The ESRB template on the O-SII buffer

Notifying national authority						
1.1 Name of the notifying authority	Magyar Nemzeti Bank (MNB)					
2. Description	of the measure					
	Institution LE			El code		
	OTP Bank Nyrt.			OO00A18X956		
	UniCredit Bank Hungary Zrt.			1696PMW8T44		
2.1 Concerned	Kereskedelmi és Hitelbank Zrt.			KFUXYFTU2LHQFQZDQG45		
institution or	ERSTE BANK HUNGARY Zrt.			549300XWJHRKLHU2PS28		
group of	Raiffeisen Bank Zrt.			5493001U1K6M7JOL5W45		
institutions	MTB Magyar Takarékszövetke	zeti Bank Z	rt. 2594004MC7\	VOKSK7Z633		
	CIB Bank Zrt.		549300MSY5I	NIVC0BME80		
	MKB Bank Zrt.		3H0Q3U74FV	FED2SHZT16		
	The measure is applied on the h	The measure is applied on the highest level of consolidation.				
	Level of the buffer					
	Institution		applied			
			From			
			1 January 2020			
	OTP Bank Nyrt.		2.000% 1.000%			
	UniCredit Bank Hungary Zrt.		1.000%			
2.2 Level of the	Kereskedelmi és Hitelbank Zrt. ERSTE BANK HUNGARY Zrt.		0.500%			
buffer applied	Raiffeisen Bank Zrt.		0.500%			
	MTB Magyar Takarékszövetke	zeti Bank				
	Zrt.		0.500%			
	CIB Bank Zrt.		0.500%			
	MKB Bank Zrt.		0.500%			
	The final buffer rates did not change compared to those indicated preliminary for 2020 in the notification of last year.					
	Institution	Ultimate EU Parent Institution		LEI code of Parent Institution		
	OTP Bank Nyrt.	OTP Bank Nyrt.		529900W3MOO00A18X956		
	UniCredit Bank Hungary Zrt.	UniCredit S.p.A .		549300TRUWO2CD2G5692		
	Kereskedelmi és Hitelbank Zrt.	KBC Group NV		213800X3Q9LSAKRUWY91		
2.3 Name of the	ERSTE BANK HUNGARY Zrt.	Erste Group Bank AG		PQOH26KWDF7CG10L6792		
EU ultimate parent	Raiffeisen Bank Zrt.	Raiffeisen Bank International AG		9ZHRYM6F437SQJ6OUG95		
institution	MTB Magyar Takarékszövetkezeti Bank Zrt.	Magyar Takarékszövetkezeti Bank Zrt.		2594004MC7VOKSK7Z633		
	CIB Bank Zrt.	Magyar Takarekszovetkezeti Bank Zrt. Intesa San Paolo S.p.A.		549300UM31PJ24TTSR94		
	MKB Bank Zrt.	MKB Bank Zrt.		3H0Q3U74FVFED2SHZT16		
		mine built Lit.				

The following subsidiaries of OTP Bank Nyrt. are identified as O-SIIs according to the latest publicly available information of notifications:

- OTP Banka Hrvatska d.d. (Croatia) (LEI code: 5299005UJX6K7BQKV086)
- DSK Bank EAD (Bulgaria) (LEI code: 529900GEH0DAUTAXUA94)
- OTP Bank S.A. (Romania) (LEI code: 5299003TM0P7W8DNUF61)

2.4 Names of subsidiaries

For a list of subsidiaries, see OTP Bank's Annual Report 2018, p. 167. available: https://www.otpbank.hu/portal/en/IR/Reports/Annual

Other institutions identified as O-SIIs for Hungary do not have any foreign subsidiary identified as O-SII, moreover they do not have relevant foreign presence through subsidiaries in any other country.

3. Timing of the measure

3.1 Timing of the Decision	The decision was taken by the Financial Stability Council of MNB on 22 October 2019.
3.2 Timing of the Publication	The intended date of the publication is 29 November 2019.
3.3 Disclosure	The names of the identified institutions, their O-SII scores and their effective O-SII capital buffer requirement will be published on the internet webpage of the MNB.
3.4 Timing of Application	The determined buffers will be applicable from 1 January 2020.
3.5 Phasing in	The phase in period for the O-SII buffer requirements runs from 1 January 2017 until 1 January 2020.
3.6 Review of the measure	The MNB shall annually review the group of institutions identified as O-SIIs and their respective O-SII buffer requirements.
	(Sections 89 (3) and 90 (3) b) of the Hungarian Banking Act; Article 131(6) of the CRD IV).

4. Reason for O-SII identification and activation of the O-SII buffer

4.1 Scores of concerned institution or group of institutions, as per EBA guidelines on the assessment of O-SIIs

(Article 131.3)

No changes were made to the identification methodology compared to last year's review. The MNB identified the O-SII institutions according to its methodology determined and published in 2015. First, the scoring methodology described in EBA/GL/2014/10 Title II (6-8) was carried out, applying only the mandatory indicators of Annex 1 of the guidelines. Second, the scores calculated in the first step according to Title II were reweighted and according to Title III weighted optional indicators were added resulting in the final complete indicator set. The final scores are derived from the equally weighted (i.e. a 20 percent weight for each) arithmetic mean of the indicator category scores.

Institution	Size	Importance	Complexity	Inter- connectedness	Overall score (Title II)	Additional optional indicators (Title III)	Final overall score
OTP Bank Nyrt.	3690	2879	4596	2452	3404	2343	3192
UniCredit Bank Hungary Zrt.	771	938	641	1217	892	1149	943
Kereskedelmi és Hitelbank Zrt.	807	824	920	864	854	795	842
ERSTE BANK HUNGARY Zrt.	646	619	461	841	642	642	642
Raiffeisen Bank Zrt.	609	707	536	567	605	647	613
MTB Magyar Takarékszövetkezeti Bank Zrt.	632	592	45	923	548	540	547
CIB Bank Zrt.	480	378	336	507	425	579	456
MKB Bank Zrt	468	359	179	408	353	491	381

Note: The standard overall score according to Title II can be calculated by taking the arithmetic mean of scores in size, importance, complexity and interconnectedness

categories. The MNB followed the EBA/GL/2014/10 guidelines on the assessment of O-SIIs. FINREP data were used for every available case following the guidelines' instructions, but it had to be supplemented by supervisory data reported to MNB for a significant number of institutions. In the last two years, the set of significant institutions for which the IFRS data is available has gradually expanded, which has made the scores more comparable to those of international peers, but also resulted in moderate changes in the scores of some O-SIIs. b. The MNB did not modify the threshold. Every institution identified as O-SII is above the 350 bps threshold calculated according to EBA/GL/2014/10 Title II. The MNB followed a two-step identification methodology in accordance with the quidelines. First, all of the institutions which scored equal or higher than 350 bps using the 10 mandatory indicators following the standard identification methodology described in EBA/GL/2014/10 Title II were selected as O-SIIs. Second, a supplementary method was applied in accordance with Title III (13-14) to include the 5 Optional indicators listed below in point d. These indicators were included in order to provide a more robust and relevant country-specific representation of systemic risks in relation to systemic importance. Optional indicators have been quantitatively assessed by aggregating the indicators in a supplementary, additional criterion group. The supplementary criterion group was added to the 4 standard criterion groups with an equal weighting amongst the groups (i.e. 20 percent group weight for every mandatory and for the one supplementary group). In the supplementary criterion group weights for Optional indicators were assigned according to a sum of squares type concentration index. Higher weights were assigned to the Optional indicators which were 4.2 Methodology and indicators characterized by higher values of the concentration index. In this way critical activities pursued by fewer important institutions with considerable market shares used for are deemed to be more important systemically. designation of the O-SII The optional indicators taken from Annex 2 of the guidelines which have been found relevant are the following: (Article 131.3) d1. Off-balance sheet items - market share based indicator aggregating outstanding credit facilities, guarantees and other off-balance sheet items carrying credit risk. d2. Share in clearing and settlement system – summarizes information about the market share of retail customers' transactions in the clearing system (based on the volume and number of transactions). d3. Assets under custody – market share in outstanding assets under custody. d4. Interbank claims and/or liabilities - centrality based analysis transformed into an additive indicator of unsecured interbank loans and deposits. d5. Market transaction volumes or values - centrality based analysis transformed into an additive indicator of FX swap transactions between credit institutions. The Optional indicators add substantial information about critical financial activities which are the least likely to be represented by the mandatory indicators. These indicators were selected based on analysis of correlations between basic and supplementary indicators and further expert judgement. Also these indicators proxy critical functions with high country specific importance and problematic

inter-bank market segments (d4. and d5.).

substitutability for agents of the real economy (d1. and d2.) or the financial system (d3.) and help to describe financial interconnectedness of credit institutions including network analysis approach highlighting the most important

The scores resulting from the weighted aggregate of the optional indicators are listed in the Table of 4.1 for every institution (see column Additional optional

indicators (Title III)). There is no institution which has been identified as O-SII solely as a result of the inclusion of the Optional indicators and which has not been identified as an O-SII based on the standard (Title II) indicators and scores in step 1 (see point c. about the two-phases identification process followed by the MNB). The inclusion of Optional indicators is motivated by their contribution to the accuracy of the representation of relative systemic importance as the buffer calibration is based on the final scores.

- g. No credit institution domiciled in Hungary has been excluded because of its total asset size.
- h. See the annexed excel file.
- Non-bank institutions have not been included in the calculation, because their sectoral and institutional-level systemic importance has been assessed as marginal.

4.3 Supervisory judgement

The group of O-SIIs was identified by the quantitative approach presented above.

4.4 Calibrating the O-SII buffer

No changes were made to the calibration methodology compared to last year's review. The MNB set the O-SII buffer requirements according to its methodology determined and published in 2015. The first step of the calibration is based on the formation of homogeneous groups in systemic importance to which the assignment of identical buffer rates can be justified. Following this approach three groups have been distinguished. As a general principle, institutions identified as O-SIIs are assigned at least a buffer rate of 0.5 percent. MNB assigns the maximum 2-percent buffer rate to the group with the highest score. Buffer rate calibration is undertaken based on the final scores resulting from the identification process. Different methods have been applied to support group formation. Peer analysis was also utilized for within-country and international comparison. Cluster analysis on different levels of the decomposed final score (indicator category score components (listed in the Table in 4.1) and indicators were examined) was applied to minimize within group variance and to assess the sensitivity of different grouping alternatives. The BCBS (2013) equal expected impact approach has been used to group institutions based on a probabilistic model (the final scores proxied the external impact and the distribution of the return on risk-weighted assets represented the probability of loss incidences).

As a second step, expert judgement has been brought in to check the validity of the results and to highlight hardly quantifiable aspects of the calibration.

The 2019 revision of the identification and the re-estimation of the calibration did not reveal any significant changes in the scores or in the buffer rates suggested by the calibration methods. Therefore, the buffer levels applicable for 2020 are the same as the indicative values communicated in last year's notification.

4.5 Effectiveness and proportionality of measure

The O-SII buffer is a targeted prudential instrument provided by CRDIV to decrease the probability of failure and the consequent system wide impact of those institutions which pose the greatest systemic risk as a combination of their size, the criticality of the financial functions they provide, and their highly connected positions. The increased resilience may impede the emergence of financial contagion caused by the default of highly interconnected institutions. It can safeguard the continued provision of critical financial services after taking massive losses, as market substitution of critical financial services in case an O-SII failure may not be feasible in the short run. Moreover, the potential burden imposed by the default of these institutions on bondholders, the industry and in extreme cases on the government budget also motivates the introduction of a preventive regulatory instrument (complementing the efficient recovery and resolution system in place in Hungary).

Buffer rates have been assigned to different institutions proportionally by classifying O-SIIs

into three groups according to their expected impact represented by their scores (see 4.4). The highest buffer rate was assigned to OTP Bank Nyrt., which has a size above one-third of the whole market, plays a prominent role in intermediating funds to and from the real economy, is highly interconnected with the financial system and operates with the greatest degree of cross-border complexity among domestic systemically important institutions. All other institutions identified as O-SIIs exceed 4.6 percent of the total asset size of the sector, contribute significantly to the supply of financial products and services to the real economy, are deeply interconnected with other credit institutions, and have considerable shares in financial transactions carried out through the major institutions of the domestic financial infrastructure.

The phase-in period announced in 2016 left enough time for the build-up of the capital buffer without hampering the ability of the banking system to sustainably contribute to economic growth.

5. Cross-border and cross-sector impact of the measure

a. Based on the assessment of the transmission channels of cross-border risk adjustment and regulatory arbitrage provided by the ESRB Handbook on Operationalising Macro-prudential Policy in the Banking Sector (Chapter 11) the possible negative cross-border impact of the measure is expected to be limited.

b.

- 5.1 Assessment of cross-border effects and the likely impact on the internal market
- (Recommendation ESRB/2015/2)
- Inward spillovers: The possible cross-border impact (leakages and regulatory arbitrage) is expected to be limited in Hungary. A possible channel of circumvention, the extension in systemic importance of branches or systemically less important institutions has not been observed in the previous years.
- Outward spillovers: The MNB still does not expect material negative cross-border effects on other Member States and on the Single Market. The increased resilience of the O-SIIs is beneficial for their stakeholders in other Member States and contributes to the functioning, financial integration and harmonized regulation of the single market. Within the identified O-SIIs only OTP Group has substantial cross-border activity. OTP Group's increased capitalization on a consolidated basis shall improve its subsidiaries' resilience. Also, the consolidated basis of the buffer requirement mitigates incentives for cross-border substitution of activities. Five of the eight identified O-SIIs are foreign parents' subsidiaries operating in Hungary. Due to the phase-in period which started out in 2017 and is going to be finalized in 2020, these subsidiaries have been able to plan compliance and gradually allocate the necessary solvency capital.
- 5.2 Assessment of leakages and regulatory arbitrage within the notifying Member State

Although systemically important institutions face higher capital buffer requirements than other institutions, further institutions are going to be automatically identified as O-SIIs if they grow significantly in size, in providing critical financial functions or in their interconnectedness. Consequently O-SII buffer requirements are going to be imposed on them following the regular yearly revision of systemic importance (or in case any unique incidence may render the revision necessary in-between the regular yearly reassessments). Furthermore, any cross-sectoral leakage that may increase the systemic relevance of non-bank financial institutions (e.g. investment firms) will be evaluated regularly and taken into account when identifying systemic institutions, but has not been observed so far.

6. Combinations and interactions with other measures

6.1 Combinations between G-SII and O-SII buffers (Article 131.14) The MNB has not identified any institutions as G-SIIs within its jurisdiction. On the other hand one institution identified as O-SII by the MNB is the subsidiary of an institution subject to G-SII buffer. (see 6.3.) The MNB did not set higher buffer rate for any of the institutions concerned than their parents' buffer rates.

The MNB applies the SyRB and the O-SII buffers for mitigating different kind of systemic risks. Therefore the SyRB is not applied to mitigate risks related to those targeted by the O-SII buffer. The SyRB and the O-SII buffer are cumulative as the SyRB applies only to domestic exposures in Hungary.

Considering the stock of problem exposures, the MNB first prescribed a SyRB from 1 July

6.2 Combinations with SRB buffers (Article 131.14 + Article 133.5)

Considering the stock of problem exposures, the MNB first prescribed a SyRB from 1 July 2017 in case of the CIB Bank Zrt. (2 percent) and the Raiffeisen Bank Zrt. (1.5 percent). In June 2018, the MNB reviewed the SyRB rates determined in 2017. From 1 July 2018 Raiffeisen Bank Zrt. and from 1 July of 2019 CIB Bank Zrt. are not required anymore to maintain a systemic risk buffer following the appropriate cleaning of problem exposures. While the SyRB is still in place as a backstop measure against any future build-up of problem domestic commercial real estate project loans, currently there are no banks which are required to maintain a systemic risk buffer for CRE problem project exposures. Moreover, from 1 January 2020 the scope of the regulation is extended to cover foreign currency domestic CRE project loan exposures qualified as non-problem in order to mitigate potential systemic risks related to the dynamically growing CRE project financing segment. (For further information on the intended use of a systemic risk buffer see https://www.esrb.europa.eu/pub/pdf/other/esrb.notification20190918_srb_hu~ea5f538696. en.pdf?26a7ce8fe8c8dd0dc5e91c566542bef5)

SyRB and O-SII buffers are applied on the highest consolidation level achievable under the jurisdiction of the MNB. This means that for the Hungarian banks with foreign parent institutions, the buffers are applied on a sub-consolidated level.

6.3 O-SII requirement for a subsidiary (Article 131.8)

Institution	EU Parent Institution	Final O-SII buffer	G-SII buffer
UniCredit Bank Hungary Zrt.	UniCredit S.p.A.	1%	1%
Kereskedelmi és Hitelbank Zrt.	KBC Group NV	1.5%	-
Raiffeisen Bank Zrt.	Raiffeisen Bank International AG	2%	-
ERSTE BANK HUNGARY Zrt.	Erste Group Bank AG	2%	-
CIB Bank Zrt.	Intesa San Paolo S.p.A.	0.75%	-

6.4 Interaction with other measures

O-SIIs are subject to intensified supervisory attention and appropriate resolution planning, but currently there are no other measures applied to mitigate risks covered by the O-SII buffer.

7. Miscellaneous

Contact person(s) for further inquiries (name, phone number and e-mail address)

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7.2 Any other relevant information