
Analyzing, Assessing and Determining Critical Functions and Relevant Credit Institutions within the Banking Resolution Regulatory Frame - Proposal for a Practical Approach

Author: Gabriel MITRACHE, PhD student, Academia de Studii
Economice Bucuresti

The 2014 framework for the recovery and resolution of credit institutions and investment firms led by the Directive 2014/59/EU of the European Parliament and of the Council introduces the concept of critical functions and the requirement for resolution authorities to identify and ensure their continuance in case of resolution; however the guidelines on how to determine these critical functions (including advice in secondary legislation and other technical guidelines) are very broad, leaving room for ambiguity, different approaches and non-comparable results.

This paper proposes a practical methodology for identifying the critical functions and the relevant credit institutions within the BRR Directive framework.

Keywords: banking resolution, critical function, central banking, bank recovery, bank supervision, BRRD

JEL Code: C80, E44, E61, F34, G21, G28, H12, K23.

Disclaimer

The author of this paper is employed by the National Bank of Romania within the Bank Resolution Department. The opinions and assessments herein presented pertain to the author and should not be related to the views of National Bank of Romania.

The National Bank of Romania is not liable in any way for the present paper.

*
* *

This paper presents personal thoughts of the author for further development and own analysis of the authorities.

This document should not, in any way, be read as a legal document or as legal interpretation of the BRRD and related legislation.

This document is intended to be a useful development tool; however it is not intended to encourage a singular and un-challenged approach.

*
* *

Although the BRRD framework refers to investment firms, in addition to credit institution, the present methodology was conceived only to be applicable to the latter. Similarities and consequent development and modifications could be adopted in order for the methodology to be applicable to all entities covered by the BRRD.

Introduction

The Banking Recovery and Resolution Directive (BRRD)¹ introduces the concept of critical function and the objective (among others) of resolution actions to ensure the continuity of these critical functions² ('critical functions' means activities, services or operations the discontinuance of which is likely in one or more Member States, to lead to the disruption of services that are essential to the real economy or to disrupt financial stability due to the size, market share, external and internal interconnectedness, complexity or cross-border activities of an institution or group, with particular regard to the substitutability of those activities, services or operations)³.

Sections A and B of the BRRD, as well as level two legislation, set out the requirement, when drawing-up recovery and resolution plans, to identify the critical functions of institutions or groups⁴.

Review of existing information

Level two legislation, namely the Commission Delegated Regulation (EU) 2016/778 sets out more detailed guidelines on how to determine the critical functions, both in the preamble and in the contents of article 6.

The Financial Stability Board also set out guidelines on determining critical functions in their paper "Recovery and Resolution Planning for Systemically Important Financial Institutions: Guidance on Identification of Critical Functions and Critical Shared Services".

The issue with these guidelines is that they are too broad, lack any scale, specificity or reference point. The ambiguity can be observed from the conclusion drawn by EBA in its Report "Comparative report on the approach

¹ Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012, of the European Parliament and of the Council Text with EEA relevance

² Article 31, (2) a) of the preamble of BRRD

³ Definition of critical functions from BRRD - Article 2, paragraph 1, definition 35.

⁴ Article (3) of the preamble of COMMISSION DELEGATED REGULATION (EU) 2016/778

to determining critical”: the 27 recovery plans considered from banks headquartered in 12 EU Member States had little if not at all ground for comparison, yielding different approaches, different metrics, while yet relating to the same legislation!

Proposed Methodology

Overview of the methodology

This paper is meant to offer a hands-on, practical approach for resolution authorities to (1) determine the critical functions, (2) determine which credit institutions are relevant in performing these critical functions and to (3) fairly and objectively assess the critical functions as self-determined by institutions, all these on a framework that would allow for comparable results regardless of the issuers of the analysis.

Starting from the requirement that “The resolution authority should conduct its own assessment of critical functions when establishing the resolution plan⁵” and considering the indication to break-down the assessment in two different steps⁶, we propose in the present methodology the two step approach with a slight variation. The authorities should start the critical function identification process as soon as data is available (credit institutions reporting their statements for year-end) and letting the institutions make their own assessment, in parallel or even afterwards. When institutions submit their recovery plan and their critical function analysis, the resolution authorities will already have an unbiased benchmark to compare and relate to.

In brief, the process herein proposed follows these steps:

- I. Determining critical functions for the real economy:
 1. Determining the activities delivered by all credit institutions in the relevant economy or geographical area;

⁵ Preface, article (5) of the CDR (EUR) 2016/778

⁶ CDR (EU) 2016/778, art (7) preface - Critical functions should be identified in a two-step procedure: first, the institutions perform a self-assessment when establishing their recovery plans. Secondly, the resolution authorities critically review the recovery plans of the individual institutions to ensure consistency and coherence in the approaches used by banks. Since the resolution authorities benefit from the overarching view as to which functions are essential to maintain financial stability as a whole, they should take the final decision as regards the designation of critical functions for the purpose of resolution planning and execution.

2. Running an analysis on the above list of activities, determining which are functions designated as per article 2, point (2)⁷ of the preamble of the CDR(EU) 2016/778;
3. Identify (by estimating / quantifying) the probable impact on the real economy and financial market in case of sudden cease of each of the previously identified functions;
4. Identify critical functions (based on the above results);
5. Identify, if any, the existence of Classes of critical functions and test for critical sub-functions⁸ ;
6. Output an analysis of critical functions for a country/region/economy - account of critical functions (ACF) – the result of steps I.1. to I.5. from above;

II. Identification of the relevant credit institutions in delivering the identified critical functions:

- a. Determine market structure through computation of Herfindahl-Hirschman Index⁹ for each critical function;
- b. Determine potential substitute suppliers' capacity and incentives for each function;
- c. Determine substitutability specific coefficients for each critical function
- d. Determine market absorbance power for each critical function;
- e. Determine the relevant institutions in providing each of the critical functions by computing all the previously determined data through the proposed methodology.

After having determined the account of critical functions (ACF) – step I - a secondary process will be run to identify which institutions are relevant in providing these critical functions. It could turn out that due to different market conditions - e.g. many players with low market shares and high substitutability - there won't be any institution defined as being relevant in providing a critical function, meaning that these institutions

7 function - means a structured set of activities, services or operations that are delivered by the institution or group to third parties irrespective from the internal organization of the institution;

8 Class of critical functions and critical sub-functions are two concepts introduced by this proposed methodology that are to be explained in detail in this paper

9 Herfindahl-Hirschman Index (computed as the sum of square of market share of all participant) – HHI. HHI usage in methodology will be further assessed and detailed at section 3.2.5.2.

could cease to suddenly deliver that critical functions and the economy / the markets would not be affected, meaning that the clients have substitutes available.

The basic diagram of the proposed methodology is outlined below:

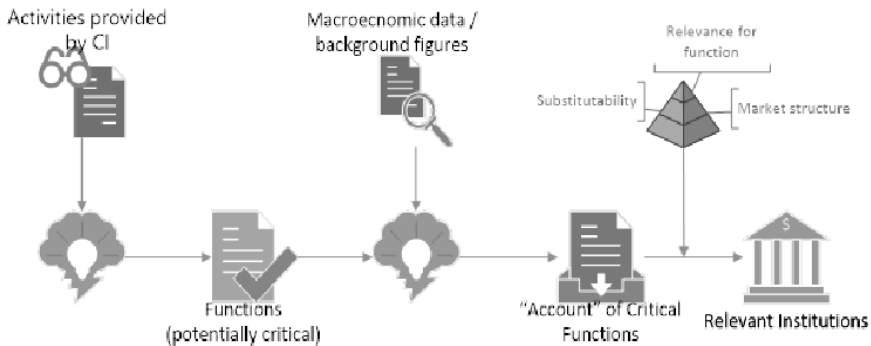


Figure 1 - Methodology Diagram

Detailed analysis of the methodology

Identification of activities

Our proposal is to firstly identify the activities performed by institutions starting from (1) the banking act that stipulates the activities that credit institutions can be authorized to perform and (2) the actual incorporation deed of each credit institution, where can be found all the activities that the specific institution is authorized to perform can be found.

Identification of functions

After collecting all the activities for which all credit institutions within the country are registered to perform (relevant banking law and all incorporation deeds from all credit institutions under the respective legislation) the resolution authority should perform a first expert analysis, consisting of the following:

1. Group all identified activities in a way that (i) an activity would appear only once (irrelevant how many credit institutions are allowed to perform it) and (ii) similar activities from an operational point of view

(referring to the same positions in the BS¹⁰, for example) should also be grouped under a synthetic name in order to appear only once (rename and merge);

2. Determine the functions performed by institutions:
 - a. Eliminate from the list all activities that refer to intra-group operations¹¹;
 - b. Eliminate from the list all the activities that can be performed only on a limited basis for third parties (volume of the activity is by law/regulation limited to a small percentage of total balance-sheet or should be primarily provided to intra-group institutions);
 - c. Eliminate from the list all activities that must be performed in order to meet regulatory reporting or other legal mandatory activities from which the institution has no gain (e.g. data collection and reporting). These activities fall under critical services definition and should be retained as such.
 - d. Eliminate from the list of activities those that are auxiliary to credit institutions, meaning that they can or are performed by other economic agents (high substitutability level for the entire activity between types of economic agents).

The result of the above-mentioned analysis contains functions provided by credit institutions that have the potential of being critical functions.

Identifying Critical Functions

The following stage proposes an approach for “assessing the material negative impact on third parties, the systemic relevance of the function for third parties”¹², i.e. determine if the functions would have a material impact on the real economy and financial markets in case they would suddenly cease to be provided¹³.

¹⁰ BS – balance sheet statement

¹¹ Condition for an activity to be a critical function, as stated by DR 778/2016 – art. 6 (1) (a) A function shall be considered critical, where it fulfils both of the following: (a) the function is provided by an institution to third parties not affiliated to the institution or group;

¹² CDR (EU) 2016/778, article 6, paragraph 2, part one.

¹³ Condition for an activity to be a critical function, as stated by DR 778/2016 – art. 6 (1) (b) the sudden disruption of that function would likely have a material negative impact on the third

In order to provide this determination, two sets of data are required:

(1) A relevant quantification of what the institutions are providing for the real economy through the previously determined functions. The analyst must cumulate from all credit institutions' FINREP data¹⁴ regarding the relevant balance-sheet position – for example, for deposits, the analyst must sum-up from all credit institutions' FINREPs all the deposits in the relevant region/country/economy) – [numerator].

(2) Relevant proxy¹⁵ for the real economy or financial markets. The default proxy for the real economy will be the GDP of the economy under analysis – [denominator].¹⁶ For each specific function the analyst should identify a specific proxy (macro-indicator) that could be used, the justification for her decision should be mentioned.

Dividing (1) [nominator] to (2) [denominator] will offer a quantitative proxy for the material impact over third parties – Criticality proxy - if that specific function will suddenly and completely cease to be provided. The reference points to determine if the function is critical are:

- i) If the proportion is of over 20%, the function is critical;
- ii) If the proportion is between 10% and 20%, the function could be critical;
- iii) An impact of less than 10% is not considered critical and hence the function is not critical.

The rationale behind these reference points is found in the BRRD, article 4, paragraph 10, where it is specified that institutions constituting a significant share in the financial system of a Member State can be considered those for which the ratio of its total assets over the GDP of the Member State of establishment exceeds 20 % [...]. From this definition, we considered to be relevant for the present methodology the default denominator – GDP – and the threshold of acceptance – 20 %.

parties, give rise to contagion or undermine the general confidence of market participants due to the systemic relevance of the function for the third parties [...].

¹⁴ If for specific functions the analyst determines it is more appropriate to use data from other reports,

¹⁵ A proxy is an observable variable that is not in itself directly relevant, but that serves in place of an unobservable or immeasurable variable.

¹⁶ This is consistent with point (11) from the preamble of CDR(UE)2016/778 - critical functions should be assessed from a perspective of their importance for the functioning of the real economy and financial markets and therefore for financial stability as a whole

These thresholds are a starting point – based on running sets of data for each state for different reference points in time, the benchmarks should be adjusted accordingly to the respective findings. In our opinion, the value (1) should be different for each country based on the particularities of both the economy and of the local institutions and (2) could be set at different levels for different points in time for the same country. Once the value will be calibrated for each country and for a year, the results will be comparable for that set of data. The calibration for each country and each period will assure that all results are reflecting the purpose of the analysis and not a one fits all assessment.

For the values that fall between 10%-20% estimated impact, the analyst must provide thorough qualitative reasoning for determining the activity as being critical. In this respect, the analysis could comprise of a set of questions, as suggested below:

Table 1 - Qualitative assessment for possible critical functions

#	Question	Answers	Score
1	Is the cease of this function likely to affect other critical functions?	Likely	3
		Moderate	2
		Not likely	1
2	Are more classes of clients affected by the activity (households, corporate, government etc.)?	3 and more	3
		2	2
		Only 1	1
3	Is the cease of the function likely to affect the general confidence of the markets?	Likely	3
		Moderate	2
		Not likely	1

If the resulting score is of minimum 6 points, the activity will be accepted as being a critical function¹⁷.

¹⁷Please refer to the Appendix for the interpretation of this scorecard.

Classes of Critical Functions

We propose a new concept, respectively the class of critical functions (or collection of critical sub-functions). The need for this approach derives from analyzing the critical functions of the same operational nature (e.g. financing activities include several industry standard structures such as financing retail clients or financing small & medium enterprises clients etc.).

If the ratio computed at point 3.2.3. - Criticality proxy - is large, that may be in a strong indicator of a combination/merger of several critical functions into a single one. A signal in this respect can be if several distinct third parties are affected by one single critical function. It is the case for such activities as financing, deposit taking, specialized payments – activities for which credit institutions, in comparison to other economic agents, either have exclusivity (deposit taking) or are specialized (financing, payments, guarantee issuance etc.).

To determine if there are critical sub-functions, the analyst must compute relevant ratios, based on the FINREP data in order to determine the probable impact for third parties. For this purpose, in order not to require additional reporting data from the institutions, two sets of analysis can be performed:

- Division by client type (as already existing in the FINREP categories);
- Division by geography (county or region, if already defined by local reporting requirements).

Specific assets or liabilities positions will be summed for all credit institutions (e.g. financing real estate / house purchases by natural persons, or attracting deposits from a specific county etc.). These sums will be measured against a specific component of the GDP – in our examples, the component of GDP referring to real-estate (housing) or the household total income (households' income) for a specific county. To determine if these are critical (sub-) functions, the same thresholds as above should be used. This is a similar computational process as the one at point 3.2.3.

If the considered sub-functions are not determined to be critical for third parties due to the estimated low-impact, then the original function will remain considered as single critical functions. If there are sub-functions designated to be critical that sum-up to at least 70% of the amount of the

class-of-function they pertain to, then the class of functions will not be considered as a critical function but only the relevant sub-functions.

Although it seems intuitive to consider sub-functions based on banking product types, our determination is that this approach is not practical because each institution sets their own products' peculiarities, differing from each other. Moreover, this data is not reported by institutions in a comparable manner and hence it would be difficult to centralize. All banking products will, however, fall into one of the sub-groups proposed – either division by client type or by geographic split.

After running the above algorithms, the result will be an output of the Critical Functions for the economy for the considered period point.

Identifying Relevant Institutions

For the final step, we calibrate the criteria to determine if an institution is relevant in providing that critical function for the economy. It can be argued that for a critical function, there are no critical suppliers as there are many providers and all have small market shares, the service being therefore highly substitutable.

Substitutability coefficients

According to the Delegated Regulation 778/2016, article 6, para. 3, when assessing the substitutability of a function the following criteria (on the left of the below table) shall be taken into account (on the right side of the below table are proposed the assessment criteria under the current methodology):

(a) the structure of the market for that function and the availability of substitute providers;

The Herfindahl-Hirschman Index (HHI) and the market share of each participant are elements descriptive of the market structure. The availability of substitute providers is given by the fact that there is a market with a number of players and banking products / services are considered substitutable a priori (a loan, a deposit, a payment operation will be substitutable with a similar products from another CI unless otherwise

proven in the analysis). Each institution present in that respective market is a potential provider of substitute, subject of costs and time.

(b) the ability of other providers in terms of capacity, the requirements for performing the function, and potential barriers to entry or expansion; The ability and the requirements are analyzed with two different metrics (coefficient A₁):

(i) for assets (loans), where capital adequacy must be met, the analyst must compute for each credit institution the existing potential for growth¹⁸, in percentages. This metric computes the potential of credit institution to take over / refinance loan clients.

(ii) For all other non-asset related functions, a portion of 30% of their existing market share is considered the maximum ability to acquire new clients on a short interval of time without additional resources.

(c) the incentive of other providers to take on these activities; The budgeted growth specified by each credit institution in their business plan for the following year is an indicator of the incentive of each provider (the budget might indicate decrease or stagnation) – coefficient A₂.

(d) the time required by users of the service to move to the new service provider and costs of that move, the time required for other competitors to take over the functions and whether that time is sufficient to prevent significant disruption depending on the type of service. The elements from this provision are determined from a computation based on the data collected as follows. The result represents coefficient A₃.

Table 2 - computation of coefficient A₃

	Coefficient of substitution			
	Relative speed	Relative cost	Relative difficulty	Final Coef.

¹⁸ $((\text{existing capital position} - \text{minimum capital requirement}) / (\text{total assets})) = \text{potential for asset acquisition}$

Critical Function _i	C _{1i}	C _{2i}	C _{3i}	A ₃
--------------------------------	-----------------	-----------------	-----------------	----------------

$$A_3 = (C_{1i} + C_{2i} + C_{3i}) / 3$$

All values for coefficients C_{ji} are from 1 (easiest to replace) to 5 (hardest to replace), where:

- 1 – means maximum 2 days for speed, no cost and no other parties involved
- 5 – means over 30 working days for speed, significant cost¹⁹, other third parties involved

All coefficients must be judged from the perspective of the individual client that must switch from one credit institution to another.

The methodology for determining the substitute availability relies on the assumptions of client voluntarily changing their credit institution supplier. Deals involving entire client-portfolio take-over are not analyzed in this methodology – these being the subject of specific negotiations and cannot be foreseen in an institution’s regular business plan, capital position etc. For a portfolio take-over, capital can be raised specifically for the deal, all additional required operational and infrastructure resources can be purchased if not already available to the buyer. In case of a resolution action, a portfolio-sale would be assimilated to the sale of business tool which actually cannot be foreseen in any plan as it can only in a limited matter depend on the seller and much more on the availability and willingness of buyers, elements that are hard to be forecasted.

The actual C_{ji} coefficients from the table above can be determined by questionnaire sent to all credit institutions (a matrix containing on one dimension all the activities or the critical functions identified by the resolution authority, and for the other dimension of the matrix the sought coefficients). Each credit institution, for each country, is to fill-in its estimate for each of the coefficients. The value taken into account is the average of these coefficient estimates.

¹⁹ More than 2% of the banking product amount.

Methodology for determining relevant institutions

The proposed methodology process for determining relevant institutions in providing the critical functions consist of the following sequence:

1. Computing the HHI²⁰ for each critical function.

- If HHI is larger than 1,500 points, this is considered a non-competitive market (distorted) and as a consequence all institution with a market share above 2% will be considered critical.

- If HHI is below 1,500 points then we test for substitutability and impact all credit institutions that have a market share of more than 2%.

The 1,500 points reference is the one used by the U.S. Department of Justice and the Federal Trade Commission in their assessment of Horizontal Merger Guidelines.

The 2% threshold was set relying on the provisions of article 51 of CRD IV²¹ where it is set out those significant branches could be those where the market share of the branch in terms of deposits exceeds 2 % in the host Member State. As such, for the analysis it is retained the 2% market share as indicating a significant institution for the analyzed function / market. However, based on data sets available for the resolution authority, a different threshold could be set. Different resolution authorities could set different threshold for the same critical function based on specific features of the local economy.

2. A new coefficient is computed for each institution – the market absorbance power (coefficient D) – meaning that it must be determined how many of the top 5 institutions in each market (related to a critical function) could take more than a quarter of the market share of the institution that is under analysis.

²⁰ Herfindahl-Hirschman Index (computed as the sum of square of market share of all participant)

²¹ DIRECTIVE 2013/36/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC

$$D_i = \sum (\text{for TOP}_5\text{CI (if } (1/4 * \text{market_share}_i < (A_1 \text{ or } A_2)^{22}; 1; 0))$$

Hence, the D coefficient could get a value between 0 and 5 points for each credit institution for each critical function, where 0 would mean that none of the top 5 institutions could take-over a quarter of the market share of the institution under analysis (not substitutable from supplier capacity / willingness point of view), and 5 would mean that all TOP 5 institutions could take over a quarter of the market share of the targeted credit institution.

3. Determining relevant institutions

The decision to determine if an institution is critical/relevant in providing a certain critical function is based on the result of the equation:

$$RCI_h = \sum [(+1 \text{ point for each } 2\% \text{ market share}) + (\text{coefficient } A_3) - (\text{Coefficient D})]$$

If RCI_h is in excess of 2 points, the institution is critical. If not, the institution is not critical for the analyzed market / critical function.

The result of this analysis will be the institutions that are relevant (critical) in providing the critical functions for an economy.

The overall result would be the Account of Relevant Institutions in providing Critical Functions for the Economy displayed as a matrix, thus encapsulating the determined critical functions for an economy as well as identifying the relevant institutions in providing each of these critical functions.

²²A1 coefficient is used for asset related critical functions and A2 coefficient for the non-asset related critical functions.

Other relevant information regarding the usage of this methodology

If any of the Critical Functions for the economy is similar for the activities tested within the O-SII identification approach, the results from O-SII determinations could be considered without running the above steps of analyzing magnitude and substitutability.

This methodology can be applied for a stand-alone credit institution. In the case of groups of credit institutions, the methodology should be run at solo level as the results might vary significantly from one country to another even if, for example, the institutions would have the same asset size in absolute amounts or in terms of market share in the different economies.

Results and Discussion

A run-test of this methodology has been realized on publicly available data from credit institutions and Romanian GDP information from a previous period.

Calibration for the considered thresholds presented in this paper has been achieved based on this data.

We emphasize the necessity to run this methodology not only on multiple periods but also on data regarding other State Members in order to evaluate how (1) the methodology remains relevant in changing circumstances and (2) how the considered relevant threshold can be maintained or how they can fluctuate and if so based on what determinants.

Novelty propositions of this methodology

Uniform base for identifying critical functions for an economy

The first major novelty proposed by this methodology refers to the starting point of the analysis, respectively the determination of the activities, following to build on these common grounds up to the critical functions. The BRRD²³ offers some idea about what a critical function should be: activities, services or operations, without further assistance for a starting

²³ critical functions' means activities, services or operations the discontinuance of which is likely in one or more Member States, to lead to the disruption of services that are essential to the real economy or to disrupt financial stability due to the size, market share, external and internal interconnectedness, complexity or cross-border activities of an institution or group, with particular regard to the substitutability of those activities, services or operations; - definition (35), article 2, BRRD

point in clearly identifying them. The Commission Delegated Regulation 778/2016, at point (4) in the preface offers further examples of critical functions: critical functions can include deposit taking, lending and loan services, payment, clearing, custody and settlement services, wholesale funding markets activities, and capital markets and investments activities.

The proposed process covers all possible activities with potential for critical functions

Additionally, article 2 (Definitions) of CDR(EU) 778/2016 sets at point (2) the definition for a 'function' - a structured set of activities, services or operations that are delivered by the institution or group to third parties irrespective from the internal organization of the institution. However, there is still no clear and uniform process that can be used to identify all possible critical functions, i.e. have a high certainty that no potential critical function is left out of the analysis process.

Clear determination of the critical function and of the relevant institutions based on an objective mechanism

The present methodology determines firstly the critical functions for an economy, as a basis for determining the relevant credit institutions are providing these critical functions. Also this is the intent of the specific regulation provision, there was no clear method for making this determination. In addition, it can be observed that without proceeding with this step, the results might be misleading. The proposed methodology is working like a funnel, taking into account all possible variants and eliminating non matching one, leaving little room for subjectivity.

Coverage of all provisions in relevant regulation

Furthermore, the methodology herein proposed takes into account all the relevant provisions set in CDR (EU) 778/2016 within a quantitative framework. Failing to follow such an approach might trigger misleading results: for example, an institution with a low market share (let's say 5%) might determine that it is not relevant for a critical function. However, without taking into account the market structure (through HHI and other supplier's capacities and willingness to take-over clients) it might not be

aware that it is the 3rd provider of that function in non-competitive market and if its ceases to provide that function it could lead to instability in the market.

Conclusions

The present methodology proposes a complete hands-on approach for determining both the critical functions and the relevant institutions within the BRRD framework:

1. This methodology takes into account all the aspects sanctioned by article 6 of the Commission Delegated Regulation (EU) 2016/778 with regard to the establishment of critical functions and relevant institutions.
2. The starting point (i.e. activities of the credit institutions) of the analysis introduces a stable ground that determines the basis for a uniform approach. Also, this entails to the conclusion that critical functions must be determined specifically for each Member State and cannot be determined for a banking group as a whole, irrespective of the countries where it operates.
3. Critical functions and relevant institutions must be assessed periodically, either when there are important changes in the market share (following the release of the new official reporting of the credit institutions and of the background economic data), but at least annually after all data with regard to the previous year-end has been released.
4. The introduction of the concept of classes of critical functions helps in systematizing the approach for complex functions providing by credit institutions.
5. The methodology proposes several unbiased approaches determining both the critical functions as well as the relevant institutions, leaving little room for expert judgement and qualitative additional decision. Additionally, this mechanism covers all provisions set out in relevant regulation for determining critical functions and relevant institutions. This way, assessment would be comparable between all credit institutions, irrespective of the country they operate in as well as for comparing results emerging from different economies.

Appendix

Scorecard explanation for Qualitative assessment for possible critical functions (Table 1)

Reaching a score of 6 points for a function means that it is considered that:

a) For at least one assessment the cease of the function would have a high impact on one of the criteria (3 points) and at least one moderate impact (2 points);

b) For all 3 assessments has been determined to be having at least a moderate impact in case the function ceases to be provided;

Failing to meet these minimum impact estimations in case of sudden ceasing, the function will not reach 6 points.

References

- [1]. U.S. Department of Justice and the Federal Trade Commission. (2010, 08 19). Horizontal Merger Guidelines. Retrieved from <https://www.justice.gov>: <https://www.justice.gov/atr/horizontal-merger-guidelines-08192010#5c>
- [2]. United States Department of Justice. (2015, 07 29). United States Department of Justice. Retrieved from www.justice.gov: <https://www.justice.gov/atr/herfindahl-hirschman-index>
- [3]. Wikipedia. (2017, 01 28). Retrieved from <https://en.wikipedia.org>: https://en.wikipedia.org/wiki/Herfindahl_index
- [4]. Wikipedia. (n.d.). Wikipedia. Retrieved from [https://en.wikipedia.org/wiki/Proxy_\(statistics\)](https://en.wikipedia.org/wiki/Proxy_(statistics))
- [5]. Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012, of the European Parliament and of the Council Text with EEA relevance
- [6]. Commission Delegated Regulation (EU) 2016/778 of 2 February 2016 supplementing Directive 2014/59/EU of the European Parliament

and of the Council with regard to the circumstances and conditions under which the payment of extraordinary ex post contributions may be partially or entirely deferred, and on the criteria for the determination of the activities, services and operations with regard to critical functions, and for the determination of the business lines and associated services with regard to core business lines (Text with EEA relevance)

- [7]. Recovery and Resolution Planning for Systemically Important Financial Institutions: Guidance on Identification of Critical Functions and Critical Shared Services. Financial Stability Board, http://www.fsb.org/wp-content/uploads/r_130716a.pdf
- [8]. Comparative report on the approach to determining critical functions and core business lines in recovery plans, European Banking Authority, March 2015, <https://www.eba.europa.eu/documents/10180/950548/EBA+Report+-+CFs+and+CBLs+benchmarking.pdf>