University of Szeged Doctoral School of Economics

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Evolvement of Financial Supervision in Hungary

Impossibility Trilemmas in theHistory of Hungarian Supervision –

PhD Dissertation
Theses

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Szeged 2019

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1. INTRODUCTION

1.1. Research Justification

The role and importance of financial supervision have been appraised recently due to the global economic crisis of 2008. In connection with the crisis, the demand for modifying the supervisory frameworks and proposals for amending the supervisory methodologies have surfaced. The debates at various professional forums have not come to an end, and even at present, several publications and lectures deal with practical issues of supervision and regulation both on a domestic and on an international level (Duffie 2017; Armour et al. 2017; Ligeti 2017). In order to assess these issues properly, it is very important to know the background of the evolvement of our supervisory system and the professional debates, opinions and proposals regarding the organisation of supervision.

The dissertation exceeds the economic historical aspects, since mapping the lessons and actual connection points of the history of supervision is very important from current practical aspects of financial supervision. The effectiveness of the financial supervision is in close connection with the qualification of supervisory professionals, as *Elemér Hantos*, Chairman of the National Association of Financial Institutions stated "men, not measures" (Hantos 1916:82). As in 1929, inspectors were already being trained at a university level in Hungary (in connection with auditing as well), this topic deserves a distinguished attention currently as well. As for the "upbringing" of expert supervisors and examiners, Miksa Havas, a teacher at the Academy of Commerce in Pest (established in 1857) expressed at the beginning of the new century, "we should ensure the education of experts to avoid having to import them from abroad" (Havas 1901:215). Looking at foreign examples, it can be stated that inspector training was already in place in 1913 in Switzerland. The Governing Council authorized the organisation of professional courses at the University of Basel and the Business Academy of St. Gallen, but special subjects and seminars concerning inspector training were also part of the programmes in England, Germany and Austria as well (Lengyel 1917:250).

1.2. Describing the Research, Time Periods

Our dissertation demonstrates the evolvement and establishment of the Hungarian financial supervision from the second half of XVIII. century (supervisory functions during the reign of *Maria Theresa*, the operation of the Hungarian Royal Governor's Council) until the end of the Second World War, together with the introduction of the first Three-Year Plans (1947), and then with the end of the centrally planned economy. We present the evolvement of the

supervisory activity from the beginning of the political regime transition until 2013, when the integration of the financial supervisory authority to the central bank took place. We intended to pay special attention to the introduction of different professional standpoints, debates, and discrepant opinions regarding the supervision's organisation. This was due to the fact that the shaping of historical approach, the more accurate understanding of current tendencies, and adapting these to the current circumstances could all contribute to the increasing efficiency of the supervisory activity.

2. AIMS OF THE RESEARCH

The dissertation has multiple aims. On one hand, the study aims at demonstrating and assessing the paradigm changes that could be experienced in the history of supervision ("Anglo-Saxon" approach based on the internal auditor and the institution's "conscience" (Éber 1911:801; Vittas 1992:21); "classical" model essentially characterised by detailed on-site examinations, covering as many areas as possible; "modern", risk-based supervision related to the own funds), and the supervisory principles and aspects (proportionality, proactivity, equal treatment, prevention, preserving market competition, "four-eyes" principle, independence). The dissertation also intends to identify and analyse the possible shifts in principles and draw the relevant conclusions from them. The presence of various supervisory paradigms should not lead one to conclude that these were unsuccessful, similarly to the fact that the alteration of the individual streams of economic philosophy over time does not suggest their inappropriate approach to the external and internal economic environments. It merely shows the constant flux of economic conditions, circumstances and processes. Therefore, there is a need for modifying response capacities. The dissertation aims to present – in light of the before-mentioned applied paradigms – what professional debates occurred in the initial period of the organisation's supervision. It also aims at uncovering the same in the 1990s, in the period of "reorganisation" of the institutionalised financial supervision. A careful choice from the supervisory paradigms has a major importance, since the supervisory "regime" in place affects not only the supervised institutions (e. g. due to the determined capital requirement, the required institutional practice, the assessment of the proper content of by-laws), but taking into consideration certain set of conditions, correlation can also be shown between the type of supervisory paradigms and the capital requirement (Buck – Schliephake 2013:4596).

On the other hand, the aim of the dissertation is to present the history of supervisory institutions. In this framework, the aim of the study is to outline the operational framework of

supervisory pre-bodies, the description of supervisory paradigms dominant in every pre-bodies (showing the accidental shifts between the paradigms), and the exposition of positive and negative characteristics, processes in the operation of supervisory institutions. From this aspect, the circumstances of the establishment of the first, integrated supervisory "top-level organisation", the Central Corporation of Banking Companies (Pénzintézeti Központ) in 1916 deserves special attention. In order to present the previously emerged professional opinions, not only the depth of supervision, but even the necessity of it was questioned among professionals (Jakabb et al. 1941:33–40).

Thirdly, the aim of the dissertation is to demonstrate the impossible trinities, namely the Hungarian materialisation of the Mundell-type monetary trilemma and the Schoenmaker-type financial trilemma and its consequences. Furthermore, it is also an additional aim to present the trade-off effects appearing in this case. The Mundell-type trilemma consists of the triangle of fixed exchange rates—free flow of capital—independent monetary policy, while the Schoenmaker-type trilemma is composed of the financial stability—financial integration—independent national supervisory policy (Schoenmaker 2011:1–2; Kellermann et al. 2013:191). Trade-off effects appear in two separate ways. On one hand, regarding each trilemma, if the economic policy decides to pursue any two of these, it will necessarily suppress the third. On the other hand, the elements of the trilemmas have an impact on each other.

We examine how the above-mentioned double trilemma manifested in specific time periods, i. e. when and which factor(s) were prioritized over others, and what sort of shifts can be observed in each period. Obviously, when facing the two trilemmas, economic policy should opt for solutions that consider both short-term and long-term goals and offer such optimal (acceptable) compromises between the individual goals that can be achieved over the short run while contributing to the sustainability of the economy's operation in the long run. The factors of the trilemmas are not independent from one another; for example, in the case of the Mundell-type monetary trilemma, monetary policy affects financial stability, because maintaining inflation at low levels for a sustained period of time contributes to minimising the instability of the macroeconomy. However, financial stability also influences the monetary policy, as a stable macroeconomy contributes to a more efficient implementation of monetary policy (Benyovszki – Nagy, 2013:24–25).

3. STRUCTURE OF THE DISSERTATION AND METHODOLOGY

Introducing the supervisory paradigms, i. e. the "Anglo-Saxon", "classical" and "modern" directions – the idea of distinction between the paradigms followed the Hungarian history of supervision – the dissertation outlines the viewpoints, the pros and cons, specific proposals, and the initiatives regarding the establishment of supervisory organisations. These factors altogether led to the evolvement of financial supervision. Outlining the above mentioned issues, the dissertation endeavours to answer which early supervisory organizations and supervisory pre-bodies have been operating since the XVIII. century regarding the banks, savings banks and cooperatives. It is also the aim of the dissertation to find out what caused their semi-failure in operation from a supervisory perspective, and what the historic background of the Pénzintézeti Központ's establishment was, detailing the emergence of each supervisory paradigm in different organisations, the professional debates related to the paradigms, and the demonstration of the varied supervisory principles and approaches. We intend to focus on the elaboration of the Pénzintézeti Központ, the uneven road that led to its formation, and the advantages and negative experiences regarding its activity.

The period of the First World War and the Hungarian Soviet Republic had a major effect on the financial institutions and on the financial supervision as well. Therefore, the supervisory practice and role of the Pénzintézeti Központ had changed, and several reform proposals emerged regarding its operation. The Great Depression – in respect of mainly the examined risk areas, applied supervisory tools, and the intensity of the performed examinations – also brought changes into the supervision. Several institutions were founded during these years that have to be taken into account from a supervisory point of view. During the period of the centrally planned economy, which was introduced after the Second World War, the supervision was primarily subordinated to the central plan's aims. When the financial institutions had become stateowned, financial supervision was practically ceased to exist for decades.

We tried to demonstrate that in the history of supervision preceding 1947, a change in paradigms has occurred, while the supervision shifted from the self-assessment-based "Anglo-Saxon" type towards the "material" or "classical" approach, which supported the outward supervision. When the market economy has reappeared again since the 1990s, a certain level of recurrence can be identified with the "Anglo-Saxon"-type regimes, besides the dominance of the "modern" paradigm's characteristics. In connection with the newly established supervisory organisations in the 1990s, we focus on the primary areas hereunder: viewpoints, opinions concerning the recomposition of supervisory organisations' activity, and the demonstration of their

exact operation, while emphasizing the progressive expansion of integrational tendencies and the macroprudential approach. In the dissertation, we present the financial and monetary trilemma elements' dominance and the occurred trade-off effects, while distinguishing between the effects that occurred inside or among the trilemmas.

The methodology applied is a secondary-type, and it is based on working with relevant sources, their assessment and demonstration from a supervision history point of view; following a partly retrospective and a partly forward-looking approach. The type of the research is descriptive and explanatory in nature, arising from the economic history's nature. The dissertation uses primarily qualitative tools, nevertheless, it outlines quantitative results through for instance the presentation of the number of financial institutions' liquidations and the certain role, and efficiency of supervision (e. g. the number of on-site examinations performed in a given year). We endeavour to present contemporary economic conditions, the situation of the financial institution and supervisory system primarily on the basis of the relevant opinions of experts from the given era. In order to conduct a proper and accurate demonstration and assessment, current bibliography was considered. Furthermore, in connection with the monetary and financial tri-lemmas (resulting from its novelty), modern sources were also taken into account.

4. HYPOTHESES – THESES

The following table summarizes the formulated hypotheses, applied methodologies, and the theses of the dissertation:

Table 1. Formulated hypotheses and theses of the dissertation with the applied methodology

Hypotheses	Applied Methodology	Theses
The validity of the supervisory principles, approaches are "timeless"	Critical analyses of the relevant literature	Considering the relevant period of the supervision's history, princi- ples and approaches were con- stantly present, which are used in the current supervisory environ- ment as well.
2. Shifts of paradigm occurred in the history of supervision	Comparative examination of the relevant literature from an economic historical point of view	In the operation of the supervisory pre-bodies, characteristics of the "Anglo-Saxion" model were dominant, while in case of the Pénzintézeti Központ, "classical" principles can be found. However, after the 1990s, a certain level of recurrence of the "Anglo-Saxion" principles emerged, in parallel with the emergence of the "modern" tendency.
3. The shift of paradigm occurred due to external (outside the banking system) and internal (inside the banking system) causes	Critical analyses of the relevant literature	Regarding the external factors, failures of financial institutions due to economic crises, international supervisory tendencies, deficiencies in the domestic legislation; while as for the internal factors, failures of financial institutions due to not prudent enough operation, increasing demand for supervision and growth in the number and concentration of financial institutions can be mentioned.
4. The validity of the supervisory principles, approaches are ,,timeless"	Critical analyses of the relevant literature	Considering the relevant period of the supervision's history, princi- ples and approaches were con- stantly present, which are used in the current supervisory environ- ment as well.

Source: own editing

Discussion of the hypotheses and theses in the Table:

Hypotheses

1. Regarding the institutional history of supervision, a number of principles and approaches adapted in the current financial supervision emerged in the operation of several supervisory pre-bodies.

- 2. Shifts of paradigm can be observed in the operation of supervisory bodies, resulting in the shift from the "Anglo-Saxion" paradigm towards the "classical"-type, without completely identifying with the characteristics of the latter. After the 1990s, certain level of recurrence can be identified in case of the "Anglo-Saxon" principles, besides the prevalence of the "modern" tendencies that came to surface in the meantime.
- 3. The shift in the paradigm during the history of supervision occurred due to external independent from financial institutions and internal operational causes.
- 4. Characteristics of the Mundell-type monetary trilemma and the Schoenmaker-type financial trilemma can be observed also in case of the Hungarian financial supervision. Trade-off effect can be experienced inside both trilemmas, which means inside the trilemmas, strengthening or bringing forward any two options will necessarily ceteris paribus suppress the third. In the history of supervision, trade-off effects occurred not only inside each trilemma, but also between them.

Theses

1. More than one and a half decades before the foundation of the Pénzintézeti Központ, in 1899, a preventive approach appeared, as a result of which, in addition to the repressive legal acts and rules, fundamentally forward-looking and preventive measures also received prominence: "...no flagrant cases can serve as the basis for violent, inconsiderate interventions [...], we need preventive rather than repressive rules. We should not eradicate the whole garden, only the weeds." (Sugár 1899:407) Pál Berényi, teacher of the Academy of Trade in Sopron, also promoted this approach in a review published in 1904, in which he declared that taking preventive measures was absolutely necessary in order to ensure that there were no circumstances in the operations of financial institutions that would suggest corrupt practices or negligence (Berényi 1904:396).

In 1911, Elemér Hantos determined the essence of proactive financial oversight, which remains valid today: "The duty of a real and ideal inspection is to prevent and strangle the causes of malfeasance at their birth rather than to detect them after the event, while its most valuable element is the instruction provided by experienced and skilled experts of the centre to the institution's officers, board of directors and supervisory board." (Hantos 1916:19) The emergence of the proactive financial supervision was very important, because the confidence towards the financial institutions was occasionally excessive (and unreasonable in some cases) in this period, which was unfavourable to the

evolvement of the supervision and examination. The dominance of the proactivity was due to the recognition that confidence formerly achieved (e. g. by supporting social aims) by the financial institutions. On one hand, it can't be extended to all financial institutions, and the reasons resulted in the emergence of confidence. On the other hand, it no longer exists in each case (e. g. due to the intertwining of savings bank and bank functions).

From a regulatory point of view, proactivity appeared later in time, during the period of the next century (and in 1911, when Hantos composed the methodological essence of the proactivity) and it hasn't been assured yet, since the Commercial Code of 1875 prescribed permissive regulations regarding the foundation and operation of financial institutions excessively, resulting in a great number of financial institution actors in a sector that – in some cases – lacked even economic justification. That was the reason why among others, József Pranger, Chief Secretary of the Austro-Hungarian Bank, raised attention to the relevant risks. In his speech in 1912, he "vehemently demanded that the mushrooming of credit institutions be halted" (Domány 1926:433). In the same year, Lipót Horváth, banker, in order to complicate the establishment and decrease the number of new financial institutions, proposed that the Austro-Hungarian Bank should deny rediscounting with respect of the significant part of these institutions. From the aspect of hindering the further growth in the number of financial institutions, the Act XIV of 1916 on the Pénzintézeti Központ was a solution, which prohibited the establishment of new financial institutions with a share capital of less than 20 million koronas until 1 January 1919.

For the proper development of the financial market, the Act designated the contribution to the financial institutions' management and administration as one of its main duties, because "if it is possible, it should be based on equal principles and purposive management, furthermore, [...] proper principles should prevail in the institutions' management in accordance with their nature and the requirements of economics". Therefore, in the Act, the principles of "equal treatment" and "proportionality" were also present.

2. In 1892, based on the initiative of *István Tisza*, who later became Prime Minister, the Central Mortgage Bank of the Hungarian Savings Banks was established. One of its primary goals was to facilitate the access of provincial smallholders to loans, and it

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¹ Act XIV of 1916 on the Pénzintézeti Központ, 5. § (4) Section

liaised only with savings banks that agreed to the process that the Mortgage Bank reviews its entire business administration and balance sheet annually (Botos 2002:39). The review function of the Mortgage Bank was a transition between the "Anglo-Saxon" and the "classical" models, as it did not regard the approach of the "Anglo-Saxon" model – primarily based on self-assessment – adequate; however, it did not include the detailed examination covering all financial institutions seen in the "classical" model either.

The National Central Credit Union was established some years later in 1898, and it diverged from the "Anglo-Saxon" approach, representing a more assertive usage of supervisory powers and a higher level of supervisory interference. This was due to the fact that the law stipulated that should the Credit Union detect any measures in the activities of a supervisory board of a cooperative "within its ranks" which were against the law or statutes, or any negligence or fraud jeopardising the interests of the cooperative, the Credit Union should call a general meeting immediately. In such cases, it could also suspend the board of directors or its individual members until the general meeting was held, and it could take measures for temporary business management. In the activity of the National Association of Hungarian Financial Institutions, founded in 1903, the organisations were functioning mainly as representative bodies. At these institutions, the "Anglo-Saxon" characteristics prevailed due to the lack of external supervisory intervention. This was also underpinned by their representative role.

Nevertheless, in the operation of the Pénzintézeti Központ – mostly in its later years, and in parallel with the widening of examined financial institutions – the "classical" principles could be detected. In the early years of its operation, the scope of the examination was implemented in smaller financial institutions (whose share capital was less than 20 million koronas). These institutions requested it or obtained a loan from the Pénzintézeti Központ. It was recorded in the Deed of Foundation due to two different reasons. Firstly, it was recorded because conducting examinations in all the financial institutions would have required huge professional apparatus, which was not available. Secondly, at the beginning, the Pénzintézeti Központ had relatively weak interest assertion role. Therefore, the introduction of a general examination – due to the inducing power of banks and the political balance of power – was not a feasible option. In 1920, four years after the establishment of the Pénzintézeti Központ, as a first step of the reform concerning the legal regulation of its operation, the scope of examinations also

covered those members, whose share capital was below 40 million koronas. In order to strengthen the role of the Pénzintézeti Központ further and to widen the scope of examinations, from 1 January 1921, only members of the Pénzintézeti Központ were allowed to accept deposits and handle public funds. Furthermore, it contributed a great deal to conclude the merger with financial institutions (which included a merger in which one of the institutions fuses to another, and when both institutions cease their activity as a result of the fusion, a new institution is formed).²

Between 1916 and 1939, the operation of the Pénzintézeti Központ shifted from the early "Anglo-Saxon" principles (i. e. a greater emphasis was put on the importance of self-assessment, restrained revision capability, and the relatively weak ability for interest assertion) to the characteristics of the "classical" paradigm, due to the gradual widening of the examined institutions (until 1921, practically the complete financial institutions' sector belonged to its supervision; horizontal widening). Moreover, with the deepening scale effect of examinations (contribution to concluding mergers, liquidity aspects gaining a higher importance; vertical widening), these examinations – covering a continuously growing number of fields – increasingly materialized. In 1939, the existing capital limit on examinations had been abolished, and the member institutions were subject to mandatory annual reviews instead of it being only an optional annual examination.

In the 1990s, a certain level of recurrence can be identified in the "Anglo-Saxon"-type paradigms. On one hand, for the sound market development, temporarily adumbrate of the "classical" principles was necessary, since their application would have hindered the development of the financial institution system. On the other hand, the "modern" supervisory philosophy – partly preserving the "classical" principles – together with the internal capital adequacy assessment process was introduced in the Basel II. The demand for disclosure requirements also relies on the "Anglo-Saxon" approach, since introducing the above mentioned issue, it acknowledges the importance of the institution's self-assessment and the disciplinary power of the market. The latter was not part of the "Anglo-Saxon" regimes, nevertheless, considering its approach, it was closely related.

3. The shift of paradigm was fostered by the failures of the financial institutions, which occurred due to external factors, such as the New York stock exchange crash of 1873 or

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² Act XIII of 1926 on Amending Certain Stipulations of Act XXXVII of 1920 on the Pénzintézeti Központ, 1. § (4) Section

the Second Boer War (1899–1902). The resulting international paucity of money, and the spill-over effects that also affected Hungary, the flow of debentures deposited abroad back to Hungary, and the general outflow of foreign capital as a result of the economic paralysis of industrial and trading companies exerted a significant effect on the Hungarian financial institution sector, too. It was also considered an external factor for the financial institutions that the state didn't have a substantial and considerable impact on their operation (Halász 1890:768). The Trade Act of 1875 was not proactive enough and its excessively permissive regulations regarding the foundation and operation of financial institutions can be considered as a shortcoming in regulation. Thus, the resulting high number of financial institution actors, the unfavourable own fund or foreign fund ratio characteristic for financial institutions, and the maturity mismatch of assets and liabilities both contributed to the failure of financial institutions and to the shift in the paradigm concerning supervisory policy. Thus, in the second half of XIX. century, the majority of professionals' opinion that urged "self-assessment" in the first place (through internal audit and supervisory board) has been transformed, and the establishment of an institution was required that independently examines and practices external control. However, it needs to be mentioned that according to the expressed opinions, a few years after the establishment of the Pénzintézeti Központ, and due to its "anaemic nature", there was absolutely no need for its existence. The continuous expansion of its activity in the later years, and the gradual escalation of its examination scope indicates that the "Anglo-Saxon" principles were not deemed appropriate, but an implementation of a paradigm close to the "classical" approach was in favour.

Among the internal operational reasons, it has to be mentioned that the failure of the savings banks operating in Újvidék and founded in 1866, and another one operating in Kiscell established in 1869, was due to misappropriation and speculation. Additional example is the Construction and Land Loan Bank of Sopron that was established in 1872 and it failed to operate successfully in 1901. Even though it had already lost its share capital in 1883 as a result of stock exchange speculations, it operated for another 11 years, reporting considerable profits and paying correspondingly high dividends. In some cases, financial institutions entered into transactions, having only 10% of the necessary collateral (Horváth 1995:3). The substantial foreign capital inflow and an increased propensity towards entrepreneurship led to the establishment of numerous financial institutions. By 1901, there were already 987 banks and savings banks operating

in Hungary, increasing to 1,183 by 1905 (Müller et al. 2014:9). All of these factors – in parallel with the external causes – led to the recognition that the "Anglo-Saxon"-type paradigm didn't create a proper and prudent regulatory and supervisory environment for the financial institutions.

In the 1990s the paradigm-shift was basically induced by external causes. Due to the lack of market conditions at the early stage and the general capital shortage, the "Anglo-Saxon"-type supervision has become popular. After this period, the development of each markets, the appearance of complex products, the start of foreign capital inflow, the appearance of foreign institutions in a greater number, and the international tendencies, for instance the prominence of foreign best practices, international banking regulatory standards and risk assessment methods (CAMEL) led to the fact that the "classical" approach has been favoured.

4. Materialisation of the elements of Mundell-type monetary trilemma and the Schoenmaker-type financial trilemma: in Hungary, in the period of formulating the initial proposals and initiatives for the establishment of supervisory activity and establishing predecessor organisations, in the absence of a supervisory body, the independence of financial supervision was impertinent; independent financial supervision only materialised after the establishment of the Pénzintézeti Központ. With respect to the Monarchy, financial integration was in place, providing the Monarchy with access to the European money and capital markets. However, the inadequate level of financial stability was reflected in the country's low resilience to economic shocks. The elements of the monetary trilemma materialised differently, free capital movement was ensured throughout the period, the stability of the exchange rate, on the other hand, could only be attained effectively – on a temporary basis – with the adoption of the new currency system (the gold korona regime) in 1900. With respect to the relationship between the Monarchy and the rest of the world, although the independence of monetary policy was achieved before the turn of the century, it was impaired by the New York stock exchange crash; as regards Hungary, it could not be attained in this period owing to Austrian control (in the case of the Austrian National Bank) and joint control (in the case of the Austro-Hungarian Bank) over the interest rate policy.

In the years following World War I, the only element that was achieved of those of the financial trilemma was the independence of financial supervision. Financial integration was accomplished for a short period, faltering gold standard regimes led to the drying

up of foreign money markets. Looking at the individual elements of the monetary trilemma, we find that only the independence of monetary policy was ensured, as the rest of the world had no significant control over the definition of the central bank's base rate. At the same time, with the acceleration of the inflation rate, the stability of the national currency exhibited an increasingly deteriorating trend, and due to the adoption of restrictive measures (for instance the limitation on the circulation of foreign currencies), free capital movement could not be attained.

Throughout the years of consolidation under the Bethlen government, the independence of financial supervision was preserved. The discontinuation of the international auditing of the central budget was beneficial to financial integration, and although several circumstances pointed to the achievement of financial stability, the large number of financial institution liquidations and subsequently, the effect of the economic crisis betrayed that the existence of financial stability was only an illusion. In 1924, the national currency stabilised and the korona embarked on an upward trend. The free movement of capital was ensured by decree and is evidenced by the increasing number of foreign interests in Hungary. At the same time, owing to the Bank of England's right to influence the discount rate, the independence of Hungary's monetary policy was temporarily (until 1926) not in place.

During the economic crisis and even in subsequent years, the independence of financial supervision was ensured, and the partial resolution of financial institutions contributed to improving financial stability. As a result of the transfer moratorium, the credit-fixing agreements and the restrictions imposed on foreign exchange management, financial integration and free capital movement were not ensured. Despite the economic crisis, the stability of Hungary's currency was preserved throughout the period, as was the case with monetary policy independence: the interest rate was defined autonomously, free of external influence (Kovács – Varga 2018:124–126).

Through the period of the planned economy, financial supervision was impertinent, and due to the lack of financial intermediary system, its stability was to be questioned. Regarding the interpretation of the monetary policy in this period, we are also facing difficulties. However, external aspects haven't influenced the determination of the basic interest rate significantly. Stability of the currency was ensured at the early years of the planned economy. However, it showed deteriorative tendency in later decades, and after the 1980s, devaluation of the forint also commenced due to the management of the debt

crisis. Free flow of capital and financial integration – also in framework of the planned economy – could not materialise.

During and following the years of the political regime transition, financial supervision was considered independent until the global economic crisis in 2008. In that year, because of the recommendations made for Hungary by the ESRB (European Systemic Risk Board) – due to its acquittal nature – the independency of the supervision was affected. The free flow of capital materialised completely from 2001, with the total convertibility of the forint, while the financial integration appeared in 2004, with Hungary's accession to the EU. The bank failures that happened in the 1990s shed light to the lack of financial stability, although the stability seemed to have materialised later. The effects of the global economic crisis in 2008 showed its deceptive character, and the stability hadn't been fully accomplished by then. The independency of the monetary policy has remained ensured all along, regardless of the accession to various international organisations. However, the currency has not managed to become stable due to a significant inflation in the years of the political regime change, the unsteady and fluctuating exchange rates between 2002 and 2008, and the effects of the economic crisis. This has not changed in the following period either, as it could be seen based on the unsteady exchange rates in 2011 and 2012.

In view of how the individual elements of the financial and monetary trilemma were achieved (see Table 2) in specific periods, we may conclude that the common elements of the two trilemmas are financial integration and free capital movement: either both or neither of them was achieved in all of the periods under review. Regarding financial stability, parallel can be observed with the period of Bethlen consolidation and the millennium, the financial system appeared stable in both cases, nevertheless — due to the effects of the crises occurred later — instability of the financial system came into surface. Trade-offs within the trilemma occurred in the case of the monetary trilemma during the years of the Bethlen consolidation and in the period of the Great Depression: in the case of the former, the economic policy was forced to temporarily relinquish monetary policy independence for the sake of currency stabilisation, while in the case of the latter, the independence of monetary policy was ensured and free capital movement was abandoned. Trade-offs between the trilemmas occurred during the years of the Bethlen consolidation. In respect of the monetary trilemma, currency stability was ensured during these years, whereas the independence of monetary policy was temporarily suspended.

As regards the elements of the financial trilemma, policy failed to achieve financial stability but managed to ensure the independence of financial supervision. The instability of the financial system was revealed after the Bethlen consolidation with the spill-over of the Great Depression to Hungary and the economic crisis in 2008, and as the crisis deepened, maintaining the rest of the elements of the financial and monetary trilemma in itself posed challenges for the economic policy.

Table 2. Achievement of the individual elements of the financial and monetary trilemma between 1867 and 2013 in Hungary

	Elements of the financial trilemma			Elements of the monetary trilemma			
Periods	Independent financial supervision	Financial stability	Financial integration	Currency stability	Free flow of capital	Independent monetary policy	
1867-1899	*	-	X	-	X	Within the Monarchy	Outside of the Monar- chy
1900-1914	*	_	X	X	X	Within the Monarchy	Outside of the Monar- chy
1915-1924	X	_	_	_	_	X	
1925-1930	X	(X)	X	X	X	(X)	
1931-1945	X	(X)	_	X	_	X	
1946-1986	*	*	_	_	_	*	
1987-2000	X	_	_	_	_	X	
2001-2008	X	(X)	X	(X)	X	X	
2009-2013	(X)	(X)	X	_	X	X	

Source: Kovács-Varga 2018:115; own editing

^{*} The trilemma element was impertinent

X The trilemma element was achieved

⁽X) The trilemma element was achieved with limitations

⁻ The trilemma element was not achieved

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