The ESRB template on the O-SII buffer

1. Notifying national authority						
1.1 Name of the notifying authority	Magyar Nemzeti Bank (MNB)					
2. Description	of the measure					
	Institution		LEI code			
	OTP Bank Nyrt.		529900W3	MOO00A18X9	56	
0.4.0	UniCredit Bank Hungary Zrt.	Y28RT6G0	Y28RT6GGYJ696PMW8T44			
2.1 Concerned institution or	Kereskedelmi és Hitelbank Zrt	KFUXYFT	KFUXYFTU2LHQFQZDQG45			
group of	ERSTE BANK HUNGARY Zrt.		549300XW	549300XWJHRKLHU2PS28		
institutions	Raiffeisen Bank Zrt.		5493001U	5493001U1K6M7JOL5W45		
Institutions	Magyar Takarékszövetkezeti E	Bank Zrt.	2594004M	2594004MC7VOKSK7Z633		
	MKB Bank Zrt.		3H0Q3U74	4FVFED2SHZT	16	
	CIB Bank Zrt.		549300MS	Y5NIVC0BME	80	
	The measure is applied on the highest level of consolidation.					
			Level of the bu	ıffer applied]	
	Institution		From	From	-	
			1 January	1 January		
			2019	2020	<u> </u>	
	OTP Bank Nyrt.	1.500%	2.000%	-		
	UniCredit Bank Hungary Zrt.	0.750%	1.000%	-		
2.2 Level of the	Kereskedelmi és Hitelbank Zrt	0.750%	0.500%	1		
buffer applied	ERSTE BANK HUNGARY Zrt. Raiffeisen Bank Zrt.	0.375%		1		
		0.375%	0.500% 0.500%			
	Magyar Takarékszövetkezeti E MKB Bank Zrt.	0.375%	0.500%			
	CIB Bank Zrt.	0.375%	0.500%			
	The final buffer levels did not change compared to the notification last year. The buffer levels for 2020 are indicative, as the MNB carries out the identification exercise and the setting of capital buffer rates every year.					
	Institution	Ultimate EU Parent Institution		LEI code of	LEI code of Parent Institution	
	OTP Bank Nyrt.	OTP Bank Nyrt.		529900W3	529900W3MOO00A18X956	
2.3 Name of the	UniCredit Bank Hungary Zrt.	UniCredit S.p.A .		549300TRI	549300TRUWO2CD2G5692	
EU ultimate parent	Kereskedelmi és Hitelbank Zrt.	KBC Group NV		213800X30	213800X3Q9LSAKRUWY91	
institution	ERSTE BANK HUNGARY Zrt.	Erste Group Bank AG		PQOH26K	PQOH26KWDF7CG10L6792	
	Raiffeisen Bank Zrt.	Raiffeisen Bank International AG		9ZHRYM6I	9ZHRYM6F437SQJ6OUG95	
	Magyar Takarékszövetkezeti Bank Zrt.	Magyar Taka	rékszövetkezeti Bank	Zrt. 2594004M	2594004MC7VOKSK7Z633	
	MKB Bank Zrt.	MKB Bank Zrt.		3H0Q3U74	3H0Q3U74FVFED2SHZT16	
	CIB Bank Zrt.	Intesa San Paolo S.p.A.		549300UM	549300UM31PJ24TTSR94	

The following subsidiaries of OTP Bank Nyrt. are identified as O-SIIs for 2018:

- OTP Banka Hrvatska d.d. (Croatia) (LEI code: 5299005UJX6K7BQKV086)
- Splitska Banka d.d. (Croatia) (LEI code: 54930006A7BQRKDHV809) (In May 2017, OTP Banka Hrvatska acquired Splitska banka, full integration expected until October 2018.)
- DSK Bank EAD (Bulgaria) (LEI code: 529900GEH0DAUTAXUA94)

For 2017 the OTP Bank S.A. (Romania, LEI code: 529900W3MOO00Al8X956) was also identified, but last year it was deleted from the Romanian O-SII list.

For a list of subsidiaries, see OTP Bank's Annual Report 2017, p. 162. 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

2.4 Names of

subsidiaries

3.1 Timing of the Decision	The decision was taken by the Financial Stability Council of MNB on 18 September 2018.				
3.2 Timing of the Publication	The intended date of the publication is 25 October 2018.				
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 2019.				
3.5 Phasing in	The phase in period for the O-SII buffer requirements runs from 1 January 2017 until 1 January 2020. For the expected institution specific buffer rates for 2020 see the table in box 2.2.				
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.	3606	2849	4545	2286	3322	2187	3095
UniCredit Bank Hungary Zrt.	751	920	825	1094	898	1196	957
Kereskedelmi és Hitelbank Zrt.	823	866	708	992	847	759	830
ERSTE BANK HUNGARY Zrt.	606	628	686	643	641	712	655
Raiffeisen Bank Zrt.	595	694	413	583	571	712	599
Magyar Takarékszövetkezeti Bank Zrt.	673	591	78	688	507	621	530
MKB Bank Zrt	558	430	244	499	433	550	456
CIB Bank Zrt.	460	375	297	384	379	570	417

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.

- a. 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. Since last year the set of significant institutions for which the IFRS data is available has 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 guidelines. 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 characterized by higher values of the concentration index. In this way critical activities pursued by fewer important institutions with considerable market shares are deemed to be more important systemically.

4.2 Methodology and indicators used for designation of the O-SII

(Article 131.3)

- d. The optional indicators taken from Annex 2 of the guidelines which have been found relevant are the following:
 - 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.
- e. 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 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 inter-bank market segments (d4. and d5.).

- f. 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

O-SII buffer

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

4.4 Calibrating the

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 2018 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 2019 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, it plays a prominent role in intermediating funds to and from the real economy, it is highly interconnected with the financial system and it operates with the greatest degree of cross-border complexity among domestic systemically important institutions. All other institutions identified as O-SIIs exceed 4.5 percent of the total asset size of the sector, they contribute significantly to the supply of financial products and services to the real economy, they are deeply interconnected with other credit institutions, and they have considerable share in financial transactions carried out through the major institutions of the domestic financial infrastructure.

The extended phase-in period announced in 2016 is still expected to leave 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.
- 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 announced in 2016 we expect these subsidiaries to be able to accumulate the necessary capital on their own, therefore, in most cases capital transfer from parents will not be required.
- 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, which 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.

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.

6.2 Combinations with SRB buffers (Article 131.14 + Article 133.5)	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 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 the MNB requires CIB Bank Zrt. to maintain a decreased, 1-percent SyRB on domestic RWA, while Raiffeisen Bank Zrt. is not obliged to maintain an SyRB buffer henceforth. The institution that has been prescribed an SyRB has to maintain an SyRB calculated by multiplying its SyRB rate with its domestic RWA. (For further information see the http://www.mnb.hu/en/financial-stability/macroprudential-policy/the-macroprudential-toolkit/instruments-to-limit-excessive-exposure-concentrations) 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 it is applied on a sub-consolidated level.				
6.3 O-SII requirement for a subsidiary (Article 131.8)	Institution UniCredit Bank Hungary Zrt. Kereskedelmi és Hitelbank Zrt. Raiffeisen Bank Zrt. ERSTE BANK HUNGARY Zrt. CIB Bank Zrt.	EU Parent Institution UniCredit S.p.A. KBC Group NV Raiffeisen Bank International AG Erste Group Bank AG Intesa San Paolo S.p.A.	Final O-SII buffer 1% 1.5% 2% 2% 0.75%	G-SII buffer 1% - - -	
6.4 Interaction with other measures 7. Miscellaneo 7.1 Contact	Contact person(s) for further inqui	measures applied to mitigate	e risks covered	by the O-SII	
person(s) at notifying authority 7.2 Any other relevant information	Mr Péter Fáykiss Director, Macroprudential Directorate Phone: +36 (1) 428 2600/2239 Email: faykissp@mnb.hu				