

# **Amendments of the requirements of own funds and the adequacy of the Hungarian banks in recent years**

*Füstös Hajnalka*<sup>1</sup>

ABSTRACT: According to the prudential operation of banks and investment companies liquidity and solvency have to be continuously maintained. These institutions always have to own required capital, which can be used as additional reserves over the provision in case of an accidental damage for further demands. Own funds are for this. Calculation and elements of it and the minimum level of the elements are severely defined by the Hungarian laws based on the directions of European Union and they are mandatory for banks and investment companies. The objective of this paper is to review the changes of the requirements of own funds from the publish of the first Basel regulation until now, furthermore to analyze how the banks in Hungary accomplished and are accomplishing the requirements of the own funds and how the capital strength has been changed in recent years.

KEYWORDS: own funds, Basel regulations, CRR, capital regulation, Tier 1  
JEL code: F55, F63, G01

## **Introduction**

The role of the own funds in the regulation of banks have been increasingly intensified and appreciated from the first release of the Basel regulation and mainly from the beginning of the financial crisis 2008.

In the beginning, the own funds were not defined as one of the requirements of the prudential operation of the banks. Firstly restrictions of entering the market were defined by international laws and requirements of mandatory reserves

---

<sup>1</sup> Füstös Hajnalka, Soproni Egyetem Széchenyi István Gazdálkodás és Szervezéstudományi Doktori Iskola, fustos.hajnalka@gmail.com

and restrictions of credit and investments were specified until the end of years 1980. The bank failures in USA and in Germany in the years of 1970 were the first signs, which warned the regulators the necessity of provide common rules in order to prevent bank failures but at least to be able to indicate the presence of the possible reasons of it (Kobrak, 2014).

According to the History of the Basel Committee (2017) Basel Committee on Banking Supervision (BCBS) was established in 1975 in order to create an integrated internationally used regulation system, which provide requirements for banks and these minimum requirements are implemented in the own legal system of the applying countries, furthermore directives are applied. Applicable regulations contain several elements regarding capital, e.g. own funds, capital ratio, reserves, limits of large exposures, management of the trading book, supervision of own funds requirements on consolidated basis (Hpt.,2013). Due to space limit the objective of this paper is only the own fund. Own funds have outstanding importance because the most important restrictions are in connection with the own funds.

## **Content of own funds and its presence in laws**

The first Basel regulation, International Convergence of Measurement and Capital Standards, Basel I, was published in 1988 in order to protect against the unexpected losses and to limit the risk taking. Over the years the importance of these two items have been changed. At the beginning there was greater emphasis on the restriction of the risk taking. The regulation defined 8 percent capital ratio and specified the content of Tier 1 capital and Tier 2 capital. One of the aims of the own funds is to ensure coverage for unexpected losses came from large exposures. The more the own funds of the bank the more capable to bear the possibly occurring losses.

Nevertheless Basel I was criticized lot and was overruled several times (Füsstös, 2016, pp.93-94). Basel standards had inflexible regulations and focusing on own funds was not enough to provide appropriate responses for those problems, which caused bank crisis and bank failures until then i.e. currency and interest rate speculations without applicable control or frauds. Further changes of Basel I was required, to complete quantitatively and qualitatively the own funds and to defined the market risk, operational risk and other risks beyond the credit risk specified earlier.

There are two categories of own funds according to Basel I. These are Tier 1 (core capital) and Tier 2 (supplementary elements). This strict qualitative regulation defined that Tier 1 can contain only registered capital, capital reserve,

earnings, general reserve and balance sheet reserve and Tier 2 can contain evaluation reserve and subordinated loan capital. Tier 2 was not allowed to exceed Tier 1 and the minimum rate of the capital ratio was 8 percent.

In 1996 there was another amendment (Overview of the amendment to the capital according to incorporate market risks 1996), which allowed to use a third level capital. This was a short-term subordinated loan capital. It was hardly applied by banks and Basel III terminated the possibility of using it (Basel III, 2011).

Banks and investment companies started to use more and more hybrid capital items as the part of the own funds. These items possess features also of the capital and the loan i.e. convertible bonds. As a result of this Basel Committee released a statement in 1998 (Instruments eligible for inclusion in Tier 1 capital, 1998), allowing hybrid capital items at most until 15% as a part of Tier 1 capital. The next significant amendment of the regulation of BCBS was in 2006, when Basel II was published. The remarkable amendments regarding definition and calculation of own funds was in 2011, when Basel III was released as response to the world economic crisis, which is the basis of CRD IV and CRR directives.

## **Regulation of own funds in European Union and in Hungary**

Basel Committee provides directives for international developed banks and these directives are released by European Union (EU) as mandatory decrees for the member states of EU in order to implement them in their legal system. Directives in connection with capital requirements and own funds based on Basel I were released at first in 1989 in EU. In Hungary regulation of own funds was implemented in financial institution law in 1991 and this regulation was taken over into credit institutions act (Tajti, 2011, p. 502).

Regulations were come together in one document on level of European Union, this document is the 'Directive 2000/12/EC of the European Parliament and of the council of 20 March 2000 relating to the taking up and pursuit of the business of credit institutions'.

Directive of CRD as the implementation of Basel II was released in EU in 2006, which introduced more detailed requirements than the earlier was regarding the hybrid capital elements and integrated on EU level the regulation of own funds and large exposures.

As a response to the impacts of the economic crisis 2008, EU released the Directive 2009/111/EC, which increased the severity of regulation of own funds and

mostly including the term of the acceptability of the hybrid capital elements were more severed. Further increase of the severity was released by Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC (CRD IV) and Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (CRR) published in 2014, which are presented in more detail in the next chapter.

## **Regulation of own funds by CRD IV and CRR**

Elements of own funds are defined in the second part of the Directive 575/2013/EC and annex 5 of Credit Institution Acts (Hpt., 1996) describes the structure of it, shown in *table 1*. Own funds are the total amount of Tier 1 capital and Tier 2 capital. Tier 1 capital contains Common Equity Tier 1 capital and Additional Tier 1 capital. Common Equity Tier 1 capital contains capital instruments issued by the company, share premium, retained earnings, accumulated other comprehensive income, other reserves and funds for general banking risk. These elements can be only those capital elements, which are available without restraint and instantly for the institution to cover risks and losses when they emerged. Directive regulates items and events which have to be deducted from the Common Equity Tier 1 capital. These are for instance losses of the current year and deferred tax assets depend on the future profit. The other part of the Tier 1 capital is the Additional Tier 1 capital. Capital instruments and connecting share premium and the relevant deductions of Additional Tier 1 capital are regulated by the laws. The other significant part of the own funds is the Tier 2 capital. Tier 1 capital always need to be more than the Tier 2 capital. Tier 1 capital are available without restraint for the institutions and the Tier 2 capital are limited involved to financing of the operation.

<b>ELEMENTS OF OWN FUNDS</b>	
<b>TIER 1 CAPITAL</b>	
I. Common Equity Tier 1 capital	
	Capital instruments
	Share premium
	Retained earnings
	Accumulated other comprehensive income
	Other reserves
	Funds for general banking risk
	Deductions from Common Equity Tier 1 items
II. Additional Tier 1 capital	
	Capital instruments
	Share premium
	Deductions from Additional Tier 1 items
<b>TIER 2 CAPITAL</b>	
	Capital instruments and subordinated loans
	Share premium
	General credit risk adjustments
	Deductions from Tier 2 items

*Table 1: Elements of own funds*

*Source: own construction*

Capital requirements of credit institutions are regulated by CRD (Capital Requirement Directive), Directives 2006/48/EC and 2006/49/EC. After the several modification of CRD, CRD IV and CRR are applicable from 1st of January 2014, these directives were implemented in legal system of the member states of EU. Credit Institution Act includes these directives in Hungary. These directives regulate not only the capital requirements, but contain several other rules in connection with the operation of the credit institutions.

CRD IV is one of the responses to impacts of economic crisis 2008. Before the crisis the aim of the regulations was to encourage credit institutions to take increasing risk, for instance acceptance of the hybrid capital items, and the goal of CRD IV is the opposite of previous regulations, the severity of the capital regulation and the own funds have been more emphasized. Capital elements of

own funds have to meet three main requirements: lasting availability (they need to be used for a long time without expiration date), flexible payment (determination of obligatory dividend or interest payment in advance is not allowed, as it was in the past regarding some hybrid elements). The third requirement is the definition of the loss making ability, because the capital element has to be able to bear the losses not only during the continuous operation, but also in case of a possible liquidation.

One example of the quality improvements of EU regulations is that decrees are more important than these were previously beside the directions and these decrees are applicable directly in the member states of EU thus there are less chance to take into consideration the national specificities when they are implemented into the legal systems of the member states. Quantitative change is the number of pages of the directions, which were only some pages in the past and now those are hundreds.

Before the regulation of CRR the regulation of own funds concerned the structure of it, but now increased percentages have been defined as qualitative changes beside quantitative changes. Criteria of elements can be evaluated as Common Equity Tier 1 capital and Additional Tier 1 capital have been severed, which means qualitative changes. Furthermore the deduction rules have been severed and the controlling of the calculation with new elements by the supervision also increased significantly.

## **Calculation of the own funds**

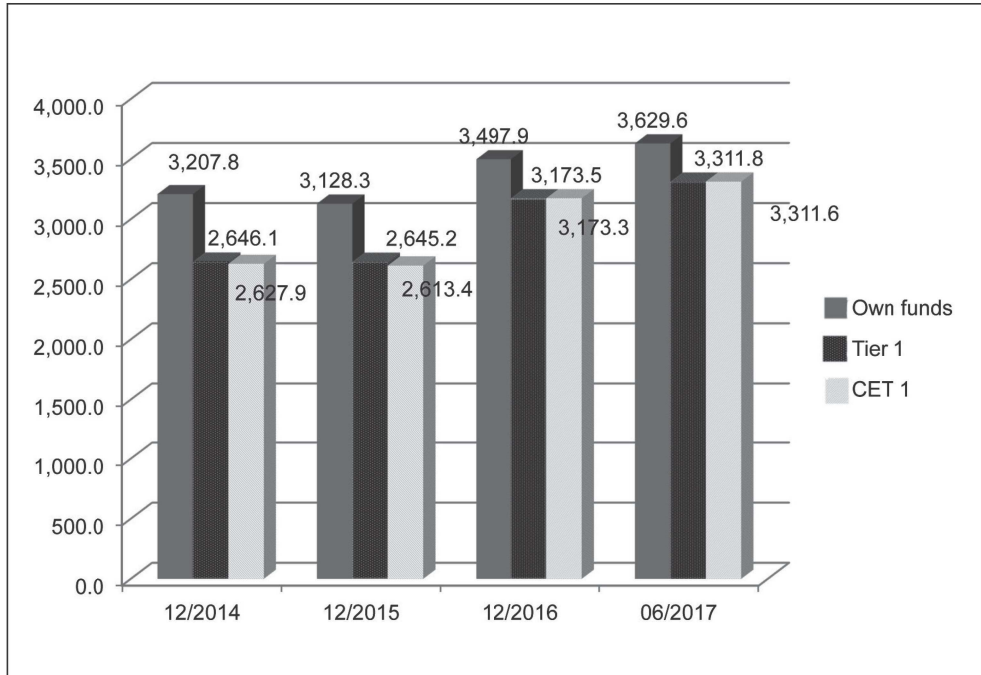
Laws contain the minimum requirement of 8 percent capital ratio henceforward, but there are further severities, these are the 4.5 percent Common Equity Tier 1 capital ratio and 6 percent Tier 1 capital ratio as requirements. Furthermore the whole requirement system is completed with the supervision excess capital requirements, which are specified by the microprudential supervision and the system of capital buffers defined by the macroprudential supervision.

The target of the tightening regulation is the safe operation of the credit institutions of the EU with appropriate capital adequacy and to be able to manage a potential another financial crisis without assistance by the member states.

Since entry into force of CRR in 2014 credit institutions continuously have to change capital elements of the own funds, which cannot be used anymore according to the new regulation (MNB 10/2014. IV.3.). They can withdraw the incorrect hybrid elements to optimize the capital stock until 2019.

We can see data of own funds of credit institutions in Hungary from 2014 until end of first half year of 2017 in Figure 1. Investigating data we can see that capital

adequacy and the ratio of acceptable elements of own funds of the credit institutions in Hungary were remarkably good in the observed period. Significant part of the own funds (more than 80 percent) is Tier 1 capital and this ratio continuously increased in this term. Further fact that ratio of Common Equity Tier 1 capital of Tier 1 capital is outstandingly high and in the last two years in the observed period it was 100 percent.



**Figure 1: Own funds of credit institutions in Hungary (billion HUF) 2014-2017**

Source: Own construction based on data of time series, MNB

## Summary

Regulation of the capital requirements of credit institutions and investment firms need to be revised and modified regularly due to constant changes of the operating conditions and economic environment and financial crisis. We have seen before the increase of severity of capital requirements year after year and due to economic crisis and the own funds as the objective of this paper was examined. Regulation of own funds has been amended several times on EU level and the requirements of the calculation was tightened in every case. EU directive regarding own funds firstly was implemented in 1991 in Hungary in financial institution laws. Amendments in EU directives have been followed by the Hungarian laws.

According to the Basel III, CRD IV and CRR, released as responses to the economic crisis 2008, credit institutions have to decrease ration of the hybrid items of own funds and the convenient of it was examined based on data of Figure 1 stated that the credit institutions in Hungary met the requirements and their own funds have become more marked.

## Bibliography

- A Bizottság jelentése az Európai Parlamentnek és a Tanácsnak a figyelembe vehető tőke fogalom meghatározása megfelelőségének az 575/2013/EU rendelet 517. cikke szerinti felülvizsgálatáról, <https://ec.europa.eu/transparency/regdoc/rep/1/2016/HU/1-2016-21-HU-F1-1.PDF> Downloaded on 8 October 2017
- A Bizottság jelentése a Tanácsnak és az Európai Parlamentnek a 2006/48/EK és a 2006/49/EK irányelvnek a gazdasági ciklusra gyakorolt hatásairól, <http://eur-lex.europa.eu/legal-content/HU/TXT/PDF/?uri=CELEX:52010DC0327&from=HU> Downloaded on 8 October 2017
- Az Európai Parlament és a Tanács 2000/12/EK irányelve (2000. március 20.) a hitelintézetek tevékenységének megkezdéséről és folytatásáról
- Basel III: A global regulatory framework for more resilient banks and banking systems, <http://www.bis.org/publ/bcbs189.pdf>, BCBS (2011) Downloaded on 3 September 2017
- Directive 2009/111/EC of the European Parliament and of the Council of 16 September 2009 amending Directives 2006/48/EC, 2006/49/EC and 2007/64/EC as regards banks affiliated to central institutions, certain own funds items, large exposures, supervisory arrangements, and crisis management
- Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of

- credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC (CRD IV)
- Füstös, Hajnalka (2016): A Bázeli ajánlások és a CRD módosításai, valamint hatásuk a hazai hitelintézeti szektor tőke megfelelési mutatójára és szavatoló tőkéjére, *Gazdaság és Társadalom*, Budapest, 2016/2
- History of the Basel Committee, BCBS <http://www.bis.org/bcbs/history.htm> Downloaded on 12 October 2017
- Hpt.(1996)
- Hpt.(2013)
- Instruments eligible for inclusion in Tier 1 capital, 27 October 1998, <https://www.bis.org/press/p981027.htm> Downloaded on 7 October 2017
- Kobrak, Christopher (2014): From Basel to Bailouts: Forty Years of International Attempts to Bolster Bank Safety [http://www.labex-refi.com/wp-content/uploads/2013/04/Working\\_paper\\_FromBaselto-Bailouts\\_Troege\\_2014.pdf](http://www.labex-refi.com/wp-content/uploads/2013/04/Working_paper_FromBaselto-Bailouts_Troege_2014.pdf) Downloaded on 10 October 2017
- MNB (10/2014. IV.3.): A Magyar Nemzeti Bank elnökének 10/2014. (IV.3.) MNB rendelete a tőkekövetelményről, a valós értéken értékelt nem realizált nyereségről és veszteségről, az ezekhez kapcsolódó levonásokról és a tőkeinstrumentsokhoz kapcsolódó szerzett jogokról (MNB 10/2014. IV.3.)
- Overview of the amendment to the capital accord to incorporate market risks, Basel Committee on Banking Supervision, January 1996, <https://www.bis.org/publ/bcbs23.pdf> Downloaded on 7 October 2017
- Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (CRR)
- Tajti, Zsuzsanna (2011): A bázeli ajánlások és a tőke megfelelési direktíva (CRD) formálódása, *Hitelintézeti Szemle* 2011/5.