# Acceptance of large corporate receivables as collateral — the practice of the Magyar Nemzeti Bank in view of the principles of collateral management, with a specific focus on legal risks<sup>1</sup>

Dániel Lerner-Nagy<sup>2</sup>, András Straubinger<sup>3</sup>, Dániel Szabadkai<sup>4</sup>

### **Abstract**

In the spring of 2020, the Magyar Nemzeti Bank (MNB) expanded the pool of assets eligible as collateral for central bank lending by accepting loans granted to large corporates as collateral, thus widening the lending channel between the MNB and credit institutions and providing credit institutions with a wider leeway in ALM (Asset-Liability Management). In this paper we analyse the MNB's framework of conditions for the eligibility of large corporate receivables in respect to the principles of collateral management including, in particular, the management of legal risks. The inclusion of such transactions as collateral is challenging from both a legal and an operational perspective, since eligibility for use as collateral requires the development of a framework that fully ensures the enforceability of large corporate receivables accepted as collateral, and compliance with all other relevant collateral management principles. It is concluded from the analysis that a set of strict conditions and the operational framework supporting it can ensure the management of legal risks, but can also be noted that there may be trade-offs between simple asset-liability

The views expressed in this article are those held by the authors and should not be regarded as the official position of the Magyar Nemzeti Bank. The authors wish to thank Dr. Melinda Bokodi, Dr. Pál Peter Kolozsi and Norbert Kiss-Mihály for their help and valuable professional advice during the preparation of the study.

<sup>2</sup> Magyar Nemzeti Bank (the Central Bank of Hungary), Bar Association Legal Counsel

<sup>3</sup> Magyar Nemzeti Bank (the Central Bank of Hungary), Head of Department

<sup>4</sup> Magyar Nemzeti Bank (the Central Bank of Hungary), Lawyer, szabadkaid@mnb.hu

and liquidity management, and compliance with the complex system of corporate receivables conditions.

KEYWORDS: monetary policy, corporate lending, collateral management, risk management, legal risk

JEL CODES: E52, G32, K12, K22

DOI: https://doi.org/10.35551/PFQ\_2023\_3\_2

### Fundamentals of central bank collateral management

Central bank lending is a classic element of the central banks' tool kit. Before the global economic crisis that broke out in 20085 central banks performed their tasks using a relatively small set of tools, one of the key elements of which was access to central bank credits, essential for banks' liquidity management.6 The central bank interest rate applied to lending (and, on the liabilities side, to deposits) was one of the primary means for achieving the inflation target. The crisis changed the interpretation of the mandates and roles of the central bank. The threat of deflation and loose monetary policy called for the use of new instruments: asset purchase programmes and derivatives appeared and the conventional credit instrument also changed. In an environment of growing inflation, central bank asset holdings have been restructured, asset purchase programmes have been halted and central banks have started to reduce their balance sheets among measures of tightening, but central bank lending has remained a stable tool even in this environment.

Credit, as a central bank instrument, is intrinsically linked to collateral management. The central bank may only grant credit in a secured form, in accordance with the rules of the MNB Act<sup>7</sup>. The well-known purpose of requiring collateral to secure lending is to protect taxpayers' assets and interests. However, there are also some other, more practical reasons for requiring coverage. Avoiding capital losses in relation to lending activities strengthens confidence in the central bank and improves its reputation. Moreover, the level playing field principle also supports the requirement of coverage. Central bank credit should be available to all market participants on the same terms. However, banks can differ widely in terms of credit risk and collateral management helps the central bank manage this heterogeneity. In addition to the above, efficiency is also an important factor: a pre-defined framework, a strong IT background, standardisation and automation enable quick lending processes, without risk and lengthy collateral analysis and individual approval procedures.

<sup>5</sup> On structural changes in banking regulation since 2008, see: Lentner (2013) and Zéman-Kalmár-Lentner (2018).

<sup>6</sup> The meaning of the concept of liquidity, the role of central bank liquidity, its impact on monetary transmission and the primary objective of the MNB, i.e. transfers, is the subject of a variety of analyses: Kolozsi-Horváth (2020), Varga (2016), Bodnar et al (2015).

<sup>7</sup> Act CXXXIX of 2013 on the Magyar Nemzeti Bank.

The cornerstones of the collateral framework are determined primarily on the basis of monetary policy and risk management considerations. The design of the central bank credit facility itself supports the achievement of a variety of monetary policy objectives. Monetary policy, however, also plays an important role in shaping the collateral management framework which is organically linked to the facility concerned, as different credit facilities introduced for different purposes entail different collateral management requirements. Risk management, on the other hand, is a fundamental objective of collateral management. No 100% protection can be achieved in practice, and all central banks use their best efforts to maximise the probability of avoiding losses, which also determines the central bank's esentially conservative approach in setting the parameters of the collateral framework.

The above considerations need to be translated to the level of specific detail rules when fine-tuning the collateral management framework's parameters. The list of acceptable instruments, including specific risk management instruments, is determined with the aim of supporting monetary policy objective while minimising the associated risks. These two aspects can often be adequately coordinated to produce an efficient, functioning risk management framework. In some cases however, there may need to be a trade-off between them: in times of market stress or liquidity stress, for instance, the monetary policy aspect may require the involvement of a wider range of collaterals, which may at, on the other hand, result in the acceptance of higher risk assets. It is important that a balance be found between these two aspects.

Collaterals have to meet certain minimum requirements for acceptance and, if accepted, the differences in the risks associated with the various instruments have to be equalised. The minimum requirements set the limit beyond which central banks cannot go lest their loss tolerance be exceeded. There may be substantial differences between eligible assets in terms of risks as well, therefore higher risks of some assets need to be mitigated by a variety of tools. Eligibility criteria and haircut systems are the basic risk management tools used in collateral management. In addition, a central bank has an extensive tool kit for working out an optimum framework. The risk considerations taken into account by the MNB and the related risk management tools are shown in Table 1. It should be noted that Bindseil (2014) sets out the key minimum requirements for collateral eligibility in a different structure but with a similar scope. Bindseil et al (2009) summed up risk management practices and procedures underlying collateral management through several examples of central banks, showing the various risk factors and their impacts.

<sup>8</sup> The impact of the parameters of central bank collateral management systems on banks' asset-liability management and liquidity management is discussed in (Cassola and Koulischer, 2019).

<sup>9</sup> The impact of a broader collateral pool on monetary transmission in the event of a liquidity shock is discussed in (Koulischer and Struyven 2014).

Table1: Risk criteria and related risk management tools taken into account in accepting collaterals

Criterion	Tool
<b>Legal risk:</b> Enforceability of the collateral	Legal risk management is <b>a knock-out criterion</b> in collateral management. The <b>Eligibility criteria</b> and the legal documentation must be determined in such a way to ensure that the collateral asset can be taken possession of and enforced and their ownership can be taken over by the central bank. This criterion requires an appropriate legal relationship not only between the bank providing the collateral and the central bank, but also between the obligor of the collateral asset and third parties (e.g. KELER).  A variety of instrument-specific factors and certain general aspects need to be taken into account in relation to legal risks (e.g. jurisdiction, language of contract, debtor's geographical location).
Credit risk: Credit risk of the asset accepted as collateral	One basic criterion for the eligibility of assets is that their credit risks can be correctly assessed and are considered acceptable by the central bank. This judgement appears in the eligibility criterion as a knock-out criterion. A central bank may use external credit risk analyses as well as internal ones in capturing and quantifying the credit risk. In general, the securities' ratings by credit rating agencies may be taken into account as a suitable basis of reference. (Ideally, other market indicators, such as spreads, may also be availa-ble in relation to certain issuers to capture credit risk.) Some central banks of the euro area (e.g. Bundesbank, Banque de France, Banco de Espana) have their own internal credit rating agencies, which are even capable of establishing the credit risks of smaller entities.¹º The ECB's collateral man-agement function accepts banks IRB (Internal Ratings-Based) ratings as well. Central banks set minimum criteria for these.  Besides the eligibility knock-out criterion, credit risk aspects may also ap-pear in other risk management tools: Higher haircuts for higher credit risks; Concentration limits applied to manage excessive exposure to a single enti-ty.

<sup>10</sup> A summary of internal credit rating agencies operated by central banks in the euro area is provided in (Auria et al 2021).

Criterion	Tool	
Market risk: Stemming from the change of the collateral value, interest rate risk, spread risk or foreign ex-change volatility, to name but a few	The <b>haircut matrix</b> is a central tool for managing market risk. The higher the risk, the higher the associated haircut and the lower the collateral value. It also applies to this type of risk that the traded price of a standardised instrument is easier to observe and manage from a haircut perspective. Although there is a marked difference even between securities in terms of price observation, yet such observation is not possible at all for a loan for instance, so the associated modelling task (including the haircut) is greater. Due to their high price volatility shares <sup>12</sup> , and commodities are not eligible as collaterals. Daily valuation and margining (placement of collateral deposit)	
	prevent variable prices from resulting in unduly high haircuts.	
<b>Liquidity risk:</b> Marketability of the collateral	Liquidity risk is relevant to collateral management in several ways. Market spreads can include an illiquidity premium, which might trigger volatility. It is difficult to monitor prices in an illiquid market, which increases uncertainty. The central bank might be able to sell the asset it has taken possession of more slowly in an illiquid market. Illiquidity requires the application of a higher haircut. Liquidity risk is low and the exposure can, ideally, be sold within a few days in a liquid government bond market. By contrast, this kind of liquidity does not really apply to a loan. When collaterals securing a credit pool are taken possession of, it is extremely time-consuming to determine the correct collateral value and sell the exposure.	
<b>Correlation:</b> The relationship between the collateral and its owner	A central bank cannot accept as collateral an asset that has a high default correlation with the entity posting the collateral. In this regard, central banks apply different <b>rules</b> regarding <b>the closely linked entities</b> .	

One possible solution is the packaging of loans into securities and their functioning as ABS (asset-backed securities). The ECB, for example, accepts ABS as collateral, yet this form of securitisation is more common in the US than in Europe, where mortgage bond structures are more commonly used.

<sup>12</sup> Just like shares, bonds convertible into shares are not eligible for use as collaterals because they do not guarantee the unconditionality of the nominal value.

<sup>13 (</sup>ECB 2013) describes the types of assets that are acceptable by major global central banks, the preference for bonds over, for example, corporate debt, and the exclusion of gold and shares from the list of eligible collaterals.

Criterion	Tool
<b>Operation:</b> Efficient, auto-mated, low-cost operation of central banks, banks and other parties	Both the <b>IT systems used</b> and the relevant <b>workflows</b> need to be designed with a view to the above considerations. The aim is to minimise operational risks, maximise automation and minimise human costs. Systems and processes must be robust as regards normal op-eration and stress situations, as well as workaround procedures.  Central banks prefer securities collateral also in terms of operational effi-ciency: standard legal framework, automated posting/release, easy revalu-ation. The other extreme is the acceptance of loans as collateral, where even the heterogeneity of the legal documentation itself poses a major chal-lenge (in addition to credit risk and pricing issues).

In general, the risk characteristics of loans are less favourable than those of more standard, more easy to value and manage securities, which are therefore preferred by central banks. In relation to the acceptance of loans as collateral Koulischer and Van Roy (2017) note that on the one hand, regular acceptance of loans as collateral may help generate information on the quality of bank loans and support the relevant internal processes to ensure that the central bank can quickly provide liquidity in the event of a liquidity shock, while ensuring that the collateral is reliable. They note however, that by accepting loans as collateral a central bank might be provided with the less liquid collateral overall. In addition, another trade-off appears - Chailloux et al. (2008) - in that applying overly strict criteria for accepting loans as collateral deprives banks of the benefits of accessing additional liquidity, while too soft criteria might impose excessive risk on the central bank. Accepting loans as collateral is also operationally challenging compared to securities: The posting of securities is largely based on automated processes, the relevant documentation and individual security characteristics are available from various reliable sources (e.g. Bloomberg), and there is external control over the issuance (e.g. the Supervisory Authority, the various investors). By contrast, the acceptance of loans as collateral results in increased manual processes and a need for more extensive analyses, for example because of the need to carry out detailed reviews of individual contracts. It is necessary to assess - in view of the above - the steps taken by the MNB to address the various risk-related challenges stemming from the acceptance of large corporate loans as collateral, as well as how effectively it addressed those challenges. The following is a review the MNB's collateral management rules regarding large corporate loans in the light of the most important risk management aspects.

### Large corporate receivables as eligible collaterals

The outbreak of a coronavirus pandemic resulted in negative financial market and real economic consequences in the spring of 2020. Central banks all over the world have sought to take measures to ensure macroeconomic and financial stability. This

required, in particular, instruments that would enable central banks to respond flexibly and quickly to any financial market turbulence. The outbreak of the coronavirus crisis caused primarily liquidity problems, therefore central banks' measures were focused on ensuring adequate liquidity, which requires the proper functioning of credit channels. Section 18 (a) of the MNB Act stipulates that the MNB may only provide credit against adequate collateral, therefore expanding the range of acceptable collaterals helped ensure liquidity.

By its decision taken on 17 March 2020 the MNB Monetary Council widened the range of eligible collaterals by adding large corporate loans. This was a suitable solution since most of the securities were already eligible collaterals, while MNB data show that in February 2020 the total portfolio of large corporate loans in Hungary amounted to HUF 3,700 billion, which, due to the 70 percent eligibility rate<sup>14</sup>, increased the liquidity available to the banking system by about HUF 2,600 billion (Magyar Nemzeti Bank, 2020). The extent to which this option is being used is illustrated by the fact that by the summer of 2020, credit institutions had provided large corporate loans worth HUF 600 billion as collateral of which more than HUF 400 billion was eligible collateral value.

Large corporate receivables have remained a part of the MNB's collateral management system even when the negative economic externalities of the epidemic ceased to exist. While the extension of the range of eligible collaterals contributed to the successful management of the COVID-19 crisis, there was still a demand among commercial banks for the upkeep of the wider range of eligible collaterals even after the epidemic had subsided, therefore the MNB continues to maintain the extended collateral framework, partly in view of the economic importance of credit-based financing for large enterprises.

# The integration of collateral management principles in the rules on the admission of large corporate receivables

The European Central Bank's (ECB) collateral management system may also be viewed as a model for the extension of the range assets for collaterals, as large corporate loans are a permanent part of the ECB's collateral management practices. In the euro area, like in Hungary, large enterprises are financed through bank lending, so the market for corporate stocks and bonds is proportionally much smaller than in the US (Tabakis and Tamura, 2013). Given their important role in debt financing, in 2007 the ECB allowed the provision of loans to large corporates as collateral. The volume of loans to large corporates pledged as collaterals has been steadily increasing, with more than EUR 370 billion of loans already offered as collateral in 2019,

<sup>14</sup> At the beginning of the acceptance of large corporate loans as collaterals, the MNB applied a uniform haircut of 30 percent for all loans, but from 28 September 2020 onwards, the haircut will be determined in view of maturity structure, currency and credit quality.

accounting for roughly a quarter of the total volume of collateral assets in the ECB's collateral management system (Calza et al. 2021).

As mentioned above, the MNB is required by law to obtain adequate collateral from the debtor when granting credit as a monetary policy instrument. The MNB specifies the assets accepted as security, that is, eligible collaterals, in its *Terms and Conditions of the operations of the central bank in forint and foreign currency markets (Business Conditions)*. Under the current rules, the category of eligible collaterals may be divided into (i) securities, (ii) large corporate receivables and (iii) liquidity absorbing deposits with the MNB<sup>15</sup>.

Credit institutions that have concluded mortgage agreements with the MNB are eligible to provide large corporate receivables as collateral. Section 5:88 of the Civil Code<sup>16</sup> stipulates that a pledge contract and, in view of this, the registration of the pledge in the appropriate register is required for the creation of a mortgage. In the case of a pledge on a receivable, the fact of the creation of the pledge is entered in the collateral register.<sup>17</sup> The pledged asset is identified by description, on the basis of which the pledged asset is constituted by the prevailing receivables – meeting the criteria laid down in the Business Conditions – concerning which the credit institution provides data for the MNB. The first transmission of data may take place after the entry of the mortgage in the collateral register.

The basic requirements for large corporate receivables are set out in the Business Conditions. The main objective of the requirements is to mitigate legal risk, that is, to ensure that the enforceability of the pledge on large corporate receivables and the protection of the pledge collateral are guaranteed at all times, but the criteria also address other risk management aspects.

To manage legal, credit and correlation risks together, the MNB has established detailed rules regarding the identity of the debtor. The debtor may only be a business

<sup>15</sup> The MNB's deposit facility with a variable interest rate and a maturity period of up to 6 months.

<sup>16</sup> Act V of 2013 on the Civil Code.

One special case of the creation of a pledge is when the pledged claim – the pledged object – is secured by a pledge. Such a pledge is a so-called sub-pledge, the subject of which is the pledge and the receivable secured by it. Pursuant to Act XXXIX of 2023 amending the Civil Code on legislative amendments to increase the competitiveness of the economy, the rules on pledge/mortgage apply, from I September 2023, to the creation of sub-pledges, with the exception that the sub-pledge must be entered in the register in which the mortgage securing the receivable that is the subject of the sub-pledge was registered. In other words: if, for example, the pledged claim is secured by a mortgage on immovable property, the mortgage must be registered in the real estate register, if it is secured by a pledge on a business share in the register of official company records, in other cases the sub-pledge must be registered in the collateral register or other appropriate register, and in the case of multiple pledges, registration in all registers is mandatory.

association<sup>18</sup> that is domiciled in Hungary, not subject to bankruptcy, winding-up, compulsory or voluntary dissolution proceedings, not subject to the supervisory powers of the MNB<sup>19</sup> and not an affiliate of a financial institution. A debtor that complies with the main rule is therefore a solvent enterprise that carries on an economic activity in the real economy as its regular business operation, has capital, is not subject to dissolution proceedings and is not affiliated to any financial institution.

To ensure adequate credit quality, loans classified as restructured or non-performing exposures have been excluded. An exposure is non-performing, for example, if the debtor is more than 90 days in arrears with a payment and the amount past due is significant<sup>20</sup>, but a claim may also be classified as a non-performing exposure without any arrears, for example, if the credit institution, based on its assessment of the debtor's financial situation, may assume that the debtor will not be able to repay the full amount of its liabilities under the transaction without collection from the collateral.<sup>21</sup> Restructuring is a contract modification aimed at avoiding non-payment because the debtor cannot fulfil its repayment obligation under the original contractual terms and would not be able to do so without the easier terms stipulated in the modification.

To reduce legal risk, the governing law stipulated in the contract as such must be the Hungarian law only, the contract must not contain any jurisdiction clause other than Hungarian, and the language of the contract – or the language of its authentic translation – may be Hungarian or English. The clause on governing law and jurisdiction is primarily necessary for minimising operational difficulties and costs arising from the enforcement of the mortgage, which is in line with the restriction on the debtor's registered office having to be in Hungary. The possibility of stipulating

<sup>18</sup> It should be noted that although the MNB is considers primarily business associations established in accordance with the format requirements set out in Section 3:89 (I) of the Civil Code as eligible debtors, however, if the receivable from the debtor is secured by a 100% individual joint and several state guarantee as specified in Section 92 (I) of Act CXCV of 2011 on Public Finance, the MNB also considers legal entities established in a form other than companies as eligible debtors, primarily on the basis of the strength of the collateral.

<sup>19</sup> If the purpose of a refinancing transaction between credit institutions is on-lending to an individually identifiable real economy operator, the MNB will accept such transaction as collateral even if the debtor credit institution is an institution supervised by the MNB.

The rules on significant credit obligations past due are laid down in Decree No. 44/2018 (XII. 5.) MNB on Taking into account qualifying holdings outside the financial sector and on the threshold for the materiality of credit obligations past due.

<sup>21</sup> It should be noted that the haircut matrix used by the MNB takes into account the impairment model introduced by IFRS 9, so the MNB does not only distinguish between performing and non-performing assets. Based on this impairment model, category Stage 1 includes loans without problems, category Stage 2 includes loans whose credit risk has increased significantly since the inception of the transaction, and category Stage 3 includes loans under which the debtors are likely to default. The MNB does not apply a haircut for Stage 1, it applies a haircut of 30 percent for Stage 2 and excludes Stage 3 from eligible exposures as non-performing.

a law or legal system other than the Hungarian would entail a significant legal risk, since that Hungarian law governs the MNB's Business Conditions and the MNB's mortgage is always created under Hungarian law, so its enforcement can best be ensured under Hungarian law and in the Hungarian institution system. It should be noted that the MNB does not check the compliance with the Hungarian law of contracts governed by the laws of any other country, because it would be a time-consuming procedure requiring extraordinary expertise. The clause on the language of the contract was needed primarily to facilitate verifiability.

In order to mitigate liquidity risk, the outstanding receivable arising from the transaction must exceed HUF I billion. Setting a threshold offers two more benefits. On the one hand, it prevents excessive increases in the cost of enforcement due to the fragmentation of the collateral pools of large corporate loans, and, on the other hand, it functions as a quantitative metric above which a debtor entity can be considered a large enterprise.

Another condition is the exclusion from the scope of eligible transactions of loans refinanced by the MNB under any stage of the Funding for Growth Scheme (FGS). The reason for this is that in some cases the MNB has already established mortgages on loans provided for companies under the FGS, which means that such transactions are collaterals securing receivables arising from the FGS.

As mentioned at the beginning of this chapter, the conditions established by the ECB for the inclusion of individual receivables was taken into account as a point of departure in the elaboration of the conditions applying to large corporate receivables. Table 2 shows the similarities and differences between the two institutions' criteria.

Table 2: Comparison of exposures accepted as collaterals by the ECB and and those accepted by the MNB

	The MNB eligible receivables	The ECB's eligible receivables
Eligible debtors	(i) large enterprises (ii) credit institutions (in the case of refinancing transactions where the ultimate debtor is an individually identifiable real economy operator)	(i) non-financial enterprises, (ii) public sector entities (apart from state-owned financial en-terprises), (iii) multilateral development banks, (iv) international organisations
Eligible assets	loan transaction	loan transaction (credit receivable under which a debt is owed)
Debtor's registered office	Hungary	Any member state of the euro area (no restrictions if the debtor is a multilateral development bank or international organisation)
Maturity	no restrictions	no restrictions
Currency	no restrictions	euro

	The MNB eligible receivables	The ECB's eligible receivables
Jurisdiction	Hungarian	the jurisdiction of a euro area member state
Governing law	Hungarian	the law of a euro area member state
Minimum Ioan amount	HUF 1,000,000,000	(i) no minimum amount for do-mestic use (but the central bank of the member state con- cerned may stipulate a minimum amount) (ii) in the case of a cross-border transaction, EUR 500 000
Cross-border element	not allowed	allowed (in the euro area)
Syndicated loan transaction	eligible	eligible
Retail loan transaction	ineligible	ineligible (was eligible during the euro area crisis (2011-2013) and the co- ro-navirus pandemic)
Frequency of data reporting from debtors	monthly	quarterly

### Managing specific individual legal risks – rules adopted in relation to special contractual terms and conditions

As explained above, the primary purpose of the rules set by the MNB is to ensure the enforceability of the pledge on the receivable and the protection of the pledge collateral in order to minimise legal risks. A credit institution may therefore only pledge a receivable as collateral if it is does not secure, in whole or in part, any other transaction, it is not encumbered by rights of the credit institution or third parties, and is free of any legal action, encumbrances or claims. Moreover, no third party may have any right in relation to a large corporate receivable that would restrict or preclude the creation of the MNB's mortgage and the exercise of the right of satisfaction thereunder. If the transaction concerned is secured collaterals, the credit institution must ensure that the collateral is enforceable by the MNB or a third party designated by the MNB in the event of a transfer of the large corporate receivable. To ensure that the right of satisfaction can be fully exercised, it is also stipulated that neither the credit institution nor the debtor may make any legal declaration that would terminate or adversely affect the MNB's right of satisfaction, so the credit institution must obtain the debtor's declaration waiving this right.

To establish eligibility as collateral, the credit institution concerned must send to the MNB all documents containing provisions relating to the transaction. This rule applies to the contract containing the loan transaction or, in the case of a collateralised transaction, its collateral contracts, and to any contract or statement containing information relevant to the transaction. To protect the pledge collateral, the MNB also requires the large corporate debtor - in view of Section 5:110 (1) of the Civil Code – to send notification of the fact of pledging after the provision of the collateral. Another rule aimed at reinforcing the obligation stipulated in Section 5:99 (1) of the Civil Code is that if the large corporate receivable is secured by mortgage, the relevant mortgagee must declare in advance that if the MNB enforces its mortgage on the large corporate receivable by selling the large corporate receivable, it will issue the necessary consents for the transfer of the mortgage or pledge on movable property to the new mortgagee or pledgee.

It should be noted that the documentations of different transactions differ from each other considerably. This is because credit institutions use different template contracts, and most of them even contain terms and conditions tailored to the borrower's specific risk, therefore the MNB cannot determine in advance the list of the documents to be sent on a mandatory basis – apart from the loan contract and any security agreement(s) – so it is up to the credit institution to determine which documents are relevant for the given transaction.

Although by transmitting data on the large corporate receivable the credit institution guarantees that the receivable complies with the conditions set out in the mortgage contract and the Business Conditions, in practice it is important that the MNB to checks all of the detailed rules and eligibility requirements. In the following sections, we review contractual clauses that are typically used in large corporate receivables documentations and that preclude or make it significantly more difficult to meet the conditions for providing them as collaterals.

### The question of disbursement

The MNB only accepts as collateral receivables stemming from loans disbursed under loan or credit contracts and provides collateralised credits to credit institutions up to the amount of such receivables minus the given haircut. From the aspect of risk management the reason for this is that in the absence of disbursement there is no large corporate receivable with a real asset value to back up MNB's secured receivable, which could be used for recovering the MNB's receivable in case the credit institution becomes insolvent.

### Protection of accepted mortgage collateral

Protection of mortgage collateral is of utmost importance in the context of the eligibility of large corporate receivables, as mortgage on receivable is less effective collateral than security collateral, as the collateral value of large corporate loans is lower and the risk of a reduction in the collateral value is high.

The pledging of receivables is the exercise of the right to dispose over the receivable in such a way that the original recipient is replaced by a new one (the pledgee), as a result of which the originally two-party legal relationship becomes a three-party

one (Vékás-Gárdos, 2021). In a tripartite legal relationship, both the pledgee and the pledgor (of the pledged receivable) may make a legal declaration or enter into an agreement which may result in the enforcement of the claim being terminated or made significantly more onerous, thus rendering it incapable of fulfilling its function as a pledge collateral (Vékás-Gárdos, 2021).

To protect the mortgage collateral and clarify the position of the pledgor, the Civil Code stipulates written notification of the the pledgor of the pledged receivable of the fact of the creation of the pledge, specifying the pledged receivable and the name of the pledgee. Accordingly, the Business Conditions require that, as a precondition for the acceptance of a large corporate receivables as collaterals, the notification of the obligors of large corporate receivables pledged to the MNB, and sending such notifications to the MNB within 1 month of the required data transmission.

The notification of the creation of a pledge must specify for the pledgee the pledged receivable and its content and terms and conditions. As a consequence, this limits the possibility for party that owes the receivable (obligor) and the party to which it is owed (obligee) of changing the content and terms of the receivable in any way that is disadvantageous the pledgee (Vékás-Gárdos, 2021). The receivable as pledged asset is protected by the following legal effects of the notification: upon receipt of the notification by the obligor

- the obligee of the pledged receivable (the pledgor, i.e. the credit institution) and the obligor (the large corporation) cannot modify the contract between them in a way that affects the content of the claim, and
- the obligor may only enforce objections and offset counterclaims vis-à-vis the pledgee which have arisen from legal grounds that already existed vis-à-vis the pledgee at the time of notification.

The pledgee may reduce or terminate the mortgage collateral both by legal transactions (contract modifications) and by unilateral legal declarations (waiver of receivable, waiver of right). The obligor of the receivable may also make a declaration adversely affecting the mortgage collateral (set-off).

Since the pledgee may reduce or even terminate the collateral cover by making a legal declaration as described above, in the context of its management of the legal risks the MNB requires the debtor of the large corporate receivables provided as collateral to undertake to refrain from making any declaration that would terminate or adversely affect the MNB's right of collection from the large corporate receivables. The credit institution must have a statement to this effect from the large corporation in order for the large corporation's receivable to be eligible collateral. Such a waiver by the debtor of a large corporate receivable is an adequate guarantee for the MNB for the protection of the mortgage collateral.

### The right of set-off of a debtor of a large corporate receivable

Offsetting is a way of settlement of a liability that eliminates the claim of the obligee to the extent of its debt to the obligor, or in other words, to the extent of the obligor's receivable from the obligee (Wellmann, 2021). The set-off declaration of the debtor

of a large corporate receivable has a negative impact on the mortgage collateral, as it eliminates the mortgaged receivable and thus the collateral of the central bank's receivable is eliminated. Although set-off by the debtor is usually precluded in the contract templates generally used in domestic financing practice, there may be cases where the debtor's right of set-off nevertheless "revives".

### Applicability of a contractual term precluding set-off in winding-up proceedings

Two different positions are identified in legal practice as regards the exclusion of offsetting in winding-up proceedings. The first is that the contractual exclusion of offsetting does not apply because of a special rule in the Bankruptcy Act.<sup>22</sup>. Section 36 (I) of the Bankruptcy Act stipulates that only claims which have been registered as admitted by the liquidator, and in respect of which no assignment was been made after the commencement of the winding-up procedure, or, if the claim arose later, after its arising, may be included in the winding-up. Mark that this rule only applies to cases where offsetting is exercised after the commencement of winding-up proceedings, , because if the declaration of offsetting is communicated before that date, the special rules of the Bankruptcy Act do not apply to offsetting (Juhász, 2022).<sup>23</sup>

The contractual preclusion of offsetting is not, according to the prevailing case law regarding the application of the Civil Code, affected by the above special rule of the Bankruptcy Act. According to more recent case law, if the parties have contractually excluded the possibility of offsetting, this clause continues to be applicable even in the event of winding-up of the parties.24 The legal reason for this is that the credit agreement does lapse when the debtor goes into winding-up: its provisions remain in force. If in their contract the parties have agreed on stricter rules than the dispositive general provisions of the civil law, the winding-up of either of them does not change or abolish the rules laid down in the contract in force. If the application of offsetting is precluded by the contract, the rules of the Bankruptcy Act and the Credit Institutions Act relating to this legal instrument are irrelevant, and the preclusion of offsetting remains valid in the winding-up proceedings on the basis of the valid provisions of the contract.

ludicial practice that has evolved on the basis of Act IV of 1959 on the Civil Code used to represent a different position. According to the case law, as a result of the cited provision of the Bankruptcy Act, the preclusion of offsetting in the case of winding-up is not applicable, i.e. the parties may use offsetting in the case of winding-up. This is because in winding-up proceedings, based on the lex specialis derogat *legi generali* principle<sup>25</sup> the set-off rules of the Civil Code do not apply, it is not even

<sup>22</sup> Act XLIX of 1991 on Bankruptcy and Winding-Up Proceedings

<sup>23</sup> Gf.III.30.583/2015/5.

<sup>24</sup> BDT2018. 3939., Gfv.VII.30.772/2016/3., 23.Fpkh.546/15/19.

<sup>25</sup> The specific provision is a derogation from the general one.

a prerequisite that the claims must be identical.<sup>26</sup> In this respect, the Bankruptcy Act therefore grants a wider right of set-off than the Civil Code.

In our opinion, the rules of the Bankruptcy Act on offsetting cannot be interpreted in such a way as to rule out the application of the provisions of the Civil Code or the contract between the parties. The set-off rules of the Bankruptcy Act are restrictive and limiting in nature: they allow the offsetting of claims that meet the additional conditions set out in it. Section 36 (1) of the Bankruptcy Act is not aimed at altering the content of the contract between the parties, but to prevent the offsetting of certain claims in winding-up proceedings.

# The effect of the termination of a large corporate loan agreement on the preclusion of offsetting

The question is, whether the condition precluding the debtor's right of set-off in the event of termination of the contract by notice of termination applies after the termination of the contract. Under the rules of the Civil Code on the termination of contracts, in the event of termination of a contract, the contractual obligations are replaced by the obligation of settlement between the parties. Consequently, the preclusion of the right of set-off do not apply between the parties after termination of the contract, unless otherwise agreed by the parties. This is confirmed by the fact that in Case No.3939 BDT2018, the very reason given by the court for the existence of a condition precluding offsetting was that the contract between the parties had not lapsed, as a result of which its provisions were still in force and applicable between the parties. If therefore the creditor terminates the contract and brings the outstanding debt to maturity by bringing forward the due date of the debt, the debtor may offset their outstanding financial receivables from the creditor under this debt in accordance with the general rules of the Civil Code.

In addition, the law may allow offsetting by the large corporate debtor, notwith-standing the contractual provisions adopted between the parties. Section 2 (5) of the Government Decree 151/2022. (IV. 14.) on the different application of Act CCXXXVII of 2013 on Credit Institutions and Financial Undertakings and certain related provisions of law makes it clear that if a security deposit established between the financial institution and the customer to secure the receivables of the financial institution is to be released or the subject of the security deposit is to be settled, the liquidator shall immediately comply with this.

### Offsetting risks and their management

A declaration of set-off made by a large corporate debtor can remove the mortgage cover in its entirety. The risk of set-off is addressed by the Civil Code on the one hand, allowing the large corporate debtor to set off against the MNB receivables

<sup>26</sup> See: BH1999 36., BH1996 113.

from the credit institution that were already established on a legal basis (at the time of the notification of the mortgage). Consequently, in managing risks associated with offsetting, the MNB expects that the debtor will be notified of the pledge by the large corporate debtor and that the debtor of the secured large corporate receivable will undertake to refrain from making any statement that would terminate or adversely affect the MNB's right to receive satisfaction from the large corporate debt.

### Contractual stipulations on the transferability of large corporate receivables

Contracts often include clauses regarding changes of creditors. Such constraints are typically found in contracts of companies with a high market capitalisation in their respective industries, presumably due to the stronger bargaining powers of the debtors. In view of these provisions, it is often actually substantial loans to the best debtors that do not qualify as acceptable collateral. Two types stipulations or their combinations are typically found in contracts. In one case a change of creditor is subject to the prior consent of the debtor. In the other case the range of possible new creditors is limited.

If the debtor's prior consent is required for a change creditors, the discrepancy with the rules can be easily resolved. In this case, the debtor's prior consent has to be obtained before the asset is provided as collateral, ensuring thereby that the MNB can continue to exercise its right of satisfaction without restriction, in case it is triggered. To the extent that the contract defines the circle of potential new creditors, it significantly limits the MNB's right to exercise its right of satisfaction. Such clauses usually only allow the transfer of rights to a credit institution or a credit institution within the creditor's group. Pursuant to Section 5:134 (1) of the Civil Code the pledgee – acting in the place of and on behalf of the pledged object's owner – is entitled to transfer the ownership of the pledged object, and thus this provision of the contract also binds MNB as the pledgee wishing to transfer the pledged object in place of its owner. Since these contractual clauses substantially limit the method of enforcement which the MNB could exercise most effectively, taking into account factors of time and money, the MNB considers them to be in breach of the requirements set out in the Business Conditions. It should be noted that compliance with the Business Conditions can be ensured by means of a contractual amendment even in this case, however as this can be interpreted as an amendment to the disadvantage of the debtor, they rarely agree to this type of amendment.

As a prerequisite for accepting a large corporate receivable as collateral, the MNB requires that it be freely marketable and transferable or that the creditor or debtor ensures that the MNB, in exercising its right of satisfaction, validly assigns the receivable, failing which the recovery of the central bank claims is impeded.

# Issues relating to assignment of assets as collaterals and the right of purchase, in the case of large corporate receivables

Assignment and right to purchase for collateral purposes are known as fiduciary collateral. An assignment for collateral purposes is a transfer of a receivable by way of security (Lajer-Leszkoven, 2004), such as when a large corporation debtor assigns its receivable or future receivables to a credit institution as security covering for a debt arising from its loan agreement. In contrast to assignment for security purposes, a right to purchase for security purposes is a fiduciary security over a loan where the debtor, as security for a loan granted by the creditor, grants the creditor a right to purchase the collateral in the event of default. In other words, the credit institution acquires a right to purchase an asset – typically real estate – of the debtor large enterprise.

Since a credit institution needs to ensure that its collaterals are enforceable by the MNB or a third party as well in the event of a transfer of the large corporate receivable in the course of the enforcement of a pledge, the question to be examined is whether the fiduciary credit collateral is transferred by the assignment of the large corporate receivable or whether some additional legal transaction is required.

The Civil Code does not contain stipulations on whether the fiduciary credit securities referred to above are transferred by assignment, therefore it is clear from the wording of the legislation that, due to the lack of collateral, these securities are not transferred to the new obligee together with the receivable.<sup>27</sup>

In the case of assignment of collateral security, the receivable serving as collateral is transferred to the beneficiary of the collateral, and, accordingly, the beneficiary of the collateral has the right to dispose of the assigned property, and can assign the receivable in his own name, acting as its owner (Gárdos-Gárdos, 2018). This specificity does not allow the transfer of the secured large corporate receivable together with its collateral, since the receivable assigned to the credit institution as collateral for a large corporate receivable would not automatically be transferred to the new holder in the event of the sale of the large corporate receivable. The foregoing also applies *mutatis mutandis* to a right of purchase stipulated as collateral security: the right of purchase is not transferred to the new holder when the MNB's mortgage on a large corporate receivable is enforced and the large corporate receivable is transferred.

Although the Civil Code does not expressly provide for the transfer of these collaterals – and the justification attached to the 2023 amendment specifically precludes it – under the case law of the courts "any and all collateral obligations securing a contract which the debtor of the principal obligation has itself assumed is transferred together with the claim"<sup>28</sup>. The assignee takes the place of the assignor, and thus

<sup>27</sup> The justification attached to Section 96 of Act XXXIX of 2023 on amendments to Section 6:193 of the Civil Code to improve the competitiveness of the economy specifically stipulates that exclusively the auxiliary collaterals of a receivable are transferred by assignment. The parties have to specifically agree on the transfer of non-auxiliary collaterals.

<sup>28</sup> Gf.I.30.033/1999/13.

their position stemming the assignment cannot be less favourable than that of the assignor, and they have all the rights to the claim which the assignor had against the debtor.<sup>29</sup> It should be noted that, as a consequence, it could so far have been accepted that (i) the receivable assigned by the obligor to the assignor as security together with the assignment of the claim is to be assigned by the obligee to the new obligee and (ii) the right to purchase as a right attached to the receivable is transferred together with the assignment of the receivable, however this cannot be established on the basis of the Civil Code and its aforementioned amendment.

In view of the fact that, as stated above, the fiduciary collaterals are not transferred with the receivable due to the lack of collateral, the MNB expects the credit institution to make a conditional declaration (offer) to transfer the receivable assigned as collateral or the right of purchase to the MNB or to a third party designated by the MNB, which declaration will take effect upon the opening of the MNB's right of satisfaction.

### Guarantee

Large corporate loans are often secured by a guarantee issued by a third party as well. By its abstract nature, a guarantee is not of a collateral nature but independent (Wellmann, 2021). This means that the content and conditions of the guarantor's obligation are directly determined by the guarantee itself, the guarantor does not fulfil the obligation of another entity, but - in case of default of the obligor - its own obligation (Vékás-Gárdos, 2021). This specificity hinders the mobilisation of large corporate receivables secured by guarantees, as detailed below. The Civil Code does not address the transfer of independent collaterals, and consequently such collaterals are not transferred by assignment. The pledging of the large corporate receivable and the enforcement of the pledge by the MNB does not make the guarantee enforceable against the guarantor, and the transfer of the large corporate receivable - in the course of the enforcement of the pledge - does not make the guarantee enforceable by the MNB or a third party. The right to call on the guarantee may, however, be transferred in advance pursuant to Section 6:433 of the Civil Code and there is no obstacle to the assignment of a monetary claim against the guarantor either (Vékás-Gárdos, 2021). The Civil Code also allows a creditor to designate the person to whom the guarantor is obliged to make the payment, in this case however, unlike in the case of the transfer of the right to call and in that of assignment, the third party will not be entitled to claim performance by the guarantor.

In view of the above, the MNB expects the credit institution to obtain the guarantor's declaration as per Section 6:433 of the Civil Code in which the guarantor

<sup>29</sup> Curia Gfv. 30.183/2021/4. [28]: "In the case of assignment, a distinction must be made between the rights attached to the receivable and those attached to the contract as a whole. The former are transferred with the assignment of the claim, but the latter, including the declaration of the consequences of an invalid contract, can only be transferred to the assignee by an express contract of assignment."

agrees in advance that if the MNB enforces its mortgage, the MNB or a third party named by it becomes entitled to enforce, i.e. to call, the guarantee.

### **Syndicated loan agreements**

A syndicated loan is one granted by a group of lenders to a debtor under a syndicated loan agreement. The most salient difference between syndicated loans and other credit claims lies in the number of parties involved and their respective roles. A typical syndicated loan scheme involves one or more brokers, several lenders and the borrower. Under syndicated loans, each creditor usually has its own legal claim on the debtor. It is typical, however, that most actions against the debtor can only be carried out through the broker performing a legal or administrative function (Csizmazia-Gárdos, 2007). Accordingly, the broker's involvement may be necessary for the encumbrance, assignment or enforcement of the credit claim against the debtor itself. Additionally, the requirement of unrestricted transferability is prejudiced if the consent of the co-creditors and the borrower is required for the encumbrance or transfer of the syndicated loan claim.

The MNB does not preclude syndicated loans as eligible collateral, but they are only acceptable if they meet all of the conditions laid down in the mortgage contract and the Business Conditions. The conditions must be met by both the loan agreement and the syndication agreement. Moreover, the MNB requires that the loan agreement or the syndication agreement discloses the amount of the mortgaged loan receivable, and that the syndicate agreement ensures that the credit institution can encumber its large corporate receivable, that the co-creditors of the syndicate agreement cannot modify the loan agreement to the detriment of the MNB, and that they cannot prevent the MNB from exercising its mortgage right.

Syndicated loan agreements or syndicate agreements that require the debtor's consent to the transfer or encumbrance of the claim or under which the consent of the majority of creditors or a group of creditors is sufficient to amend the syndicated loan agreement and its security agreements or to enforce the security, typically fail to fulfil the above conditions.

### **Summary**

In this study we sought to answer the question of how loans to real economy participants comply with the MNB's collateral management principles in practice, with regard, in particular, to the requirement to manage legal risk. The main requirements regarding the central bank's collateral management were discussed; this was followed by a description of the rules applicable to large corporate loans accepted as collateral by the MNB and the legal risks inherent in certain contractual provisions and how to manage them. Clearly, known legal risks can be managed through a set of detailed terms and conditions, but the legal background work and reporting process required to comply with such terms and conditions means that accepting large

corporate receivables as collateral results in a significant additional administrative burden compared to the blocking of securities or the placement of liquidity absorbing deposit.

Although the key focus of this study is on the analysis of legal risks, it can also be concluded that compliance with other principles of collateral management can also be achieved by setting up an appropriate framework of conditions. It should be noted, however, that the general risks associated with accepting large corporate loans are by default higher than the risks associated with accepting securities as collateral.

From the perspective of credit institutions, the above mentioned lower marketability is an advantage, as there is a significant benefit in terms of ALM if the provision securities a collaterals – which are mostly high quality liquid assets (HQLA) – can be replaced by the provision of less marketable credit transactions – which are considered illiquid assets – as collaterals. The advantage that may be so gained somewhat outweighs the disadvantages of this additional administrative burden.

It should also be pointed out however, that the standard contracts used by credit institutions often include clauses and legal provisions that are not conform to the MNB's terms and conditions. In the case of debtors with a smaller balance sheet totals, a typical example is the use of fiduciary credit guarantees, while in the case of debtors with a larger balance sheet totals, the change of the creditor is often restricted and the syndicated nature of the transaction makes it difficult to reconcile the provisions with the MNB's Business Conditions in general.

### References

- Auria, L., Bingmer, M., Mateo, C., Graciano, C., Charavel, C., Gavilá, S., Iannamorelli, A., Levy, A., Maldonado, A., Resch, F., Rossi, A. M., Sauer, S. (2021). Overview of central banks' in-house credit assessment systems in the euro area. ECB Occasional Paper Series, No 284. <a href="https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op284~bbce5257bf.en.pdf">https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op284~bbce5257bf.en.pdf</a>. Downloaded: I May 2023
- 2. Bindseil U., González F., Tabakis E. (2009). Risk Management for Central Banks and Other Public Investors. Cambridge University Press.
- 3. Bindseil, U. (2014). Monetary Policy Operations and the Financial System. Oxford University Press
- 4. BIS. (2013): Central bank collateral frameworks and practices. <a href="https://www.bis.org/publ/mktco6.htm">https://www.bis.org/publ/mktco6.htm</a> Downloaded: 1 May 2023
- Bodnar, L., Luspay, M., Pintér, C. (2015): Az egynapos fedezetlen bankközi ügyletek időzítési jellemzői a VIBER-ben. (Timing characteristics of overnight unsecured interbank transactions in VIBER.) Hitelintézeti Szemle, Vol. 14 Ed. 4, December 2015, pp. 124–154 <a href="https://hitelintezetiszemle.mnb.hu/letoltes/6-bodnar-lus-pay-pinter.pdf">https://hitelintezetiszemle.mnb.hu/letoltes/6-bodnar-lus-pay-pinter.pdf</a> Downloaded: 01.08.2023
- 6. Bodzási, B. (2013): Hitelbiztosítékok (Credit collaterals), HVG-ORAC, Budapest.
- 7. Calza, A., Hey, J-B., Parrini, A. & Sauer, S. (2021): Corporate loans, banks' internal risk estimates and central bank collateral: evidence from the euro area. Working

- Paper Series 2579, European Central Bank. <a href="https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2579~e7d577c5ad.en.pdf">https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2579~e7d577c5ad.en.pdf</a>. Downloaded: I May 2023
- 8. Cassola, N., Koulischer, F. (2019): The collateral channel of open market operations. Journal of 560 Financial Stability 41, 73-90. <a href="https://doi.org/10.1016/j.jfs.2019.03.002">https://doi.org/10.1016/j.jfs.2019.03.002</a> Downloaded: I May 2023
- 9. Chailloux, A., Gray, S., & McCaughrin, R. (2008): Central Bank Collateral Frameworks: Principles and Policies. YPFS Documents (Series 1). 11257. <a href="https://elischolar.library.yale.edu/ypfs-documents/11257">https://elischolar.library.yale.edu/ypfs-documents/11257</a> Downloaded: 1 May 2023
- 10. Csizmazia, N., Gárdos, I. (2007). Az önálló zálogjogról kodifikációs szempontból. (On the independent pledge from a codification point of view.) Polgári Jogi Kodifikáció (Civil Law Codification), 2007/3. pp. 32-41, <a href="https://gmtlegal.hu/cikkek/az-onallo-zalogjogrol-kodifikacios-szempontbol.php?oldalszam-=16&kid=1&did=50 (gmtlegal.hu)</a> Downloaded: 4 September 2023
- II. ECB (2013): Collateral eligibility requirements a comparative study across specific frameworks. <a href="https://www.ecb.europa.eu/pub/pdf/other/collateralframeworksen.pdf">https://www.ecb.europa.eu/pub/pdf/other/collateralframeworksen.pdf</a> Downloaded: I May 2023
- 12. Gárdos, I., Gárdos, P. (2018): Fidúcia és dologi biztosítékok A fiduciárius hitel-biztosítékok helyzete a törvénymódosításokat követően. (Fiduciary securities and securities in rem The situation of fiduciary securities following the amendments to the law.) Polgári Jog (Civil Law) 2018/5.
- 13. Juhász, L. (2022): A magyar fizetésképtelenségi jog kézikönyve I. kötet (The Hungarian Insolvency Law Handbook Volume I,) HVG-ORAC, Budapest
- 14. Kolozsi, P. P., Horváth, G. (2020): Mennyit ér a likviditás? (How much is liquidity worth?) A magyar bankrendszer likviditáskeresleti függvényének becslése. (Estimation of the liquidity demand function of the Hungarian banking system.) Közgazdasági Szemle 67: 2 pp. 113-139., 27 p. (2020).
- 15. Koulischer, F., Van Roy, P. (2017). Using bank loans as collateral in Europe: The role of liquidity and funding purposes, NBB Working Paper, No. 318, Central Bank of Belgium, Brussels <a href="https://www.econstor.eu/bitstream/10419/173774/1/wp318en.pdf">https://www.econstor.eu/bitstream/10419/173774/1/wp318en.pdf</a> Downloaded: I May 2023
- 16. Koulischer, F., Struyven, D. (2014). Central bank liquidity provision and collateral quality. Journal of Banking & Finance, 49, 113-130. <a href="https://www.sciencedirect.com/science/article/pii/S0378426614002891">https://www.sciencedirect.com/science/article/pii/S0378426614002891</a> Retrieved: 1 May 2023
- 17. Lajer, Zs., Leszkoven L. (2004). A bizalmi (fiduciárius) biztosítékokról. (On fiduciary collaterals.) Civil Law Codification No 1-2. <a href="https://ptk2013.hu/polgari-jogi-kodifikacio/lajer-zsolt-leszkoven-laszlo-a-bizalmi-fiduciari-us-biztositekokrol-pjk-20041-2-23-33-0/363">https://ptk2013.hu/polgari-jogi-kodifikacio/lajer-zsolt-leszkoven-laszlo-a-bizalmi-fiduciari-us-biztositekokrol-pjk-20041-2-23-33-0/363</a> Downloaded: 4 September 2023
- 18. Lentner, Cs., Horbulák, Zs. (2013): A bankszabályozás tudományos rendszertana és fejlődéstörténete. (The scientific taxonomy and history of the development of banking regulation.) In: Lentner, Cs. (ed.) Bankmenedzsment (Bank Management): Bankszabályozás pénzügyi fogyasztóvédelem. (Banking regulation financial consumer protection.) Budapest, Hungary: Nemzeti Közszolgálati és Tankönyv Kiadó Zrt. (National Public Service and Textbook Publishing House Zrt.) (2013) 526 p. pp. 27-86., 60 p.

- 19. Magyar Nemzeti Bank. (2020): A Magyar Nemzeti Bank monetáris politikai eszköztára a COVID-19 válság időszakában: likviditás, biztonság, rugalmasság. (Monetary policy instruments of the Magyar Nemzeti Bank in the period of the COVID-19 crisis: liquidity, safety, flexibility.) https://www.mnb.hu/letoltes/ jegybanki-eszkoztar-2020-covid19.pdf. Downloaded: 1 May 2023
- 20. Osztovits, A. (2015): A csődeljárásról és a felszámolási eljárásról szóló 1991. évi XLIX törvény kommentárja. (Commentary on Act XLIX of 1991 on bankruptcy and winding-up proceedings.) OPTEN Informatikai Kft., (OPTEN Informatics Ltd.,) Budapest.
- 21. Tabakis, E., Tamura, K. (2013): The use of credit claims as collateral for Eurosystem credit operations. Occasional Paper Series 148, European Central Bank. https://www.ecb.europa.eu/pub/pdf/scpops/ecbocp148.pdf. Downloaded: 1 February 2023
- 22. Varga, J. Z. (2016): A bankközi likviditási többlet hatása a vállalati és bankközi kamatokra. (The impact of the interbank liquidity surplus on corporate and interbank interest rates.) A bankközi likviditási többlet hatása a vállalati és bankközi kamatokra. (Financial Review) 2016/1. 95-110., http://publicatio.bibl.u-szeged. hu/8844/1/varga\_2016\_1.pdf Downloaded: 01.08.2023
- 23. Vékás, L., Gárdos, P. (2021): Nagykommentár a Polgári Törvénykönyvről szóló 2013. évi V. törvényhez, (Detailed commentary on Act V of 2013 on the Civil Code) Complex, Budapest.
- 24. Wellmann, Gy. (2021): A Ptk. magyarázata (Explanation of the Civil Code), HVG-ORAC, Budapest
- 25. Zeman, Z.; Kalmar, P.; Lentner, Cs. (2018). Evolution of post-crisis bank regulations and controlling tools: A systematic review from a historical perspective. Banks And Bank Systems 13: 2 pp. 130-140., 11 p.