample/ Golden Book	70%	74%	27%	24%	38%	64%	

Table 1 Coverage of the population by size

Source: compiled by author based on the sample and Golden Book (MNB, 2017)

Taking into account the robust average determined based on the sample, there are a total of 10 large and 30 small credit institutions operating as joint stock companies in Hungary. Responses were received from 70 percent of the large banks, and 27 percent of the small banks. In total, the sample covers 38 percent of the total statistical population in terms of the number of credit institutions, and 64 percent in terms of the balance sheet total.

Accounting rules applied at individual financial statement level in 2017

We also grouped the credit institutions in the sample based on the accounting rules applied prior to the IFRS 9 transition, in their individual annual financial statements for the financial year ending on 31.12.2017. On this basis, in the year 2017, a total of 7 credit institutions applied IFRS, while 8 applied Hungarian Accounting Standards.

This grouping was also examined relative to the total population of banks, the result of which is shown in the following table:

	IFRS		Н	AS	Total		
	Number of banks	Balance sheet total (HUF Bn)	Number of banks	Balance sheet total (HUF Bn)		Balance sheet total (HUF Bn)	
Sample	7	15 726	8	4 435	15	20 161	
Golden Book	12	19 755	28	11 654	40	31 409	
Sample/ Golden Book	58%	80%	29%	38%	38%	64%	

Table 2 Coverable of the population by accounting standards applied at individual financial statement level in 2017

Source:compiled by author based on the sample and Golden Book (MNB, 2017)

Based on the table it is clear that, for the purposes of their individual financial statements, in 2017 only 12 credit institutions operating in the form of joint stock companies had switched to the use of IFRS, while 28 credit institutions still prepared their financial statements in accordance with Hungarian Accounting Standards. The questionnaire was completed by 58 percent of the users of IFRS, and 29 percent of those that applied HAS, and these ratios were 80 percent and 38 percent respectively in terms of balance sheet total.

IFRS reporting obligation before the IFRS 9 transition

A substantial part of the credit institutions sector already prepared IFRS-based consolidated financial statements, or a reporting package with identical content, before the transition to IFRS 9; that is, prior to 2018, but this does not necessarily mean that the introduction of IFRS did not represent a major challenge for them. In 2006, the Hungarian Financial Supervisory Authority³ (PSZÁF) conducted a survey of 38 credit institutions, based on which only 2 banks kept separate, individual IFRS subledgers, but 13 banks generated the IFRS data by converting Hungarian accounting data, while 3 banks applied a combination of the two methods. Similarly, in a survey conducted in 2012 by KPMG, out of 11 credit institutions 6 banks had IFRS-level subledger records. Besides this, at the level of consolidated financial statements, in the course of converting the Hungarian data the credit institutions presumably applied numerous simplifications; for example, the amortised cost of a loan was determined not using the effective interest method, but

³ Today, the supervisory authority is the National Bank of Hungary (MNB). (Gulyás 2017)

as the sum of the Hungarian carrying value and the total of cumulative nominal interest. Based on this, it may be assumed that even credit institutions which already had some kind of IFRS reporting obligation prior to the introduction of IFRS also had a need for considerable developments. *(Gulyás 2017)*

Many years have passed since those surveys, so with our questionnaire we also investigated how many of the credit institutions in the sample had prepared IFRS financial statements or a report with identical content before transitioning to the IFRS 9 standard, and how they had produced the data necessary for this.

In 2017, of the 8 credit institutions applying Hungarian Accounting Standards, 3 credit institutions prepared an IFRS reporting package at the request of their parent companies, and 2 of these credit institutions generated the necessary data for this with separate, individual IFRS subledgers, while 1 bank produced the figures through the aggregated conversion, using estimates, of the HAS accounting data. Besides this, those who had previously used IFRS, without exception, had segregated IFRS subledgers. Overall, before the transition 60 percent of the credit institutions in the sample had an individual IFRS subledger, which represents a higher proportion than in the earlier surveys.

4.2 Correlations between the explanatory variables

It could be assumed that there was a close correlation between the various variables associated with the credit institutions, and therefore in section *4.3. Evaluation of the explanatory variables* it may be sufficient to analyse the replies based on the grouping according to one of the aspects. To this end, in the SPSS system, we used Cramer's V to examine the strength of the association between the selected groups.

Cramer's V	Size	2017 - IFRS / HAS	IFRS statements/ report before IRFS 9
Size	-	0.464	0.378
2017 – IFRS / HAS	0.464	-	0.661
IFRS statements/ report before IRFS 9	0.378	0.661	_
Average	0.421	0.563	0.520

Table 3 Correlations between the explanatory variables

Source: Compiled by author

The value of the coefficient between the credit institutions' size and an IFRS reporting obligation prior to the IFRS 9 transition was 0.378, which shows a weaker than medium correlation. There is a medium correlation (coefficient 0.464) between the credit institutions' size and the accounting rules applied at the level of individual financial statements in 2017, and a stronger than medium association between the pre-transition accounting standards and the prior IFRS reporting obligation (coefficient 0.661). Based on the averages of the coefficients, the accounting standards applied for the purposes of individual financial statements in 2017 are in close correlation with the other two variables. Therefore, in what follows it is sufficient to analyse the questions that yielded the result variables in terms of a single aspect. Accordingly, hereinafter we shall only examine the responses based on the grouping in terms of the accounting standards applied for individual reporting in 2017.

Evaluation of the result variables

The questions leading to result variables were grouped into the following 3 topics:

- general characteristics of the transition;
- challenges;
- benefits and drawbacks.

4.2.1 General characteristics of the transition

Of the circumstances of the transition to the IFRS 9 standard, we examined which information sources the respondents used to familiarise themselves with the provisions of the IFRS 9 standard, whether they enlisted the help of external consultants or advisers, whether they prepared a GAP analysis, and whether they succeeded in implementing the transition project within the deadline.

Information sources

The respondents indicated, on a scale of 1 to 5, how often they used the specified information sources in the course of familiarising themselves with the provision of the IFRS 9 standard. The responses were examined based on the opinions of the 27 respondents; in other words, they were not aggregated for each bank. Based on the averages thus obtained, the reading of the IFRS 9 standard, participation in training courses and information provided by the parent company proved to be the most significant sources of information, but even the highest average remained below 4.

The rankings determined by the groups classified based on the *accounting stand-ards applied in 2017* differed significantly in three cases. Based on the ranking, credit institutions that had previously applied IFRS learned about the provision of IFRS 9 through information received from their parent companies and from the reading of the IFRS 9 standard itself, and rarely or never used specialist literature. In contrast, for those that previously applied Hungarian Accounting Standards, training courses, specialist literature and the IFRS 9 standard represented the primary sources of information, with which they presumably made up for the lack of information from a parent company.

Third-party consultant/advisor

The surveys show that in certain phases of the IFRS transition project the companies needed to be able to rely on outside professional support, so in the questionnaire we also investigated how many of the credit institutions made use of this opportunity. All the credit institutions in our sample, without exceptions, made use of assistance from an external consultant or advisor; that is, the actual practice exceeded our expectations formed on the basis of the earlier studies.

GAP analysis

Based on the responses, most of the banks conducted an impact study with respect to the accounting regulations and IT system, while 40 percent of them also analysed the impact on taxation issues, operating processes and controls. This was in line with our expectations, since the IFRS 9 standard brought considerable changes in the regulation of financial instruments, for which an accounting impact study was of course essential. Besides this, the "innovations" of IFRS 9 (for example, the effective interest method in the case of those who previously applied Hungarian Accounting Standards) required considerable IT developments, so it was also important for the credit institutions to assess the IT impacts and the impact on internal controls.

Compliance with deadlines

Two thirds of the credit institutions in the survey; that is, 10 banks, had already launched their IFRS 9 transition projects in 2016, and five of these completed them successfully within the planned timescale of 12-24 months. In contrast, one bank – in the group of large banks – significantly underestimated the transition project, completing it within 24 months instead of the planned 6-12 months. This bank had only prepared a GAP analysis in respect of the accounting rules, and therefore it had presumably significantly underestimated the length of the project because it did not conduct a comprehensive impact study, which supports the finding of the PwC survey that the effectiveness of implementation of the transition.

sition is largely dependent on the time invested in preparing the impact study. *(Kökény, 2017).* A further four banks had not yet completed the transition project at the time of the survey, while only one bank in the survey had received a one-year extension of the deadline for introducing IFRS. Besides this, of the credit institutions that launched their transition projects in 2017, four implemented the transition within 12-24 months; this also shows that, in comparison to the situation as at the launch of the project, they still had ongoing tasks remaining in 2018.

Overall, 60 percent of the credit institutions in the sample; that is, 9 credit institutions, did not succeeded in completing their projects for transition to the IFRS 9 standard by 1 January 2018.

It is not clear from the responses, however, what scale of tasks were carried over to the year 2018 at those credit institutions that had not yet completed their transition projects. Further research is needed, or interviews could be conducted, to reveal whether only a few relatively minor tasks remained for the year in which IFRS 9 takes effect, or whether the situation is worse than this and essential functions are missing.

4.2.2 Challenges

In order to learn about the challenges related to introduction of the IFRS 9 standard, in the questionnaire we evaluated the respondents' experiences with regard to three aspects:

- general challenges;
- accounting challenges;
- it challenges.

It can be assumed that credit institutions for which 2018 represented both the adoption of IFRS and introduction of the IFRS 9 standard found the adoption of the new standard to be a greater challenge than those who had prepared their individual financial statements in accordance with IFRS prior to the transition. To test this assumption, we also examined the received responses based on the grouping by standards applied in the year 2017.

General challenges

The respondents assessed, on the scale of 1 to 5, the extent to which they were affected by the challenges that we listed. Based on the responses, the three biggest general challenges were the immaturity of the IT system, the large information requirement (mandatory reports) and the shortage of time. Besides these, the respondents also considered the immaturity of domestic regulation, the lack of experience and the shortage of suitably trained IFRS specialists to be greater than average problems. The absence of a GAP analysis represented the smallest challenge, which is unsurprising given that 13 of the banks in the sample certainly prepared a GAP analysis, while a "don't know" answer was received from two banks. However, interestingly, underestimation of the length of the transition project was not rated as a major problem, although based on the responses 60 percent of the credit institutions were unable to complete their projects by the entry into force of the IFRS 9 standard.

Earlier, we made the assumption that *credit institutions that applied Hungarian Accounting Standards in 2017* would judge the challenges to be considerably larger, because they need to familiarise themselves not only with the new features of the IFRS 9 standard, including the changes in classification, impairment and hedge accounting, but also the basic logic of IFRS (for example: the effective interest method, fair value). The result of the survey really does show that those who previously applied HAS have a higher rating to the challenges, but the difference was significantly smaller than expected. For both groups, the immaturity of the IT system represented the greatest challenge, albeit in differing extents. The credit institutions that previously used HAS were presumably not even prepared for the basic IFRS calculations (for example the effective interest methodology, fair value), so for them the development and implementation of these functions represented a greater challenge. In contrast, for those already applying IFRS in 2017 the improvement and extension of existing functions, as well as the changes related to impairment and hedge accounting, can be assumed to pose a major challenge.

A striking difference in the ranking determined in each group can be observed in the responses given regarding the immaturity of regulation. While in 2017 the credit institutions already using IFRS judge the immaturity of the regulation – that is, the IFRS 9 standard – to be one of the greatest challenges; this challenge was downgraded to 5th place by the banks that previously applied HAS. However, there is no significant divergence in the averages; so therefore, overall, it represented a major problem for everyone. The difference in the ranking can presumably be attributed to the fact that the lack of experience and skills was a greater factor for the users of HAS, so it is likely that they saw the immaturity of the regulation as a lesser problem. Besides this, the shortage of time also presented a major challenge for those who previously used HAS: This group typically consists of small banks, so presumably with their lower headcount they were less capable of spreading the workload.

Besides analysing the accounting standards applied in 2017, we also examined what the credit institutions' *compliance with deadlines* had an effect on the responses. Unsurprisingly, the credit institutions that had not completed the transition projects in time for the entry into force of the IFRS 9 standard gave the challenges a higher rating, with a significant difference showing with respect to the absence of a GAP analysis, lack of experience and the underestimation of the length of the transition project. Based on the responses, it is likely that these credit institutions did not perform a comprehensive GAP analysis, and consequently they underestimated the length of the transition project, which ultimately led to their inability to comply with the set deadlines.

Accounting challenges

The introduction of the IFRS 9 standard fundamentally altered the method of classifying financial instruments and, for those switching from Hungarian Accounting Standards, the mode of their valuation; it also brought considerable changes to the impairment model and hedge accounting. In order to determine which area of accounting represented the greatest challenge for the credit institutions in the sample, an assessment of the accounting challenges featured as a separate question in the questionnaire.

Based on the average of these ratings, the three greatest challenges were determining impairment, the SPPI test and the issues related to taxation. This is consistent with the results of our secondary research, where Deloitte's observations also showed that the classification of financial instruments and the impairment methodology pose difficulties for the companies. (*Veszprémi et al., 2018*) The obtained results also concord with the findings of the Big 4 survey, that the harmonisation of taxation laws with IFRS is another key aspect. (*Bartha et al., 2014*) Besides this, the treatment of subsidised transactions also represented an above average challenge for the respondents. Based on the responses, the estimation of costs and future cash flow items also presents a difficulty, because the business has to estimate the expected cash flows in advance, at the start of the transaction. The respondents regarded hedge accounting as the smallest challenge, which may be due partly to the simpler rules of IFRS 9 in comparison to the IAS 39 standard, and partly to the fact that two thirds of the credit institutions already applied hedge accounting in some manner prior to the transition.

For credit institutions that applied IFRS in 2017, impairment represented the greatest challenge, being given a rating of 5 by all the accounting professionals without exception. In contrast to this, the credit institutions that previously applied HAS judged impairment to be a lesser challenge, in terms of both its ranking and its rating, which is presumably due to the fact that 75 percent of this latter group are small banks that previously only used the standardised approach for calculation of the capital requirement, so even after the transition they probably developed simpler impairment models based on the cost-to-benefit principle. The respondents were also divided in their opinions on the issue of subsidised transactions. While the credit institutions that had previously applied IFRS considered

these to be the second largest challenge, those that used HAS placed the handling of subsidised transactions last in the ranking. In contrast, for the former users of HAS the greatest challenge was taxation-related issues, since for them 2018 was given over to both the adoption of IFRS and introduction of the IFRS 9 standard at the same time, which may have pushed the problem of how to handle special transactions into the background.

IT challenges

Besides the accounting challenges, the introduction of IFRS 9 brought the need for considerable IT developments at credit institutions, so in the questionnaire we separately evaluated how much of the data necessary for IFRS 9 is produced in the IT system, and what degree of difficulty each of the developments caused for the respondents.

Based on the responses, unsurprisingly, the greatest IT challenge was the development of regulatory reports, as in KPMG's experience the introduction of IFRS can affect up to approximately 80-100 reports at a given credit institution (*Veit*, 2018), and based on the estimates of the respondents some 51–75 percent of these are produced in an IT system. In addition to this, the generation of the data necessary for the introduction of IFRS 9 also resulted in substantial developments in the area of fair value, while hedge accounting also takes last place when it comes to IT challenges.

There was reason to assume that credit institutions previously applying Hungarian Accounting Standards would give a higher rating to the IT challenges, because the basic IFRS calculations were unfamiliar to them, so we also examined the responses based on the grouping by *accounting standards applied in 2017*.

Overall, the specialists at credit institutions that applied Hungarian Accounting Standards in the year 2017 gave IT challenges a significantly higher rating than those who applied IFRS, which is in line with our earlier assumptions. For the latter group, impairment, fair-market valuation and the automation of generation of regulatory reports represented the greatest challenge, while for the specialists at credit institutions that previously applied Hungarian Accounting Standards, besides regulatory reports and hedge accounting, the calculation of amortised cost, which represents the basic valuation, were also introduced. It comes as no surprise that the implementation of the amortised cost calculation in the IT system represented a greater challenge for credit institutions that previously applied HAS, because for them the effective interest method was new in professional terms as well.

4.2.3 Benefits and drawbacks

In the questionnaire-based survey we revealed whether the credit institutions' specialists, who deal with IFRS, and specifically with the IFRS 9 transition project, on a day-to-day basis, view the introduction of IFRS 9 as beneficial or disadvantageous.

The accounting standards applied at the level of individual financial statements in 2017 had no effect on the results, so here we only analyse the benefits and drawbacks in overall terms.

Benefits

The respondents rated the benefits listed in the questionnaire on a scale of 1 to 5, and the results of this are shown in the following table:

Table 5 Rating of benefits

	Average/Rating
Accounting more in line with business objectives	2.83
More flexible reclassification	2.61
More favourable income position	2.32
Reduction in administrative burdens (no more need for Hungarian accounting data)	2.25
More favourable tax burden	2.11
Lower time requirement for compiling IFRS financial statements	1.68
Total	2.31

Note: 5 = "great benefit", 1 = "no benefit". *Source:* Author.

Based on the table, it is immediately striking that the average rating of the benefits is only 2.31, which seems decidedly low in comparison to the results of previous surveys. By way of example, not even the reduction in the administrative burden was regarded as a great benefit, while the expectations were that the elimination of parallel bookkeeping would result in a substantial reduction in administrative burdens. The reason for this is presumably that the generation of certain Hungarian data continues to be necessary, for example for the purpose of settling with customers in the case of loans

The respondents regarded the "greatest benefit" – albeit with only a 2.83 average rating – as being the better alignment of accounting with business objectives. This is not surprising if we consider the business model necessary for the classification of financial instruments, or the lifting of the 80-125 percent rule on hedge accounting, which demonstrate that the aim of the IFRS 9 standard was to bring the accounting settlement of financial instruments into line with business and risk-management objectives.

Drawbacks

Besides the benefits, the drawbacks of introducing the IFRS 9 standard were also rated, as summarised in the following table:

Table 6 Rating of drawbacks

	Average/Rating
High one-off transition costs	4.08
Greater time requirement for compilation of IFRS financial statements	3.57
Different interpretation of profitability	3.36
Change in composition of portfolio	3.14
Less favourable tax burden	3.12
Less favourable income position	2.74
Hungarian accounting data continues to be needed	2.70
Total	3.28

Note: 5 = "highly beneficial", 1 = "not beneficial". *Source:* author

The table shows that the average rating of the drawbacks was 3.28, which significantly exceeds the average for the benefits, thereby supporting the proposition that in the first year the credit institutions mainly had a negative assessment of the tasks associated with the transition. The greatest drawback proved to be the high one-off costs related to the introduction of IFRS 9, which is in line with the results of the secondary research. Besides this, the respondents viewed the higher time requirement for the compilation of the IFRS financial statements as a major challenge, which is not surprising as IFRS-based financial statements require far more detailed notes, which are likely to be more difficult for accounting specialists to prepare in the first few years (*Rakó*, 2018). Respondents also judged the differing interpretation of profitability to be a greater than average challenge, as with the introduction of IFRS the valuation at fair value leads to greater variability of profit, which must also make it necessary for the credit institutions to restructure their incentive systems (Bodor et al., 2017). Finally, taxation issues were also regarded by the respondents as more of a drawback, presumably due to the variability of profit, although the legislation had essentially set out to ensure that the introduction of IFRS does not cause significant changes from a taxation perspective (*Lipták*, 2018).

5. CONCLUSIONS

In our study, we set out to assess the experiences of specialists at credit institutions in relation to the IFRS – Financial Instruments standard, to which end we conducted a questionnaire-based survey.

In the course of the research we sought to answer the question of how successful the credit institutions' specialists considered the IFRS 9 transition project to have been, what challenges the implementation of the new standard represented for them, and what benefits and drawbacks they attribute to the transition. Interestingly, 60 percent of the credit institutions participating in the survey had not succeeded in completing their transition project by 1 January 2018, but further research is needed to assess the scale of the tasks that have carried over to 2018, and whether they are capable of preparing the reports for the MNB in spite of the ongoing tasks. With regard to most of the questions, we observed significant differences between the responses, depending on whether or not the respondent's bank had prepared IFRS individual financial statements prior to the transition. The former group always judged the challenges to be smaller, and the ranking of these challenges was also different.

For participants in the survey, the immaturity of the IT system presented the greatest challenge. We can assume that the IT systems of credit institutions that had previously not prepared either IFRS financial statements or an IFRS parentcompany reporting package were not even prepared for the basic IFRS calculations (for example, the effective interest methodology, fair value), and therefore for them the development and implementation of these functions may have posed a major problem for them. In contrast, for those who previously used IFRS the enhancement and expansion of the existing functions, and the changes related to the impairment model and hedge accounting, may have represented a big challenge. We also observed differences between the two groups' answers with regard to the accounting challenges, both in terms of the ranking and the average ratings given. For credit institutions that used IFRS in 2017, impairment represented the greatest challenge, with all accounting specialists without exception giving this aspect a rating of 5. In contrast, the credit institutions that had previously used HAS judged impairment to be a much lesser challenge in terms of both its ranking and its rating. Besides this, credit institutions that previously used IFRS considered the treatment of subsidised transactions to be the second largest challenge, but among those that used HAS the treatment of subsidised transactions comes last in the ranking. In contrast, those that previously used HAS found taxationrelated issues to be the greatest challenge, as for them the year 2018 entailed both the adoption of IFRS and introduction of the IFRS 9 standard together, which may have pushed the problem of dealing with special transactions into the background.

Finally, the result of the evaluation, on a scale of 1 to 5, of the benefits and drawbacks listed by us, did not confirm the expected advantages of the introduction of IFRS and IFRS 9, because overall the respondents gave the benefits a lower rating than the drawbacks. Based on this, we concluded that the year 2018 is representing a "learning curve" for the credit institutions, because during this period the implementation of the new rules posed a challenge for the participants in the survey; and consequently, for the time being, the drawbacks of introducing the IFRS 9 standard have more weight for the respondents. In a few years, when the credit institutions have gathered sufficient experience, it may be interesting to conduct another survey to assess whether the specialists' opinions regarding the transition to IFRS 9 have changed with the benefit of hindsight.

APPENDIX

Annex 1

Questionnaire

Basic Data: *Compulsory field

- 1. Please state which credit institution you work at: *
- 2. Please select the field that you work in: *

Accounting
Regulatory reporting
Back office
Risk management
Front office
Project management
IT
Other:

Questions

- 1. In which year will/did you switch to using IFRS 9?
 - 2017

2018

- We haven't switched yet
- Don't know
- 2. Did/Will you switch from IAS 39 or from Hungarian Accounting Standards?
 -] IAS 39
 - Hungarian Accounting Standards
 - Don't know
- 3. Before the transition do/did you prepare IFRS financial statements or reports with a similar content, alongside the HAS financial statements?
 - Yes, an IFRS reporting package at the parent company's request
 - No
 - Don't know
 - Other:

4. Before the transition, how do/did you produce the data for the IFRS reporting package?

With separate, individual IFRS data
Through the aggregate conversion of Hungarian accounting date, us-
ing estimates
Don't know
We do/did not prepare an IFRS reporting package
Other:

- 5. After the transition, how do/will you produce the data for the IFRS financial statements?
 - With separate, individual IFRS data
 - Through the conversion of Hungarian accounting data with individual subledgers
 - Through the aggregated conversion of Hungarian accounting data, using estimates
 - Don't know
 - Other: _____
- Please rate, on a scale of 1 to 5, how often you used the following sources of information to learn about the requirements of IFRS 9: (1 I never used them, 5 I often used them)

	1	2	3	4	5	Don't know
Reading the IFRS 9 standard						
Training courses						
Conferences						
Information from the parent company						
Journals						
Newsletters						
Specialist literature						

7. In the course of the IFRS 9 transition project, are you using/did you use an external consultant/advisor?

] No

] Don't know

- 8. Please indicate which areas the GAP analysis covered at the beginning of the IFRS 9 transition project: (you may select more than one answer)
 - Accounting regulation
 - IT systems
 - Operating processes, controls
 - Taxation-related issues
 - We did not prepare a GAP analysis
 - Don't know
 - Other: _____
- 9. In which year die you launch the IFRS 9 transition project?
 - Before 2016
 - In 2016
 - 🗌 In 2017
 - In 2018
 - We haven't launched it yet
 - Don't know
- How much time did you estimate was needed for implementation of the IFRS 9 transition project?
 - Less than 6 months
 - □ 6–12 months
 - □ 12–24 months
 - More than 24 months
 - Don't know
- 11. How long did it take to implement the IFRS 9 transition project?
 - Less than 6 months
 - 6–12 months
 - □ 12–24 months
 - More than 24 months
 - Project is not yet finished, but we will be able to meet the planned deadline
 - Project is not yet finished, and we are unable to meet the planned deadline
 - Don't know

 Please rate, on a scale of 1 to 5, the challenges and problems of the transition to IFRS 9: (1 – did/does not present a challenge, 5 – presents/presented a major challenge)

	1	2	3	4	5	Don't know
Lack of a GAP analysis						
Underestimating of the length of the transition project						
Shortage of time on top of day-to-day tasks						
Lack of a project manager						
Shortage of trained IFRS specialists						
Lack of experience						
Immaturity of the IT system						
Immaturity of regulation						
High information requirement (regulatory reporting)						

13. Are/Were there any other challenges or problems associated with the transition to IFRS 9? If yes, please specify:

Other.	
Other:	

14. Before the transition to IFRS 9, do/did you apply the fair value method?

	Yes
\square	No

-] Don't know
- 15. Before the transition to IFRS 9, do/did you apply hedge accounting?
 -] Yes
 -] No

- Don't know
- 16. After the transition to IFRS 9, do/will you apply hedge accounting?
 - Yes
 -] No
 -] Don't know

 Please rate, on a scale of 1 to 5, the accounting challenges of the transition to IFRS 9: (1 – did/does not present a challenge, 5 – presents/presented a major challenge)

	1	2	3	4	5	Don't know
SPPI test						
Evaluation of the business model						
Calculation of amortised cost						
Estimation of costs and future cash flow items						
Fair value						
Determination of impairment						
Hedge accounting						
Handling of subsidised transactions (e.g.: HIRS)						
Taxation-related issues						

18. Are/Were there any other accounting challenges or problems associated with the transition to IFRS 9? If yes, please specify:

Other:

19. Please estimate, on a scale of 1 to 5, what proportion of the tasks below are/ will be implemented using an IT system:

	0%	1– 25%	51– 75%	100%	Don't know
Classification of financial instruments					
Calculation or amortised cost					
Calculation of fair value					
Calculation of impairment					
Hedge accounting					
Handling of subsidised transactions (e.g.: HIRS)					
Automatic booking of financial instruments					
Preparation of regulatory reports					

20. Please rate, on a scale of 1 to 5, the IT challenges of the transition to IFRS 9: (1 – did/does not present a challenge, 5 – presents/presented a major challenge)

	1	2	3	4	5	Don't know
Classification of financial instruments						
Calculation of amortised cost						
Calculation of fair value						
Calculation of impairment						
Hedge accounting						
Handling of subsidised transactions (e.g.: HIRS)						
Automatic booking of financial instruments						
Preparation of regulatory reports						

- 21. Are/Were there any other IT challenges or problems associated with the transition to IFRS 9? If yes, please specify:
- 22. Please rate, on a scale of 1 to 5, the drawbacks of the transition to IFRS 9: (1 not a drawback, 5 major drawback)

	1	2	3	4	5	Don't know
Higher time requirement for compiling IFRS financial statements						
Hungarian accounting data still needed						
High one-off costs of the transition						
Less favourable tax burden						
Les favourable income position						
Different interpretation of profitability						
Change in composition of the portfolio						

23. Are/were there any other drawbacks of the transition to IFRS 9? If yes, please specify:

0.1		
Other:		

24. Please rate, on a scale of 1 to 5, the benefits of the transition to IFRS 9: (1 – not beneficial, 5 – highly beneficial)

	1	2	3	4	5	Don't know
Lower time requirement for preparation of IFRS statements						
Reduction in administrative burdens (Hungarian accounting data no longer needed)						
Accounting procedures more aligned with business objectives						
More flexible reclassification						
More favourable tax burden						
More favourable income position						

25. Are/Were there any other benefits of the transition to IFRS 9? If yes, please specify:



26. Please rate, on a scale of 1 to 5, which main departments took/are taking part in the joint effort to implement the transition project: (1 – isn't participating / did not participate in the project, 5 – is participating/participated fully in the project)

	1	2	3	4	5	Don't know
Accounting						
Regulatory reporting						
Controlling						
Back Office						
Risk management						
Front Office						
Project management						
IT						

REFERENCES

- BARTHA ZSUZSANNA BALÁZS GÁBOR BOROS JUDIT MOLNÁR GÁBOR (2014): The Path to IFRS [Úton az IFRS felé]. https://www.pwc.com/hu/hu/szolgaltatasok/ifrs/uton_az_ifrs_fele.pdf (downloaded at 20.11.2018).
- BARTHA ZSUZSANNA WILLIAMS, M. HEVESI MÓNIKA (2015): The Use of IFRS in Hungary: A summary of the results of the survey [Az IFRS hazai alkalmazása. Összefoglaló a felmérés eredményeiről]. https://www.ey.com/Publication/vwLUAssets/IFRS_SURVEY_HUN_ JAV_0619/\$FILE/ifrs_HUN_JAV_06_19.pdf (downloaded at 20.11.2018).
- BODOR KORNÉL VESZPRÉMI ISTVÁN MOLNÁR GÁBOR HELYBÉLY JUDIT FÖLDVÁRI ROLAND – ÁDÁM ENDRE (2017): Summary Report on the Results of the 2017 IFRS Survey [Összefoglaló jelentés a 2017. évi IFRS-felmérés eredményeiről]. https://www2.deloitte.com/content/dam/Deloitte/hu/Documents/audit/hu-audit-IFRS-jelentes-2017.pdf (downloaded at 20.11.2018).
- GULYÁS ÉVA (2017): The Transition to IFRS Individual Financial Statements at Financial Institutions [IFRS-ek szerinti egyedi beszámolóra való áttérés a pénzügyi intézményeknél]. SZAK-ma 59(3), 27–29.
- HUZSVAI LÁSZLÓ VINCZE SZILVIA (2012): SPSS Book [SPSS-könyv]. Seneca Books (h. n.), http:// seneca-books.hu/doc/spsskonyv.pdf (downloaded at 01.11.2018).
- IBM (2016): The Fisher Exact test for an RxC table is the Fisher-Freeman-Halton Test. http://www-01. ibm.com/support/docview.wss?uid=swg21479647 (downloaded at2018.10.12.).
- Кöкény Gábor (2017): The IFRS Transition How Companies See it Now [IFRS-átállás Ahogy jelenleg a vállalkozások látják]. SZAK-ma 59(3), 25–26.
- LIPTÁK VIRÁG (2018): Corporate Tax Under IFRS [Az IFRS-ek szerinti társasági adózás]. SZAK-ma 60(9), 13–15.
- MAJOROS PÁL (2011): Advice, Tips and Tricks, not Just for Dissertation Writers: The Basics of Research Methodology [Tanácsok, tippek, trükkök nem csak szakdolgozatíróknak avagy a kutatásmódszertan alapjai]. Budapest: Perfekt.
- Mészáros László (2015): The Government has Decided on the Use of IFRS for Individual Financial Reporting Purposes [A kormány döntött az IFRS-ek egyedi beszámolási célokra történő alkalmazásáról]. SZAK-ma 57(6), 276–278.
- MNB (2017): 5th Golden Book [V. Aranykönyv]. https://www.mnb.hu/felugyelet/idosorok/v-aranykonyv (downloaded at 12.10.2018).
- RAKÓ ÁGNES (2018): The Transition to IFRS Requires a Change of Approach. Interview with Ágnes Rakó [Szemléletváltást igényel az IFRS-ekre történő áttérés. Interjú Rakó Ágnessel]. SZAK-ma 60(9), 8–9.
- SPSSABC (2018a): One Sample t-test [Egymintás T-próba]. https://spssabc.hu/ketvaltozos-elemzes/ egymintas-t-proba/ (downloaded at 18.10.2018).
- SPSSABC (2018b): Fisher test [Fisher-teszt]. https://spssabc.hu/ketvaltozos-elemzes/fisher-egzakt-teszt/, (downloaded at 12.10.2018).
- SPSSABC (2018c): Application of the Chi Square Test in SPSS [Khí-négyzet próba jelentése és alkalmazása az SPSS-ben]. https://spssabc.hu/ketvaltozos-elemzes/khi-negyzet-proba/ (downloaded at 01.11.2018).
- VAJAY JULIANNA (2015): International Harmonisation of Accounting from the 1970s to the Present Day [A számvitel nemzetközi harmonizációja az 1970-es évektől napjainkig]. *Gazdaság és Társadalom* 7, Special Issue 88–98, https://doi.org/10.21637/GT.2015.00.07.
- VEIT ADRIENN (2018): Icing on the IFRS Cake Change in mandatory reporting to the MNB [Hab az IFRS tortán – Változások az MNB felé történő kötelező adatszolgáltatásban]. http://blog.kpmg. hu/2018/01/hab-az-ifrs-tortan-valtozasok-az-mnb-fele-torteno-kotelezo-adatszolgaltatasban/ (downloaded at 16.11.2018).
- VESZPRÉMI ISTVÁN MOLNÁR GÁBOR HELYBÉLY JUDIT JENEI MÓNIKA ÁDÁM ENDRE (2018): Summary Report on the Results of the 2018 IFRS Survey [Összefoglaló jelentés a 2018. évi IFRS felmérés eredményeiről]. https://www2.deloitte.com/hu/hu/pages/audit/articles/ifrs-felmeres. html (downloaded at 20.11.2018).