The Concept of Financial Stability in Theory and Law*

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State intervention in the functioning of the economy is necessarily based on some public interests, which may serve as a reason for restrictive state action against the individual, or their freedoms and rights. In legislation, financial stability can be identified as a form of public interest, whereby the need to define the substance of the concept is expressed as an expectation towards the legislator, all the more so because it forms the basis of significant administrative intervention of the public authority type. The study analyses how the concept of financial stability appears in the literature, in legislation and in legal enforcement. Although the concept of financial stability is strongly reflected in the theoretical literature and even in legislation and legal enforcement, its substance is difficult to capture and has evolved constantly. In view of the above, the author offers a definition for the general legal concept of financial stability.

Journal of Economic Literature (JEL) codes: K1, K20

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1. Introduction

Economic and financial crises can trigger major social problems, as illustrated by the global financial crisis that erupted in 2007, which set in motion a significant wave of legislation in many states and in the European Union. The focus was on creating the necessary legal instruments to restore and maintain the stability of the financial system, while at the same time broadening the scope of state intervention. As regards the supervisory authorities, i.e. the public authorities exercising public authority control over the financial system, *one of the major achievements of crisis legislation was the expansion of the toolkit for macroprudential regulation and supervision*.

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Macroprudential policy is a sector of the economy and a set of administrative, systemic, comprehensive tools of intervention for the operation of the financial intermediary system; it can be understood *as the enforcement of the public interest* in terms of promoting and maintaining financial stability, averting threats, and, in part, managing any systemic risks that emerge. It follows that macroprudential policy is, first and foremost, a set of *ex ante* instruments, which is also characterised by primary responsibility in that its main focus is to prevent systemic risks from emerging or becoming harmful, in the interest of avoiding financial crises and mitigating losses to the real economy. However, in a period of imbalance in the financial intermediary system, i.e. *ex post*, its instruments are complementary to crisis management tools such as *resolution, lending of last resort, public rescue packages, deposit insurance and investor protection*. Thus, as sets of economic management tools, macroprudential policy and crisis management intervene in the operation of the economy when they "perceive" a threat to financial stability.

However, the decade of strong growth following the global financial crisis is over, and a number of risks can be identified that also are or could be a threat to the stability of the financial system. Such risks include the problems of high inflationary environment, the unforeseen economic consequences of the war in Ukraine, the effects of the COVID-19 pandemic, the risks involved in FinTech companies, or the steady emergence of cryptocurrencies. The mounting risks are already triggering events, such as in the case of the second largest bank failure in US history, that of Silicon Valley Bank. They underline the need for a potent, well-functioning system of administrative instruments to identify and manage the risks surrounding the financial intermediary system.

Striking the delicate balance between public and private interests is the task of the legal system. The most important expectation of a strong administrative system is that is should enforce the rule of law in public administration¹ and ensure that all members of society are protected by law. Describing and defining the substance of public interest that warrants state intervention, including financial stability, the subject of this study, is a means of enforcing the rule of law and ensuring legal protection, and at the same time, an expectation for the legislator (*Kukorelli 2020:27*). However, this expectation for the legislator can only be stated in recognition of the necessarily prominent role of regulatory bodies in the interpretation of the concept.

The aim of this study is to examine the concept of financial stability in theory and law. To this end, in four conceptual units, it provides an analysis of how the concept of financial stability appears, first, in the literature; second, in legislation; and third,

¹ The requirement of lawfully functioning public administration has become increasingly valued since the 19th century, and today it is an absolute prerequisite for the democratic rule of law (*Fábián 2021:51*).

in legal enforcement; finally, in the concluding part, in pursuit of a description of public interest that gives rise to public intervention, seeking to identify the common conceptual aspects appearing in the literature and in legislation as well as in the definitions used by regulatory bodies, a proposal is made for financial stability to be rethought and defined in substance.

2. Efforts to define the concept of financial stability in literature

Financial stability is one of the most "used" concepts in public policy and scientific reasoning, but its substance remains uncertain. The term emerged in the aftermath of the financial crises of the 1990s in technical and scientific discourse – chiefly concerning economics – within specialised financial institutions (*BIS 1986*) and beyond (*Crockett 2000; Das et al. 2004; Horváth et al. 2002; Mérő 2003; Lublóy 2004; Arner 2007*).

In terms of the concept and substance of financial stability, no professional or scientific consensus has been reached, and the concept has evolved constantly as a result of financial crises and also over time. The substance of the concept has also been influenced by the scientific and public policy debate on whether supervisory powers over the financial intermediary system are supposed to be placed in the central bank or in an independent administrative body (Oosterloo – de Haan 2004:257; Toniolo – White 2015:5)

However, the global economic crisis also transformed the instruments of state intervention in the financial intermediary system, in view of which, in order to define the concept of financial stability, a research group was set up within the Bank for International Settlements (BIS) in 2011, which provided a summary of the basic issues related to the concept in the Ingves report (BIS 2011). The report divides the definitions of financial stability into five groups. The first group includes concepts that define financial stability by describing its preconditions (Hunter et al. 2006:9). The second group includes those seeking to define financial stability from a negative perspective by defining financial instability (Mishkin 1997:62; Mishkin 1999:6; Allen 2005). The third group includes concepts that already seek to define financial stability in positive terms; in the case of this group, financial stability is basically described in terms of a smoothly functioning financial system (Duisenberg 2001). According to the concepts in the fourth group, financial stability can be grasped in terms of the robustness to shocks, the ability of the financial system to perform its main functions, such as intermediation, the execution of payment transactions, and the management of risks, even in times of stress (Padoa-Schioppa 2002; Phan et al. 2020). The fifth group is comprised of the concepts that appear in the legal practice of national and EU authorities and central banks as they exercise their powers to maintain financial stability. These concepts define financial stability in terms of the smooth functioning of the financial system and its robustness to shocks.²

In Hungarian literature, almost all of these forms of conceptualisation can be found. According to Nagy (2010:68), the stability of the financial system is a precondition for the normal functioning of the economy. Abel and Kobor (2009:33) argue that price stability is an important element of financial stability. Mérő highlights an important aspect among the components of financial stability, namely that if banks start to grow substantially on a massive scale, the role of the too-big-to-fail principle supporting financial stability will be reversed. In such cases, rather than supporting the stability of the financial system, it will contribute to its instability by imposing extremely high, sometimes unbearable, burdens on individual countries in the rescue of very large banks (Mérő 2013:55). Székely (2012:232) takes the position that the measurement and monitoring of systemic risks is key for financial stability. Holló uses the concept of financial stress to describe financial stability. In this approach, financial stress is understood in broad terms as a situation in which disruptions to the financial system affect the prices and flows of financial products in unexpected ways, which may potentially cause systemically important financial institutions to fail and completely destroy the ability of the financial system to allocate resources, resulting in a major downturn in the real economy (Holló 2013:256). A number of authors adopt and use the concept as developed by the Magyar Nemzeti Bank (the central bank of Hungary, MNB) (Magas 2011:211; Bethlendi – Vértesy 2020:33; Lentner 2018:6).

There is therefore no general consensus on the definition of financial stability in the literature. Attempts at a definition differ from one another in many ways, approaching conceptualisation from different perspectives, focusing on different elements of financial stability, seeking develop a concept from conceptual elements of unspecified substance. Nevertheless, several common elements can be identified to enable a definition and to develop the concept. *First*, in a significant part of the attempts to define the concept of financial stability, authors refer to the functions of the financial system, in particular the allocation of savings to investors, or the operation of the payment system in the economy. *Second*, a common element is the recognition that in addition to endogenous shocks, instability often develops as a result of unforeseen external shocks to the financial system. *Third*, a number of definitions explicitly acknowledge the potential negative impact of financial instability on the real economy (*Kálmán 2021:276–277*).

² For more details on conceptualisation in international literature, see Kálmán (2021).

3. Is financial stability defined in law?

As a result of the global economic crisis, the concept of financial stability, due to its flexibility and adaptability to specific situations, has become a reason for shaping public policy and introducing state intervention mechanisms. As a result of this process, reaching beyond the confines of science, financial stability *has become a legal concept* incorporated in legislation. As the concept took on a legal character, the need arose to define the exact boundaries of the concept and to explore its substance. Threatening financial stability in itself legitimises the use of official tools and state intervention in the relations of market participants. Determining the substance of the grounds for state intervention, including financial stability, is essential for ensuring that legislation is applied fairly and consistently, that public administration is subject to the rule of law, and that legal protection is guaranteed.

In view of the above, this study provides an analysis of how the concept of financial stability appears in international and EU legislation, as well as in the legislation of Member States and of certain countries that are of particular importance for financial legislation.

3.1. The concept of financial stability in international financial legislation

The most important thematic organisation for the international promotion of financial stability (*Pardavi 2022:171*) is the *Financial Stability Board* (FSB). The FSB continuously updates and monitors *key standards* that are of paramount importance for the sound and stable functioning of financial systems. These key standards are widely accepted as the minimum set of best practices that countries are encouraged to meet or exceed. Through the analysis of key standards, this study examines the definition of financial stability as it appears in the legal regulations.

According to the FSB Charter, the purpose of the FSB is to identify the vulnerabilities that threaten global financial stability, and its members are *committed* to maintaining financial stability (*FSB 2012*). In several provisions, the standard on the key attributes of resolution regimes specifies financial stability as an aspect to be taken into account in resolution (*FSB 2014*). Despite that, *no attempt is made in either the Charter or the standard to define the concept and substance of financial stability*.

The by-laws of the *International Organization of Securities Commissions* (IOSCO) contain no regulations of any kind in relation to financial stability (*IOSCO 1996*), nor does the most important standard developed by IOSCO that summarises the objectives and core principles of securities regulation (*IOSCO 2017a; IOSCO 2017b*).

The by-laws of the *International Association of Insurance Supervisors* (IAIS) (*IAIS 2018*) state that the purpose of the organisation is to contribute to global

financial stability,³ and that its task is to draw up recommendations, standards, guidelines and other documents related to financial stability, systemic risks and macroprudential supervision.⁴ The most important IAIS standard, which summarises the core principles for the insurance sector (*IAIS 2019*) also contains a number of provisions⁵ on official tasks related to the promotion of systemic financial stability. The standard of the *International Association of Deposit Insurers* (IADI) summarising the core principles for effective deposit insurance systems defines the contribution to financial stability as one of the public policy objectives of a deposit insurance system (*IADI 2014*). The *International Auditing and Assurance Standards Board* (IAASB), in its standard on international quality control, auditing, review, other assurance, and related services (*IAASB 2015*) identifies threats to financial stability. In its key standard, the *Islamic Financial Services Board* (IFSB) identifies a well-defined system of financial stability (public) policy-making as a prerequisite for effective banking supervision (*IFSB 2015*). *The concept of financial stability*, however, *is not defined in any of these regulations*.

The Basel Committee on Banking Supervision (BCBS) Charter (BCBS 2018), similar to that of the FSB, defines the purpose of the organisation as being to increase financial stability by strengthening regulation, supervision and banking operations.⁶ The Charter also stipulates that members of the BCBS are committed to promoting financial stability, and in particular, *global financial stability*.⁷ That said, the Charter also fails to specify the substance, meaning and key attributes of financial stability as the goal set out to be pursued by the BCBS. Developed by the BCBS, the standard on core principles for effective banking supervision (BCBS 2012) identifies a welldefined system of financial stability (public) policy-making as a prerequisite for effective banking supervision.⁸ An effective banking supervision regime clearly identifies the authorities that are responsible for the identification of systemic risk in the financial system by monitoring and analysing the market-related and other financial and economic factors that lead to its accumulation. The identification of systemic risks, which requires effective cooperation and communication between the authorities concerned, constitutes the basis for designing and implementing appropriate public policy and official measures.⁹

However, it is important to point out that the Financial Stability Framework was included in the prerequisites for effective banking supervision only in the 2012 revision of the Principles, driven by the increased prominence of the macroprudential aspect, but even then the standard stopped short of defining

³ See: IAIS 2018, Article 2(1)b).

⁴ See: *IAIS 2018*, Article 14(3)b).

⁵ See: IAIS 2019, Sections 1.2, 1.4.1, 24.0.2, 24.4.2 and 25.7.1

⁶ BCBS 2018, Section 1.

⁷ BCBS 2018, Section 5(a) and (g).

⁸ BCBS 2012, Section 47.

⁹ BCBS 2012, Section 49.

the concept. Mention should also be made of the standard specifying the basic principles of financial market infrastructure, which contains a number of provisions on the role of the infrastructure in financial stability without defining the latter concept.¹⁰ Developed by the BCBS, the *Basel III Recommendation*, at least indirectly, touches on the substance of the concept of financial stability. According to the Recommendation, the objective of the global reforms on capital and liquidity regulations is to improve the ability of the banking system to absorb shocks arising from financial and economic stress, regardless of their source, thus reducing the risk of the financial sector having a negative impact on the real economy due to the spillover effect. Despite the fact that the above wording can already serve as a guide in defining the concept of financial stability, as it allows conceptual elements such as increasing resilience to shocks and avoiding negative external effects on the real economy to be identified, it *does not qualify as an explicit and precise definition*. In addition to the above, it is important to point out that in view of its scope, Basel III is a specific recommendation, aimed exclusively at the regulation of the banking sector, and as such it cannot be considered sufficient for defining the concept of financial stability for the entire financial system.

The Articles of Agreement of the *International Monetary Fund* (IMF) state that a principal objective is the continuing development of the orderly underlying conditions that are necessary for financial and economic stability,¹¹ yet they do so without explaining the meaning of these concepts. Neither is the concept of financial stability defined in the key standards issued by the IMF to ensure the sound functioning of the financial system (*IMF 2017; IMF 2015; IMF 2000; IMF 1998; IMF 1996*). Similarly to the IOSCO, the agreement establishing the *World Bank* (WB) (*WB 1989*) and the standard setting out the principles for insolvency regimes (*WB 2011*), developed by the WB contain no provisions of any kind relating to the concept of financial stability.

Thus, the concept of financial stability appears in international financial regulation and standards, but none of the international documents attempts to define and map its conceptual elements. The regional and national levels of regulation for financial stability therefore need to be further explored.

3.2. The concept of financial stability in EU legislation

The Treaties of the European Union¹² contain only two references to financial stability. First, TFEU Article 127(5) states that the European System of Central Banks (ESCB) shall *contribute to the smooth conduct of policies pursued by the*

¹⁰ BIS 2012, Sections 1.15, 1.17 and 3.2.2

¹¹ *IMF 2016,* Article 4.

¹² The Treaty on European Union (TEU) and the Treaty on the Functioning of the European Union (TFEU). See the consolidated version of the Treaty on European Union and the Treaty on the Functioning of the European Union (2016/C 202/1).

competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system. Second, TFEU Article 136(3) stipulates that *Member States whose currency is the euro may establish a stability mechanism to be activated if indispensable to safeguard the stability of the euro area as a whole.* The Treaties therefore link the financial stability objective to the role of the ESCB in supporting the competent authorities and presume it constitutes the legal basis for the establishment of the European Stability Mechanism, but do so without offering a definition of the concept, which warrants an examination of secondary Union law.¹³

The regulation establishing the European Systemic Risk Board (ESRB) as the macroprudential warning system of the European Union¹⁴ does not *explicitly* define the concept of financial stability, but contains a number of references and guidelines regarding the components of its substance. The ESRB Regulation provides that financial stability is a precondition for the creation of jobs, credit and growth in the real economy.¹⁵ It states that the ESRB should contribute to ensuring financial stability and mitigate the negative effects on the internal market and the real economy.¹⁶ In addition, the ESRB should monitor and assess the risks to financial stability arising from the processes, which may have an impact at the sectoral level or at the level of the financial system as a whole, and contribute to the financial stability necessary for further financial integration of the internal market by monitoring systemic risks and issuing warnings and recommendations as necessary.¹⁷ The normative definition of financial stability in EU law can therefore be approached from the point of view of the concept of systemic risks. Systemic risk is defined as a risk of disruption in the financial system with the potential to have serious negative consequences for the internal market and the real economy.¹⁸ Similarly to Basel III, CRD IV/CRR¹⁹ contain a number of references to financial stability, setting it as the legal basis for prudential authorities to apply stricter standards compared to the general rules.²⁰

¹³ It is important to point out that the legal bases provided in primary EU law show that the importance of financial stability as a factor in the fulfilment of the central banks' price stability mandate was generally recognised even before the global economic crisis (*Zilioli 2020:143–145*).

¹⁴ Regulation (EU) No 1092/2010 of the European Parliament and of the Council of 24 November 2010 on European Union macro-prudential oversight of the financial system and establishing a European Systemic Risk Board (ESRB Regulation).

¹⁵ ESRB Regulation, Recital (1).

¹⁶ ESRB Regulation, Recital (10).

¹⁷ ESRB Regulation, Recitals (30)–(31). However, Article 2(c) of the ESRB Regulation defines the concept of systemic risk. For the purposes of the Regulation, systemic risk is a risk of disruption in the financial system with the potential to have serious negative consequences for the internal market and the real economy. All types of financial intermediaries, markets and infrastructure may be potentially systemically important to some degree.

¹⁸ ESRB Regulation, Article 2(c).

¹⁹ See 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); 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).

²⁰ See: CRR, Articles 124(2) and 164(5)

However, the concept of financial stability is not defined *expressis verbis* in any of these EU legal acts: the ESRB Regulation and CRD IV²¹ only define the concept of systemic risk, from which the concept, substance and characteristics of financial stability can be inferred indirectly.

The concept of financial stability is therefore known in EU legislation, but remains undefined. Nevertheless, several possible conceptual elements appear in the normative regulation. In the absence of a definition in EU legislation, it is necessary to examine the concept of financial stability in national legislation.

3.3 The concept of financial stability in national legislation

Given the similarity of the legal systems and the regulatory environment, this study examines only the regulations of the largest financial markets in the European Union, i.e. France, Germany and the Netherlands,²² touching upon the regulation of the United Kingdom, the largest (post-Brexit, non-EU) financial market in Europe and the fifth largest globally, and also reviewing the regulations of the United States and Hungary.

In *France*, in normative terms,²³ responsibility for the financial stability objective was conferred on the Banque de France (BDF) in 2013. Amended in 2013, the *Code monétaire et financier*²⁴ provides that BDF shares responsibility for the stability of the financial system with the newly created *Le Haut Conseil de stabilité financière*.²⁵ The *Le Haut Conseil de stabilité financière* exercises control over the financial system as a whole, in order to preserve the stability of the financial system and ensure its contribution to sustainable economic growth.²⁶ The financial stability objective was therefore introduced in the French regulation in 2013. However, as pointed out by BDF Governor *Christian Noyer (2014:8)*, in terms of its conceptual foundations, financial stability is extremely difficult to define and quantify, and as such it can be interpreted as a complex and multifaceted objective.

In Germany, responsibility for maintaining financial stability was conferred under the *Gesetz zur Überwachung der Finanzstabilität*²⁷ primarily on the *Deutsche Bundesbank* (DBB), providing that it should not compromise the DBB's

²¹ For the purposes of *CRD IV Article 3(1)(10)*, systemic risk is a risk of disruption in the financial system with the potential to have serious negative consequences for the financial system and the real economy.

²² According to WB statistics, the three Member States with the largest market capitalisations in the European Union are France (9th globally), Germany (10th) and the Netherlands (15th). Data used are available: https:// data.worldbank.org/indicator/CM.MKT.LCAP.CD?end=2020&most_recent_value_desc=true&start=1975 (30 November 2022).

²³ It is important to point out the tendency that the financial stability objective became regulated as a central bank or other official responsibility after the global economic crisis, although even previously most central banks also considered the analysis of financial stability to be of interest, in addition to price stability.

²⁴ See: Code monétaire et financier 1999, amended by LOI n° 2013-672 du 26 juillet 2013 de séparation et de régulation des activités bancaires.

²⁵ See: Code monétaire et financier 1999, Art. 141-5-1.

²⁶ See: *Code monétaire et financier 1999*, Art. 631-2-1.

²⁷ See: Finanzstabilitätsgesetz vom 28. November 2012 (BGBI. I S. 2369) 1. §.

accomplishment of price stability, its primary objective.²⁸ The Banking Act (*Gesetz über das Kreditwesen*²⁹) requires the federal supervisory authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*) to take into account the impact of its decisions on the stability of the domestic and EU financial system in carrying out its supervisory tasks. In this regard, the effect on financial stability appears as one of the criteria to be considered when taking supervisory decisions.³⁰ That said, the concept of financial stability is not defined in any of the acts cited.

As opposed to the central banks referred to above, in the Netherlands the promotion of the stability of the financial system is not an objective of the central bank (*De Nederlandsche Bank*), but rather only one of its tasks, the fulfilment of which should not jeopardise the primary objective of maintaining price stability.³¹ In addition to appearing in the regulation of the central bank, which also bears responsibility for monetary policy, the financial stability objective is also reflected in the Dutch supervisory regulation. The law on the supervision of the financial intermediary system (*Wet op het financiel toezicht*) provides that prudential supervision, which is carried out by the *Autoriteit Financiële Markten*, is to focus on the reliability of financial institutions and the stability of the financial system.³² On the other hand, the *Autoriteit Consument & Markt* is responsible for supervising the conduct of business and, partly in order to ensure the stability of the financial system, focuses on orderly and transparent financial market processes, proper relations between market counterparties and the prudent treatment of customers.³³ The concept of financial stability is not defined in any of these acts.

In the United Kingdom, which has the largest financial market in Europe, it was in the aftermath of the global economic crisis that financial stability as an objective to be achieved was introduced, in the form of normative regulation, into the set of objectives pursued by the Bank of England (BoE).³⁴ In 2009, the Banking Act³⁵ was adopted to amend the Bank of England Act,³⁶ providing that the BoE has the objective to contribute to the protection and strengthening of the stability of the financial system of the United Kingdom (UK).³⁷ This definition of an objective was amended in 2012 by the Financial Services Act,³⁸ whereby the BoE objective of contributing to the protection and strengthening of the stability of the UK's financial

²⁸ See: Gesetz über die Deutsche Bundesbank vom 22. Oktober 1992 (BGBI. I, S. 1782) 3. §.

²⁹ See: *Gesetz über das Kreditwesen*, 1998.

³⁰ See: Gesetz über das Kreditwesen, 1998, Article 6(4).

³¹ See: Bankwet 1998, Article 4(1)(c).

³² See: Wet op het financieel toezicht 2006. Art. 1:24.

³³ See: Wet op het financieel toezicht 2006. Art. 1:25.

³⁴ Responsibility for financial stability was previously shared between HM Treasury, the *Financial Services Authority* and the Bank of England.

³⁵ See: Banking Act 2009, Part 7.

³⁶ See: Bank of England Act 1998.

³⁷ In the original language: *Bank of England Act 1998,* Section 2A (1): An objective of the Bank shall be to contribute to protecting and enhancing the stability of the financial systems of the United Kingdom (the "Financial Stability Objective").

³⁸ See: Financial Services Act 2012, Part 1.

system was extended to include its *achievement*.³⁹ The objective of financial stability and at the same time responsibility has therefore been *explicitly* defined in the legislation. However, while providing a precise delineation of responsibilities, the Bank of England Act does not define the concept of financial stability, but, similarly to the ESRB regulation, it contains several references and guidelines regarding the components of its substance. The Bank of England Act provides, by way of a *task*, that the achievement of the financial stability objective primarily involves the identification and monitoring of systemic risks and measures to eliminate or reduce them, in order to protect and increase the resilience of the UK financial system.⁴⁰ In addition, the Bank of England Act defines systemic risk by stating that systemic risks include (a) risks arising from the *structural characteristics of the financial market*, such as risks arising from relations between financial institutions, (b) the *sharing* of systemic risks within the financial sector, and (c) *unsustainable* leverage, debt and credit growth.⁴¹

In the United States, in the aftermath of the global economic crisis, in 2010 the legislature adopted one of the most complete regulations in the history of the United States affecting the financial sector (*Székely 2012:232*), the *Dodd-Frank Act.*⁴² In its preamble, the Dodd-Frank Act states its objective as being "to promote the financial stability of the United States by improving accountability and transparency in the financial system, to end 'too big to fail', to protect the American taxpayer by ending bailouts, to protect consumers from abusive financial services practices, and for other purposes." The need for financial stability is therefore already highlighted in the statement of the objective of the Dodd-Frank Act, but, as in the case of European legislation, despite its numerous applications, its normative definition has not been carried out by the legislator.

Hungarian regulation is aligned with the above European legislation in that it does not define the concept of financial stability *expressis verbis*, but it differs in that many elements of the concept of financial stability appear in normative regulation. In particular, Act CXXXIX of 2013 on the Magyar Nemzeti Bank (MNB Act) mandates the MNB to elaborate macroprudential policy for the *stability of financial intermediary system as a whole*.⁴³ In that regard, the Act attaches a *dual objective to macroprudential policy*: first, to enhance the resilience of the financial intermediary system to economic growth. To achieve this dual objective,

³⁹ In the original language: Bank of England Act 1998, Section 2A (1): An objective of the Bank shall be to protect and enhance the stability of the financial system of the United Kingdom (the "Financial Stability Objective").

⁴⁰ See Bank of England Act 1998, Section 9C (2): (...) the Financial Stability Objective relates primarily to the identification of, monitoring of, and taking of action to remove or reduce, systemic risks with a view to protecting and enhancing the resilience of the UK financial system.

⁴¹ See Bank of England Act 1998, Section 9C (3).

⁴² See: Dodd-Frank Wall Street Reform and Consumer Protection Act, 2010.

⁴³ For more details, see: https://www.mnb.hu/en/financial-stability/macroprudential-policy

and within the limits specified in the MNB Act, the MNB identifies the business and economic risks threatening the system of financial intermediation as a whole, promotes the prevention of the development of *systemic risks* and the reduction or elimination of systemic risks which have evolved. Furthermore, in the event of disturbances to the credit market, it contributes to the balanced functioning of the system of intermediation in financing the economy by stimulating lending or – in the event of excessive credit outflow – by restraining lending.⁴⁴ As part of one ex ante pillar of achieving financial stability, in addition to microprudential policy the MNB Act requires the pursuit of a macroprudential policy, whose substance is defined as measures to increase the resilience of the financial intermediary system and to ensure the sustainable contribution of the financial intermediary system to economic growth.⁴⁵ The MNB Act does not define the concept of financial stability, but specifies certain substantive elements of the concept and presents them in the regulation as a condition giving grounds for state intervention.⁴⁶

4. The concept of financial stability in the practice of regulatory authorities

On the basis of the above, it can be established that international, European Union and Member State legislation all make use of the concept of financial stability, typically as a cause and purpose of state and administrative intervention in the operation of the financial intermediary system. Although legislation has developed and continues to develop major instruments of administrative intervention in the form of the macroprudential policy toolkit in order to maintain and restore financial stability, it has stopped short of defining the concept of financial stability as grounds for intervention, other than highlighting certain conceptual elements.

The absence of a normative conceptual definition of financial stability is attributable to the fact that financial stability is a complex and multifaceted concept, which may vary according to the objectives a given state is pursuing. The definition of financial stability in a legal instrument may limit its interpretation to a particular context and hamper the flexibility to manage changing financial risks. The financial system and risks are constantly evolving due to technological advances, economic changes and the emergence of new financial instruments. It is difficult for the legislator to develop a concept that, in addition to being subject to the rule of law, also provides the necessary interpretation dynamics for legal enforcement.

⁴⁴ MNB Act, Article 4(7)

⁴⁵ With reference to the introduction, it is appropriate to indicate that the *ex-ante* policies of financial stability are not exclusively responsible for the realisation of financial stability; they are necessarily complemented by *ex post* policies.

⁴⁶ See: MNB Act, Art. 32. (3)(b), Art. 33. (4), Art. 36, Art. 44. (4); also, on its website the MNB provides information on financial stability and what the concept entails: https://www.mnb.hu/web/en/financialstability

In the absence of a normative definition of financial stability, the regulatory authorities, i.e. macroprudential authorities and central banks, are free to add substance to the concept, and indeed they do. This study explores the regulatory practices followed by central banks in the same countries as for legislation, as well as by the European Central Bank (ECB).

The *ECB* made its first attempt to define the concept of financial stability in 2004. At the time, financial stability was defined as a condition in which the financial system is able to perform all its general tasks well and is expected to continue to do so for the foreseeable future (*EKB 2004:8*). Following a series of refinements and changes to the concept (*ECB 2006:7; ECB 2015:4; ECB 2016:4*), the ECB currently defines financial stability as a condition in which the financial system – which comprises financial intermediaries, markets and market infrastructures – is capable of withstanding shocks and unravelling financial imbalances. This mitigates the prospect of disruptions in the financial intermediation process that are severe enough to adversely impact real economic activity (*EKB 2018:4*).

The *Banque de France* understands the concept of financial stability as a complex term in itself (*Noyer 2014:8*). It is defined as a situation in which the various institutions of the financial system – the financial market, the payment and settlement system, the clearing system and the financial institutions – operate smoothly in such a way that all components of the system are fully resilient to possible shocks (*BDF 2007:3*).

Initially, the *Deutsche Bundesbank* construed financial stability as the smooth operation of the financial system (*DBB 2009:7*) and subsequently defined it in more detail as a property of the financial system whereby it can perform its key economic functions smoothly at all times, such as the effective distribution of financial resources and risks and ensuring the adequate functioning of the financial infrastructure even in times of crisis and in times of structural disruptions (*DBB 2010:7; BB 2011:7*). Also following a series of changes (*DBB 2012:5; DBB 2013:5; DBB 2014: 5; DBB 2015:5; DBB 2016:5*) in its most recent annual reports, DBB already defines the concept of financial stability simply as *the condition of the financial system in which it is able to perform its functions at all times* (*DBB 2020:5*).

According to *De Nederlandsche Bank*, a stable financial system is capable of allocating resources efficiently and absorbing shocks without damaging the real economy (*DNB 2022:90*).

Following the onset of the global economic crisis, the *Bank of England* construed the concept of financial stability from the perspective of purpose, highlighting the context of the flexibility, functioning and outcomes of the economic system. According to the *BoE*, the objective of financial stability is to ensure the resilience

of the financial system so that financial services (payment services, credit supply, insurance against risks) are permanently and continuously available to the economy as a whole during the credit cycle (*BoE 2009:9*). In other words, a sound financial system exists when it is able to provide basic services to households and businesses under both good and bad economic conditions. However, following the amendment of the Bank of England Act, the BoE no longer defines the concept of financial stability directly, but sets out the actions necessary to achieve the financial stability objective. Thus, in order to achieve the financial stability objective, the BoE identifies and monitors systemic risks and takes measures to eliminate or reduce systemic risks in order to protect and enhance the resilience of the UK financial system (*BoE 2013:3; BoE 2022:3*).

According to the definition provided by the *Federal Reserve System*, acting as the central bank of the United States of America, the financial system can be considered stable if banks, other creditors and financial markets are able to provide households, municipalities and businesses with the financing they need to invest, grow and participate in the functioning of the economy, even when the economy is hit by adverse events or "shocks" (*Fed 2022:V*).

The legal environment in Hungary, similarly to those of the countries reviewed previously, has made it necessary for the *Magyar Nemzeti Bank*, in the absence of normative regulation, to develop a concept that sets the framework of its activities in performing its tasks defined by the legislation. Accordingly, the MNB defines financial stability as a condition in which the financial system, including key financial markets and financial institutions, is resilient to economic shocks and is capable of smoothly performing its key functions in intermediating financial resources, managing financial risks and processing payment transactions.⁴⁷ The above definition was first published in April 2005 (*MNB 2005:3*) and still serves as the MNB's framework for the interpretation of financial stability (*MNB 2022:5*).

At the intersection of the many definitions used in the practice of regulatory authorities, the majority of regulatory bodies apparently seek to define the concept of financial stability and not instability, in pursuit of a positive definition of the concept. In addition, in the definitions an essential element is a reference to the performance of the functions of the financial system and the ability to withstand shocks.

⁴⁷ For more details, see the MNB's website at https://www.mnb.hu/web/en/financial-stability

5. The concept of financial stability and specific elements of the concept

This study provided a detailed analysis of the conceptualisation of financial stability, reaching the conclusion that no consensus has emerged in the literature, in the legislation or in legal enforcement with regard to the substance of the concept. Legislation generally refers to financial stability as a reason or purpose for expanding administrative, official, economic instruments of intervention, but does not define the concept itself. It is therefore incumbent on the enforcement authorities to define the concept as a matter of necessity and to define concepts that are constantly changing both over time and in substance.

The definition of a common concept of financial stability is beneficial for a number of reasons. A common definition provides clarity and a common understanding among decision-makers, regulators, financial institutions and market participants. It creates a common language that facilitates communication and coordination in addressing financial stability concerns. A clear and generally accepted definition of financial stability allows the legislator to develop effective public policies for stability. It provides a framework for identifying and assessing risks, establishing appropriate rule-of-law safeguards and implementing measures to safeguard the stability of financial systems. A common definition allows for better coordination and cooperation between countries, international organisations and regulatory bodies. Financial stability is closely linked to investor confidence and market efficiency. If there is consensus on what constitutes financial stability, investors can make informed decisions and market participants can better assess risks and allocate resources efficiently. This promotes confidence and stability in the financial market. A common definition of financial stability helps to identify and prevent systemic risks. It allows authorities to monitor key indicators, detect vulnerabilities and take timely action to mitigate potential threats. In addition, in the event of a financial crisis, a common definition provides the basis for taking the necessary decisions for coordinated crisis management and recovery.

Taking into account the results from the literature, the conceptual elements and conceptual definition attempts in legislation and legal enforcement, the synthesised concept of financial stability, which is also suitable for normative regulation, can be defined as follows:

Financial stability is the condition of the financial system in which:

- a) the financial system is able to contribute to economic development in a sustainable manner by fulfilling its functions,
- b) there is no systemic risk in the financial system that would cause significant harm to those who are not clients or counterparties to financial institutions by interfering with the performance of the functions of the financial system, and

c) participants in the financial system are resilient to endogenous and exogenous economic shocks.

Before addressing each conceptual element in detail, it is appropriate to point out that the definition of the concept or elements of the concept of financial stability is *not an end in itself*. The necessity and practical benefit of defining financial stability lies in the fact that even the threat of the realisation of a single conceptual element provides the *legal grounds for administrative state intervention via public authorities*.

In alignment with the ESRB Regulation, for the purposes of this study, the concept of the financial system comprises financial institutions, financial markets, products and market infrastructures, which makes the elaboration of this conceptual element unnecessary.

On the basis of the *first conceptual element*, in a state of financial stability the financial system is able to contribute to development in a sustainable manner by fulfilling its functions. That is, the financial system can supply money and liquidity to the economy, adequately meet its credit needs, maintain and operate the economy's payment systems, allocate savings effectively to investors, and manage uncertainties and micro-risks. By carrying out all these functions, the financial system contributes to the sustainable development of the economy, i.e. to cushioning the fluctuation of the economy, to sustainable economic growth, to high employment, to low inflation, to the governmental tasks of ensuring the external and internal financial balance and competitiveness under the supranational coordination of certain governmental tasks.

Based on the second conceptual element, there is no systemic risk in the financial system that would cause significant harm to those who are not clients or counterparties to financial institutions by interfering with the performance of the functions of the financial system. On the one hand, this conceptual element emphasises that financial stability as a feature of the whole financial system necessarily requires a macro-level approach, i.e. it responds to systemic or systemic risks rather than to individual institutional risks. The notion of systemic risk, based on the definition of the ESRB Regulation, can be defined as a downturn in financial service provision as a result of the weakening of the financial system as a whole or part of it, in such a way that this downturn may have serious negative impacts on the real economy. Thus, through the conceptual element of systemic risk, a negative impact on the real economy appears as an element of the concept of financial stability, on the one hand, and a significant amount of this negative impact on the real economy on the other hand, since the concept of systemic risk does not include minor fluctuations in asset prices, and the institutional difficulties of certain financial intermediaries, which are part of the normal functioning of competitive markets. The concept of systemic risks already has a negative impact on the real economy, but it is emphasised in the conceptual element that systemic risks do have and can have a significant negative impact not only on the real economy but also on members of society in general, and that systemic risks also have social costs due to *external impact and procyclicality*. In addition, the specification of systemic risk as a conceptual element provides a time dimension and thus dynamics to the concept, since systemic risks and thus financial stability are not characterised by a given static time state, but have a temporal perspective and at the same time a run-off.

Finally, on the basis of the *third conceptual element*, in a state of financial stability, participants in the financial system are resilient to endogenous and exogenous economic shocks, that is, the financial system is able to manage the emerging risks on its own without external state intervention, regardless of their intrinsic or extrinsic impact on the financial system. The development of resilience serves to avoid and manage the significant negative effects of systemic risks.

In conclusion, the social costs of both financial system and financial system disruption are not limited by state borders, as a result of which the regulation of financial stability can necessarily be considered as an international task or a *global public good*. Despite the fact that it has been shown in detail in the study that the definition of the concept of financial stability can be considered to be highly heterogeneous in the literature, in legislation and in legal enforcement, it is still possible to identify conceptual elements that are capable of creating a concept of a general nature.

References

- Ábel, I. Kóbor, Á. (2009): *Monetáris politika, árfolyam és stabilitás* (*Monetary policy, exchange rate and stability*). Pénzügyi Szemle (Public Finance Quarterly), 54(1): 33–48.
- Allen, F. (2005): *Modelling Financial Instability*. National Institute Economic Review, 192(1): 57–67. https://doi.org/10.1177/002795010519200107
- Arner, D.W. (2007): *Financial Stability, Economic Growth, and the Role of Law.* Cambridge University Press, New York. https://doi.org/10.1017/CBO9780511511431
- BCBS (2012): *Core principles for effective banking supervision*. http://www.bis.org/publ/ bcbs230.htm. Downloaded: 30 November 2022.
- BCBS (2018): *Basel Committee on Banking Supervision Charter.* https://www.bis.org/bcbs/ charter.htm. Downloaded: 30 November 2022.

- BDF (2007): *Annual Report 2006.* https://publications.banque-france.fr/sites/default/ files/medias/documents/annual-report-banque-de-france_2006.pdf. Downloaded: 30 November 2022.
- Bethlendi, A. Vértesy, L. (2020): Makrogazdasági pénzügyek (Macroeconomic finances).
 Budapest University of Technology and Economics Faculty of Economics and Social Sciences, Department of Finance, Budapest.
- BIS (1986): *Recent innovations in international banking (Cross Report)*. CGFS Publications. No. 1. https://www.bis.org/publ/ecsc01.htm. Downloaded: 30 November 2022.
- BIS (2011): *Central bank governance and financial stability*. http://www.bis.org/publ/othp14. pdf. Downloaded: 30 November 2022.
- BIS (2012): *Principles for financial market infrastructures*. http://www.bis.org/cpmi/publ/ d101a.pdf. Downloaded: 30 November 2022.
- BoE (2009): *The role of macroprudential policy. A Discussion Paper.* https://www. bankofengland.co.uk/-/media/boe/files/paper/2009/the-role-of-macroprudential-policy. pdf. Downloaded: 30 November 2022.
- BoE (2013): *Financial Stability Report*. June. https://www.bankofengland.co.uk/-/media/ boe/files/financial-stability-report/2013/june-2013.pdf?la=en&hash=B6FF8E6BD760F7 184914F622630F65CFC4DF87B5. Downloaded: 30 November 2022.
- BoE (2022): *Financial Stability Report*. December. https://www.bankofengland.co.uk/-/ media/boe/files/financial-stability-report/2022/financial-stability-report-december-2022. pdf. Downloaded: 30 November 2022.
- Crockett, A.D. (2000): *Marrying the micro- and macro-prudential dimensions of financial stability*. BIS Speech, Basel. https://www.bis.org/speeches/sp000921.htm. Downloaded: 16 September 2022.
- Das, U.S. Quintyn, M. Chenard, K. (2004): Does Regulatory Governance Matter for Financial System Stability? An Empirical Analysis. IMF Working Paper, WP/04/89. https:// doi.org/10.5089/9781451851311.001
- DBB (2009): *Financial Stability Review*. https://www.bundesbank.de/resource/blob/626158/ a393b7e5fa94e5f9370487504091b291/mL/2009-finanzstabilitaetsbericht-data.pdf. Downloaded: 30 November 2022.
- DBB (2010): *Financial Stability Review*. https://www.bundesbank.de/resource/blob/665906/ f06d0cf1b5414d01073b3ac1bd6cc618/mL/2010-finanzstabilitaetsbericht-data.pdf. Downloaded: 30 November 2022.

- DBB (2011): *Financial Stability Review*. https://www.bundesbank.de/resource/ blob/666238/4d12912826e2d1a311f91830db1296f3/mL/2011-finanzstabilitaetsberichtdata.pdf. Downloaded: 30 November 2022.
- DBB (2012): *Financial Stability Review*. https://www.bundesbank.de/resource/ blob/666016/8934e4f8558c83e9f8eaef465f6c0811/mL/2012-finanzstabilitaetsberichtdata.pdf. Downloaded: 30 November 2022.
- DBB (2013): *Financial Stability Review*. https://www.bundesbank.de/resource/blob/654260/ fe96f1e8092d9438ae5e190c23e20b8e/mL/2013-finanzstabilitaetsbericht-data.pdf. Downloaded: 30 November 2022.
- DBB (2014): *Financial Stability Review.* https://www.bundesbank.de/resource/ blob/666664/41825d5b3af86c1a1df703544041d1e7/mL/2014-finanzstabilitaetsberichtdata.pdf. Downloaded: 30 November 2022.
- DBB (2015): *Financial Stability Review*. https://www.bundesbank.de/resource/blob/666964/ bac3168b79ef24d514842ee291aa7c6e/mL/2015-finanzstabilitaetsbericht-data.pdf. Downloaded: 30 November 2022.
- DBB (2016): *Financial Stability Review*. https://www.bundesbank.de/resource/ blob/667246/5e320b6dc52c2c79994b9a986b1cb05b/mL/2016-finanzstabilitaetsberichtdata.pdf. Downloaded: 30 November 2022.
- DBB (2020): *Financial Stability Review*. https://www.bundesbank.de/resource/ blob/847248/36cb058e4c06d08de803607eeea46ae5/mL/2020-finanzstabilitaetsberichtdata.pdf. Downloaded: 30 November 2022.
- DNB (2022): *Striking a new balance. 2021 Annual Report*. De Nederlandsche Bank N.V. https://www.dnb.nl/media/4kobi4vf/dnb-annual-report-2021.pdf. Downloaded: 16 September 2022.
- Duisenberg, W.F. (2001): *The contribution of the euro to financial stability*. In: Randzio-Plath, Ch. (ed.): Globalisation of Financial Markets and Financial Stability: Challenges for Europe. Nomos Verlagsgesellschaft, Baden-Baden, pp. 37–51.
- ECB (2004): *Financial Stability Review*. December. https://www.ecb.europa.eu/pub/pdf/ other/financialstabilityreview200412en.pdf?eec3264a09f1bd7c1299c7c3a94818a1. Downloaded: 30 November 2022.
- ECB (2006): *Financial Stability Review.* December. https://www.ecb.europa.eu/pub/pdf/ other/financialstabilityreview200612en.pdf?eeb9342332f4cd3127e55b523c51c9ff. Downloaded: 30 November 2022.
- ECB (2015): *Financial Stability Review*. November. https://www.ecb.europa.eu/pub/pdf/fsr/ financialstabilityreview201511.en.pdf. Downloaded: 30 November 2022.

- ECB (2016): Financial Stability Review. May. https://www.ecb.europa.eu/pub/pdf/ other/financialstabilityreview201605.en.pdf?e1a2bef79ed901d8ceaee004f2fcecdd. Downloaded: 30 November 2022.
- ECB (2018): *Financial Stability Review*. November. https://www.ecb.europa.eu/pub/pdf/fsr/ecb.fsr201811.en.pdf. Downloaded: 30 November 2022.
- Fed (2022): *Financial Stability Report*. Federal Reserve System, November. https://www. federalreserve.gov/publications/files/financial-stability-report-20221104.pdf. Downloaded: 30 November 2022.
- Fábián, A. (2021): *Gondolatok a magyar közigazgatási jogról (On Hungarian Administrative Law*). Közigazgatás-Tudomány, 1(1): 50–57. https://doi.org/10.54200/kt.v1i1.5
- FSB (2012): *Charter of the Financial Stability Board*. https://www.fsb.org/wp-content/ uploads/FSB-Charter-with-revised-Annex-FINAL.pdf. Downloaded: 30 November 2022.
- FSB (2014): *Key Attributes of Effective Resolution Regimes for Financial Institutions*. https://www.fsb.org/wp-content/uploads/r_141015.pdf. Downloaded: 30 November 2022.
- Holló, D. (2013): Rendszerszintű stresszindex a magyar pénzügyi rendszerre (A systemwide financial stress indicator for the Hungarian financial system). Hitelintézeti Szemle (Financial and Economic Review) (12)4: 253–284. https://www.bankszovetseg.hu/Content/ Hitelintezeti/253-284-Hollo-Daniel.pdf
- Horváth, E. Mérő, K. Zsámboki, B. (2002): Tanulmányok a bankszektor tevékenységének prociklikusságáról (Studies on the procyclical behaviour of banks). MNB Occasional Papers 23, Magyar Nemzeti Bank https://www.mnb.hu/letoltes/mt23.pdf
- Hunter, L. Orr, A. White, B. (2006): *Towards a framework for promoting financial stability*. Reserve Bank of New Zealand: Bulletin, 69(1): 5–17.
- IAASB (2015): Handbook of International Quality Control, Auditing, Review, Other Assurance, and Related Services Pronouncements Volume I-II. https://www.iaasb.org/ publications/2015-handbook-international-quality-control-auditing-review-otherassurance-and-related-services-0. Downloaded: 30 November 2022.
- IADI (2014): Core Principles for Effective Deposit Insurance Systems. https://www.iadi.org/en/ assets/File/Core%20Principles/cprevised2014nov.pdf. Downloaded: 30 November 2022.
- IAIS (2018): By-laws of International Association of Insurance Supervisors. https://www. iaisweb.org/uploads/2022/01/181207-2018-By-Law-Amendments-8-November-2018.pdf. Downloaded: 30 November 2022.

- IAIS (2019): Insurance Core Principles and Common Framework for the Supervision of Internationally Active Insurance Groups. https://www.iaisweb.org/ uploads/2022/01/191115-IAIS-ICPs-and-ComFrame-adopted-in-November-2019.pdf. Downloaded: 30 November 2022.
- IFSB (2015): Core Principles for Islamic Finance Regulation (Banking Segment). https:// www.ifsb.org/download.php?id=4373&lang=English&pg=/index.php. Downloaded: 30 November 2022.
- IMF (1996): *The Special Data Dissemination Standard*. https://dsbb.imf.org/content/pdfs/ sddsplus15.pdf. Downloaded: 30 November 2022.
- IMF (1998): *Key Aspects of a Framework for a Sound Financial System.* http://www.imf.org/ external/pubs/ft/wefs/toward/pdf/file03.pdf. Downloaded: 30 November 2022.
- IMF (2000): Code of Good Practices on Transparency in Monetary and Financial Policies: Declaration of Principles. https://www.imf.org/external/np/mae/mft/code/index.htm. Downloaded: 30 November 2022.
- IMF (2015): *Dissemination Standards Bulletin Board.* https://dsbb.imf.org/. Downloaded: 30 November 2022.
- IMF (2016): Articles of Agreement of the International Monetary Fund. https://www.imf. org/external/pubs/ft/aa/. Downloaded: 30 November 2022.
- IMF (2017): *The Fiscal Transparency Code*. https://www.imf.org/external/np/fad/trans/ Code2019.pdf. Downloaded: 30 November 2022.
- IOSCO (1996): *By-laws of International Organization of Securities Commissions*. https:// www.iosco.org/library/by_laws/pdf/IOSCO-By-Laws-Section-1-English.pdf. Downloaded: 30 November 2022.
- IOSCO (2017a): *Objectives and Principles of Securities Regulation*. https://www.iosco.org/ library/pubdocs/pdf/IOSCOPD561.pdf. Downloaded: 30 November 2022.
- IOSCO (2017b): Methodology for Assessing Implementation of the IOSCO Objectives and Principles of Securities Regulation. https://www.iosco.org/library/pubdocs/pdf/ IOSCOPD562.pdf. Downloaded: 30 November 2022.
- Kálmán, J. (2021): A pénzügyi stabilitás fogalma (The concept of financial stability). Miskolci Jogi Szemle, (14)5: 272–285. https://doi.org/10.32980/MJSz.2021.5.1472
- Kukorelli István (2020): Fejezetek a gazdasági alkotmányosság (gazdasági jogalkotás) témaköréből (Chapters on economic constitutionality (economic legislation)). Dialóg Campus, Budapest.

- Lentner, Cs. (2018): A jegybanki szabályozás tanulságai a 2008–2015-ös időszakból nemzetközi összehasonlító elemzés (Lessons from central bank regulation in the period 2008–2015: international comparative analysis). Gazdaság és Jog, 26(3): 6–11.
- Lublóy, Á. (2004): Systemic Risk Implications of the Hungarian Interbank Market. MNB Füzetek, 2004/10. Magyar Nemzeti Bank. https://www.mnb.hu/en/publications/studiespublications-statistics/working-papers-1-1/wp-2004-10-agnes-lubloy-systemic-riskimplications-of-the-hungarian-interbank-market
- Magas, I. (2011): Pénzügyi liberalizáció a nemzeti alkalmazkodás dilemmái (Financial liberalisation The dilemmas of national adaptation). Pénzügyi Szemle (Public Finance Quarterly), 56(2): 211–237.
- Mérő, K. (2003): A gazdasági növekedés és a pénzügyi közvetítés mélysége (Economic growth and the depth of financial mediation). Közgazdasági Szemle (Economic Review), 50(7): 590–607.
- Mérő, K. (2013): Egy paradigma születése és bukása. A "túl nagy a csődhöz" elv értelmezésének és alkalmazásának változásai (The birth and fall of a paradigm. Changes in the interpretation and application of the "too big to fail" principle). In: Valentiny, P. – Kiss, F.L. – Nagy, Cs.I. (eds.): Verseny és szabályozás (Competition and regulation), 2012. MTA KRTK Közgazdaság-tudományi Intézet, Budapest, pp. 32–57.
- Mishkin, F.S. (1997): The Causes and Propagation of Financial Instability: Lessons for Policymakers. In: Maintaining Financial Stability in a Global Economy, Symposium Proceedings, Federal Reserve Bank of Kansas City, August 28–30, pp. 55–96. https://www. kansascityfed.org/Jackson%20Hole/documents/3591/pdf-s97Mishk.pdf
- Mishkin, F.S. (1999): *Global Financial Instability: Framework, Events, Issues*. Journal of Economic Perspectives 13(4): 3–20. https://doi.org/10.1257/jep.13.4.3
- MNB (2005): *Report on Financial Stability*. April. https://www.mnb.hu/letoltes/stab-jel-20050425-hu.pdf. Downloaded: 30 November 2022.
- MNB (2022): *Report on Financial Stability*. November. https://www.mnb.hu/letoltes/ penzugyi-stabilitasi-jelentes-2022-november.pdf. Downloaded: 30 November 2022.
- Nagy, I.Gy. (2010): A globális pénzügyi válság néhány szabályozórendszerbeli összefüggése (The context of the global financial crisis in some regulatory systems). Külgazdaság, 54(3– 4): 63–80.
- Noyer, C. (2014): *Macroprudential policy: from theory to implementation*. Financial Stability Review, 18: 7–12.
- Oosterloo, S. de Haan, J. (2004): *Central banks and financial stability: a survey*. Journal of Financial Stability, 1(2): 257–273. https://doi.org/10.1016/j.jfs.2004.09.002

- Padoa-Schioppa, T. (2002): *Central Banks and Financial Stability. Exploring a Land in Between*. Policy Panel Introductory Paper, Second ECB Central Banking Conference, "The transformation of the European financial system", 24 and 25 October 2002. http://central.banktunnel.eu/events/pdf/conferences/tps.pdf. Downloaded: 16 September 2022.
- Pardavi, L. (2022): *Nemzetközi pénzügyi jog (International financial law*). Universitas-Győr, Győr.
- Phan, D.H.B. Iyke, B.N. Sharma, S.S. Affandi, Y. (2020): *Economic policy uncertainty and financial stability Is there a relation*? Economic Modelling, 94(January): 1–12. https://doi.org/10.1016/j.econmod.2020.02.042
- Székely, A. (2012): A válságra tett szabályozói válaszlépések az Egyesült Államokban (The Regulatory Responses to the Financial Crisis in the United States). Hitelintézeti Szemle (Financial and Economic Review), 11(3): 230–253. https://www.bankszovetseg.hu/ Content/Hitelintezeti/230-253-szekely1.pdf
- Toniolo, G. White, E.N. (2015): *The evolution of the financial stability mandate: form its origins to the present day*. NBER Working Paper Series, WP 20844. https://doi. org/10.3386/w20844
- WB (1989): International Bank for Reconstruction and Development Articles of Agreement. https://www.worldbank.org/en/about/articles-of-agreement/ibrd-articles-of-agreement. Downloaded: 30 November 2022.
- WB (2011): Principles for Effective Insolvency and Creditor/Debtor Regimes. https:// thedocs.worldbank.org/en/doc/538701606927038819-0130022020/original/ ICRStandardJan2011withC1617.pdf. Downloaded: 30 November 2022.
- Zilioli, Ch. (2020): New Tasks for the European Central Bank: Between Separation, Synergies, and the Preservation of Independence. In: Law & Financial Stability, International Monetary Fund, pp. 143–156. https://www.elibrary.imf.org/display/book/9781513523002/ch009.xml